

**THE DEVELOPMENT OF A MEASURING INSTRUMENT TO DETERMINE  
THE EDUCATIONAL FOCUS OF STUDENTS AT A NURSING COLLEGE**

by

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submitted in accordance with the requirements

for the degree of

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at the

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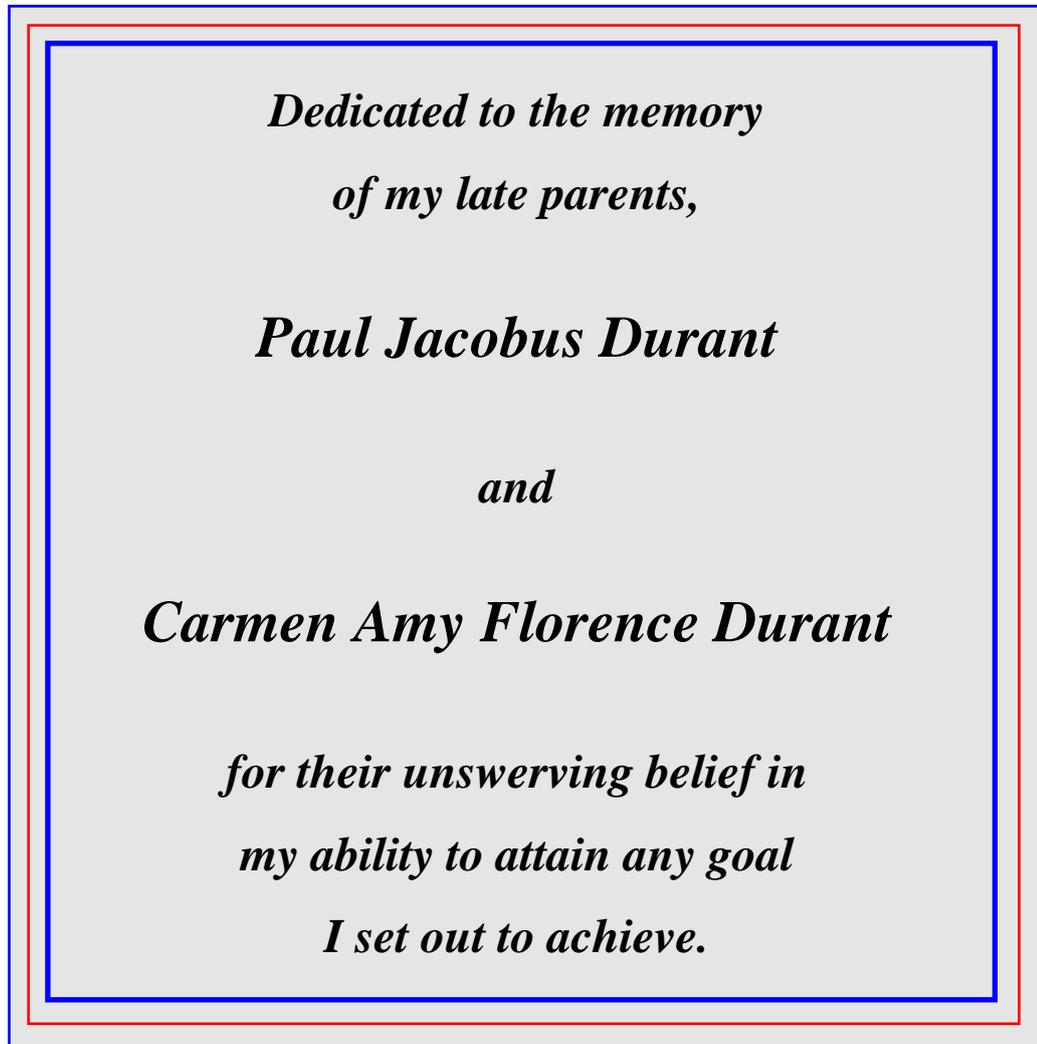
I declare that

**THE DEVELOPMENT OF A MEASURING INSTRUMENT TO  
DETERMINE THE EDUCATIONAL FOCUS OF STUDENTS  
AT A NURSING COLLEGE**

is my own work and that all the sources that I have used or  
quoted have been indicated and acknowledged by means of  
complete references.

.....  
**SIGNATURE**  
**(MRS. C. MOUTON)**

.....  
**DATE**



“Our chief want in life is somebody who shall make us do what we can”. Ralph Waldo Emerson (Considerations by the Way, in Shechtman, Weiser & Kurtz 1993:40).

## ACKNOWLEDGEMENTS

*I can do all things through Christ which strengtheneth me (Philippians 4:13).*

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DEGREE: DOCTOR OF LITERATURE AND PHILOSOPHY  
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**ABSTRACT**

The question the researcher set out to answer was “*What is the educational focus of a nursing college when viewed within Bevis and Watson’s Humanistic-Educative-Caring Curriculum Paradigm versus a Stimulus-Response Curriculum Paradigm?*” The purpose of this study was to develop and test an instrument based on the Bevis and Watson Humanistic-Educative-Caring Model; an educational paradigm shift from the Tylerian rationale in nursing education.

A questionnaire comprising 181 Two-Choice Comparative-Value-Statement Items was developed and tested. A non-experimental research design was implemented. During the developmental phase, a non-probability, purposive sample was used; the questionnaire (instrument) was developed; data were analysed by applying content analysis and the questionnaire was refined. During the testing phase a stratified, random sample was used consisting of first to fourth year students from two nursing colleges from the Gauteng Province; the items were tested against biographic data and hypotheses resulting from the Bevis and Watson model. Six conceptual continuums comprise the Bevis and Watson model namely, the Learner Maturity Continuum, the Teacher-student relationship, the Teacher-student structure, the Typology of Learning, Criteria for Teacher-Student Interactions and Criteria for Selecting and Devising Learning Experiences. Both descriptive and inferential statistics were utilised.

The results indicated that the educational focus of the respondents with regard to the Bevis and Watson model was predominantly humanistic. The exception occurred with regard to TUTOR: Teacher-student structure; pertaining to hypothesis 7 on language; and hypothesis 9 on gender, where a behaviouristic orientation appears to prevail. Significant differences were found between the model variables (conceptual continuums) and year group, language, college A and B, and gender. In hypothesis 5, although a humanistic orientation predominated, the 4th year students tended to display an increasing behaviouristic orientation. In hypothesis 8, although a humanistic orientation predominated, college A appeared less humanistic than college B.

Recommendations were made regarding nursing education and further research studies to refine the instrument. The implementation of the Bevis and Watson model calls for a curriculum paradigm shift in nursing education.

#### **KEY TERMS**

- Humanistic-Educative-Caring Curriculum Paradigm
- Behaviouristic (Stimulus-Response) Curriculum Paradigm
- Curriculum Focus
- Stimulus-response principles
- Interactions and learning
- Learner Maturity Continuum
- Typology of Learning
- Criteria for Teacher-Student Interactions
- Criteria for Selecting and Devising Learning Experiences
- Educational focus
- Training-Education Continuum
- Two-Choice Comparative-Value-Statement Items.

# TABLE OF CONTENTS

## CHAPTER 1

### ORIENTATION TO THE STUDY

	<b>Page</b>	
<b>1.1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>1.2</b>	<b>PROBLEM FORMULATION</b>	<b>1</b>
1.2.1	Background to the problem	1
1.2.2	Problem statement	6
1.2.3	Research question	9
1.2.4	Purpose of the study	9
1.2.5	Objectives	9
1.2.5.1	Objectives during the developmental phase	10
1.2.5.2	Objectives during the testing phase	10
1.2.6	Assumptions	10
1.2.6.1	Theoretic-conceptual commitments	11
1.2.6.2	Methodological-technical commitments	11
1.2.6.3	Ontological commitments	12
1.2.7	Hypotheses	12
1.2.7.1	Hypothesis 1	12
1.2.7.2	Hypothesis 2	12
1.2.7.3	Hypothesis 3	13
<b>1.3</b>	<b>SIGNIFICANCE OF THE STUDY</b>	<b>13</b>
1.3.1	Direction and focus	13
1.3.2	Scientific foundation of nursing	14
1.3.3	Curriculum refocus	14
1.3.4	Quality assurance instrument	15
<b>1.4</b>	<b>CONCEPTUAL FRAMEWORK</b>	<b>15</b>
1.4.1	Description of the conceptual framework	15

	<b>Page</b>	
1.4.1.1	Curriculum Focus	16
1.4.1.2	The Bevis and Watson six conceptual continuums	16
1.4.1.3	Training-Education Continuum	18
<b>1.5</b>	<b>RESEARCH METHODOLOGY</b>	<b>20</b>
1.5.1	Research design	20
1.5.2	Research technique and instrument	20
1.5.3	Sampling design	20
1.5.4	Pretesting the instrument	20
1.5.5	Data collection methods	21
1.5.6	Data analysis	21
1.5.7	Developmental phase: validity and reliability during data collection and analysis	21
1.5.8	Testing phase: validity and reliability during data collection and analysis	22
<b>1.6</b>	<b>ETHICAL CONSIDERATIONS</b>	<b>22</b>
<b>1.7</b>	<b>LIMITATIONS OF THE STUDY</b>	<b>23</b>
<b>1.8</b>	<b>TERMINOLOGY</b>	<b>23</b>
<b>1.9</b>	<b>OUTLINE OF THE RESEARCH REPORT</b>	<b>25</b>
<b>1.10</b>	<b>OUTLINE OF THE RESEARCH METHODOLOGY</b>	<b>26</b>
<b>1.11</b>	<b>SUMMARY</b>	<b>32</b>

**CHAPTER 2****THEORETICAL FRAMEWORK  
THE BEVIS AND WATSON MODEL**

	<b>Page</b>	
<b>2.1</b>	<b>INTRODUCTION</b>	<b>33</b>
<b>2.2</b>	<b>CONCEPTUAL FRAMEWORK</b>	<b>33</b>
<b>2.3</b>	<b>CLARIFICATION OF TERMINOLOGY</b>	<b>34</b>
<b>2.4</b>	<b>THE BEVIS AND WATSON HUMANISTIC-EDUCATIVE-CARING CURRICULUM PARADIGM</b>	<b>40</b>
<b>2.5</b>	<b>DESCRIPTION OF THE BEVIS AND WATSON MODEL</b>	<b>41</b>
2.5.1	Learner Maturity Continuum	41
2.5.1.1	Immature positions	43
2.5.1.2	Mature positions	46
2.5.1.3	Teacher-student relationship	48
2.5.1.4	Teacher structure and Student self-structure	50
2.5.2	Typology of Learning	50
2.5.2.1	Different types of learning	50
2.5.2.2	Description of the Typology of Learning	54
2.5.2.2.1	Item learning	55
2.5.2.2.2	Directive learning	59
2.5.2.2.3	Rationale learning	60
2.5.2.2.4	Contextual learning	60
2.5.2.2.5	Syntactical learning	61
2.5.2.2.6	Inquiry learning	62
2.5.3	Criteria for Teacher-Student Interactions	64
2.5.4	Criteria for Selecting and Devising Learning Experiences	67
2.5.4.1	The impact of Benner's research	73
2.5.4.2	Triple Jump method	74
<b>2.6</b>	<b>SUMMARY</b>	<b>76</b>

**CHAPTER 3****LITERATURE REVIEW****THE BEHAVIOURISTIC PARADIGM**

	<b>Page</b>	
<b>3.1</b>	<b>INTRODUCTION</b>	<b>77</b>
<b>3.2</b>	<b>CLARIFICATION OF TERMINOLOGY</b>	<b>77</b>
3.2.1	Learning	77
3.2.2	Training	78
3.2.3	Education	79
<b>3.3</b>	<b>THE BEHAVIOURISTIC FRAMEWORK</b>	<b>79</b>
3.3.1	Classical conditioning	79
3.3.2	Behaviourism	80
3.3.3	Law of effect	80
3.3.4	Operant conditioning	81
3.3.5	Bandura's social learning theory	81
3.3.6	Bruner's theory of discovery learning	82
<b>3.4</b>	<b>TYLERIAN RATIONALE AND OUTCOME BASED EDUCATION (OBE)</b>	<b>82</b>
3.4.1	Outcome Based Education (OBE)	82
3.4.2	Tylerian rationale	83
3.4.2.1	Instrumentalism	84
3.4.2.2	Curriculum development	85
<b>3.5</b>	<b>DISCUSSION OF THE TYLER RATIONALE AND THE BEVIS AND WATSON HUMANISTIC-EDUCATIVE- CARING CURRICULUM PARADIGM</b>	<b>90</b>
3.5.1	Question one	90
3.5.1.1	Teacher-student relationship, Teacher structure and Student self-structure	92
3.5.1.2	Immature positions on the Learner Maturity Continuum	92
3.5.1.3	Mature positions on the Learner Maturity Continuum	94
3.5.2	Question two	95

		<b>Page</b>
3.5.2.1	Learning by contract	96
3.5.3	Question three	98
3.5.4	Question four	99
3.5.4.1	An interpretive-criticism approach	99
<b>3.6</b>	<b>SUMMARY</b>	<b>101</b>

**CHAPTER 4****LITERATURE REVIEW****THE HUMANISTIC-EDUCATIVE-CARING CURRICULUM PARADIGM**

	<b>Page</b>	
<b>4.1</b>	<b>INTRODUCTION</b>	<b>102</b>
<b>4.2</b>	<b>HUMANISTIC-EDUCATIVE-CARING CURRICULUM PARADIGM</b>	<b>102</b>
<b>4.3</b>	<b>AFFECTIVE EDUCATION</b>	<b>104</b>
4.3.1	Foundations of affect	110
4.3.1.1	Human dignity	110
4.3.1.1.1	Freedom	111
4.3.1.1.2	Caring and Justice	112
4.3.1.1.3	Equality	115
4.3.1.1.4	Peace	115
4.3.2	History of affect in the curriculum	115
4.3.2.1	Religious-based moral education	116
4.3.2.2	Classical humanism	116
4.3.2.3	Child-centred movements	116
4.3.2.4	Character education	117
4.3.2.5	Social efficiency movement	117
4.3.2.5.1	Social reconstructionism and engineering of consent	118
4.3.2.6	Life adjustment education	119
4.3.2.7	Decline of the concept affect	120
<b>4.4</b>	<b>HUMANISTIC EDUCATION</b>	<b>121</b>
4.4.1	Humanistic psychology	121
4.4.1.1	Values education	122
4.4.1.2	Values clarification	122
4.4.1.3	Cognitive-moral developmental education	122
4.4.2	Humanism as a philosophy of education	124
4.4.2.1	Beliefs about education	124
4.4.2.2	The university	124

	<b>Page</b>
4.4.2.3	The learner 125
4.4.2.4	The nature of method 125
4.4.2.5	Social progress 126
4.4.3	Humanism and human care nursing education 126
4.4.3.1	The moral dimension 127
4.4.4	Student centred learning theories 128
4.4.4.1	Self-directed learning 128
4.4.4.2	Individualised learning 131
<b>4.5</b>	<b>DEVELOPMENTAL EDUCATION 132</b>
<b>4.6</b>	<b>CURRICULUM DEVELOPMENT IN THE 134</b>
	<b>POST-MODERN ERA</b>
<b>4.7</b>	<b>SUMMARY 136</b>

**CHAPTER 5****LITERATURE REVIEW****RECENT TRENDS AND ISSUES IN SOUTH AFRICA**

	<b>Page</b>	
<b>5.1</b>	<b>INTRODUCTION</b>	<b>138</b>
<b>5.2</b>	<b>RECENT TRENDS AND ISSUES IN SOUTH AFRICA</b>	<b>138</b>
5.2.1	Application of behaviouristic principles	139
5.2.1.1	Curriculum content: curriculum organisation and subject content	139
5.2.1.2	Teaching strategies and learning climate	139
5.2.1.3	Evaluation of learning	139
5.2.2	Changes in the educational system in South Africa	140
5.2.2.1	Curriculum 2005	141
5.2.2.1.1	Concerns regarding Curriculum 2005	145
5.2.3	The South African Nursing Council (SANC)	147
5.2.3.1	Documentation	147
5.2.3.2	The Nursing Act 2005 (Act no 33 of 2005)	149
5.2.4	The National Health Plan	150
5.2.4.1	Human resource development	151
5.2.4.2	The Reconstruction and Development Programme (RDP)	152
5.2.4.3	Batho Pele Principles and Patients' Rights Charter	152
5.2.4.4	The White Paper on the transformation of the health system	153
5.2.4.5	The National Health Act 2003 (Act no 61 of 2003)	154
5.2.5	The Moral Regeneration Movement in South Africa (MRM)	154
5.2.6	The emerging social scene in South Africa	156
5.2.6.1	Democracy	156
5.2.6.2	Gender issues	156
5.2.6.3	Family structure	157
5.2.7	Factors in nursing and nursing education that are erosive to the caring ethic	157
5.2.7.1	Politics	157

		<b>Page</b>
5.2.7.2	Economics	158
5.2.7.3	AIDS	159
5.2.7.4	Moral degeneration	159
<b>5.3</b>	<b>SUMMARY</b>	<b>160</b>

**CHAPTER 6****RESEARCH METHODOLOGY**

	<b>Page</b>	
<b>6.1</b>	<b>INTRODUCTION</b>	<b>161</b>
<b>6.2</b>	<b>THE CONCEPTUAL FRAMEWORK AND HYPOTHESES</b>	<b>161</b>
<b>6.3</b>	<b>RESEARCH METHODOLOGY FOR THE DEVELOPMENT AND TESTING OF THE INSTRUMENT</b>	<b>162</b>
<b>6.4</b>	<b>DEVELOPMENTAL PHASE</b>	<b>162</b>
6.4.1	Data collection and refinement	162
6.4.2	Validation of data during the developmental phase	163
6.4.3	Data analysis	163
6.4.3.1	Content analysis	163
6.4.4	Developmental testing phase: pretesting of the instrument	164
6.4.4.1	Testing the items using the Visual Analogue Scale (VAS)	165
6.4.4.1.1	Description of the VAS instrument	165
6.4.4.1.2	Sampling design used for the VAS instrument	167
6.4.4.1.3	Sampling method and size used for the VAS instrument	167
6.4.4.1.4	Administration of the VAS instrument	167
6.4.4.1.5	Results of the testing of the VAS instrument	167
6.4.4.1.6	Outcome of the VAS pretest	168
6.4.4.1.7	Results of the post-pretest questionnaire	169
6.4.4.1.8	The 10-minute discussion	171
6.4.4.2	Consideration of a Likert Scale	171
6.4.4.3	The administration of the second instrument using the Two-Choice Comparative-Value-Statement Items	172
6.4.4.3.1	Description of the instrument	172
6.4.4.3.2	Sampling design	173
6.4.4.3.3	Sampling method and size	173
6.4.4.3.4	Administration of the Two-Choice Comparative-Value-Statement Items	174

	<b>Page</b>
6.4.4.3.5	Results of the testing of the Two-Choice Comparative-Value-Statement Items 175
6.4.4.3.6	Outcome of the Two-Choice Comparative-Value-Statement Items pretest 175
6.4.4.3.7	Results of the post-pretest questionnaire 178
6.4.4.3.8	The 10-minute discussion 179
6.4.5	Discussion of the pretested instrument prior to the empirical study 180
<b>6.5</b>	<b>TESTING PHASE 180</b>
6.5.1	The conceptual framework and hypotheses 180
6.5.1.1	Hypotheses relating to the conceptual framework internally 181
6.5.1.1.1	Hypothesis 1 181
6.5.1.1.2	Hypothesis 2 182
6.5.1.1.3	Hypothesis 3 182
6.5.1.2	Alternative hypotheses relating to biographical data and the conceptual framework 183
6.5.1.2.1	Hypothesis 4 183
6.5.1.2.2	Hypothesis 5 184
6.5.1.2.3	Hypothesis 6 185
6.5.1.2.4	Hypothesis 7 185
6.5.1.2.5	Hypothesis 8 186
6.5.1.2.6	Hypothesis 9 187
6.5.1.2.7	Hypothesis 10 187
6.5.2	Sampling design 188
6.5.2.1	Population 188
6.5.2.2	Sample eligibility criteria 189
6.5.2.3	Sample size 189
6.5.2.4	Sampling protocol 190
6.5.3	The instrument (Questionnaire) 192
6.5.3.1	Composition of the instrument 192
6.5.3.2	Biographical data 193
6.5.3.3	Reliability of the instrument 193
6.5.3.4	Validity of the instrument 195

	<b>Page</b>	
6.5.3.4.1	Face validity	195
6.5.3.4.2	Content validity	196
6.5.3.4.3	Construct validity	197
6.5.3.4.4	Criterion validity	198
6.5.3.5	Procedure for the administration of the questionnaire	198
6.4.3.5.1	Physical safety	198
6.5.3.5.2	Psychological safety	199
<b>6.6</b>	<b>DATA ANALYSIS</b>	<b>200</b>
<b>6.7</b>	<b>ETHICAL CONSIDERATIONS</b>	<b>201</b>
6.7.1	Acceptability of the instrument	201
6.7.2	Informed consent	201
6.7.3	Guarantee of privacy	202
6.7.3.1	Anonymity	202
6.7.3.2	Confidentiality	202
<b>6.8</b>	<b>SUMMARY</b>	<b>203</b>

**CHAPTER 7****RESULTS OF THE STUDY**

	<b>Page</b>	
<b>7.1</b>	<b>INTRODUCTION</b>	<b>204</b>
<b>7.2</b>	<b>ANALYSIS OF THE BIOGRAPHICAL DATA</b>	<b>204</b>
7.2.1	Site details	205
7.2.1.1	College representation	205
7.2.1.2	Internal- and external candidates	205
7.2.1.3	Academic year group of respondents	206
7.2.1.4	College block periods	206
7.2.2	Respondent details	207
7.2.2.1	Age	207
7.2.2.2	Gender	208
7.2.2.3	Language	208
<b>7.3</b>	<b>RELIABILITY AND VALIDITY OF THE INSTRUMENT</b>	<b>211</b>
7.3.1	Coding of responses	212
7.3.2	Reliability	212
7.3.3	Validity	215
7.3.4	Results of the factor analysis	215
<b>7.4</b>	<b>STATISTICS ON ITEMS AND CONCEPTUAL CONTINUUMS</b>	<b>216</b>
7.4.1	Mean scores per individual item	216
7.4.1.1	Means for items 1 – 20: STUDENT: Learner Maturity Continuum	216
7.4.1.2	Means for items 21 – 33: STUDENT: Teacher-student relationship	219
7.4.1.3	Means for items 34 – 44: STUDENT: Teacher-student structure	220
7.4.1.4	Means for items 45 – 60: STUDENT: Typology of Learning	222
7.4.1.5	Means for items 61 – 73: STUDENT: Criteria for Teacher-Student Interactions	223
7.4.1.6	Means for items 74 – 90: STUDENT: Criteria for Selecting and Devising Learning Experiences	225
7.4.1.7	Means for items 91 – 109: TUTOR: Learner Maturity Continuum	227
7.4.1.8	Means for items 110 – 120: TUTOR: Teacher-student relationship	228

	<b>Page</b>
7.4.1.9	Means for items 121 – 130: TUTOR: Teacher-student structure 229
7.4.1.10	Means for items 131 – 144: TUTOR: Typology of Learning 230
7.4.1.11	Means for items 145 – 160: TUTOR: Criteria for Teacher- Student Interactions 232
7.4.1.12	Means for items 161 – 181: TUTOR: Criteria for Selecting and Devising Learning Experiences 233
7.4.1.13	Summary of the responses per individual items 234
7.4.2	Mean scores of respondents for the conceptual continuums 235
7.4.3	Matched pairs <i>t</i> -test: comparisons of respondent preferences and perceptions that the respondents have of the tutor/college regarding the conceptual continuums 238
7.4.4	Testing of hypotheses 1-3 on the conceptual continuums internally 241
7.4.4.1	Hypothesis 1: There is a positive relationship amongst the conceptual continuums regarding respondents' preferences. 241
7.4.4.2	Hypothesis 2: There is a positive relationship amongst the conceptual continuums regarding the perceptions respondents have of the tutor/college. 244
7.4.4.3	Hypothesis 3: There is no relationship with regard to the conceptual continuums between the preferences of respondents and the perceptions they have of the tutor/college. 246
7.4.5	Testing hypotheses relating to biographic data and the conceptual continuums 247
7.4.5.1	Hypothesis 4: There is no relationship between respondents' age and their preferences regarding, and their perceptions of the tutor/college in terms of, the conceptual continuums. 247
7.4.5.2	Hypothesis 5: There is no significant difference between first, second, third and fourth year respondents with regard to their preferences regarding, and their perceptions of the tutor/college pertaining to, the conceptual continuums. 249
7.4.5.2.1	Oneway ANOVA 249
7.4.5.2.2	Multiple comparisons of groups 253
7.4.5.2.3	The Scheffé test 256

	<b>Page</b>	
7.4.5.2.4	Discussion of results with regard to hypothesis 5	261
7.4.5.3	Hypothesis 6: There is no significant difference between the college block periods respondents have attended and their preferences regarding, and their perceptions of the tutor/college in relation to, the different conceptual continuums.	264
7.4.5.4	Hypothesis 7: There is no significant difference between the different language groups with regard to respondents' preferences, and their perceptions of the tutor/college relating to, the conceptual continuums.	267
7.4.5.4.1	Oneway ANOVA	267
7.4.5.4.2	Multiple comparisons of groups	271
7.4.5.4.3	The Scheffé test	273
7.4.5.4.4	Discussion of results with regard to hypothesis 7	281
7.4.5.5	Hypothesis 8: There is no significant difference between the two colleges with regard to respondents' preferences, and their perceptions of the tutor/college, in relation to the conceptual continuums.	281
7.4.5.5.1	Oneway ANOVA	281
7.4.5.5.2	Discussion of results with regard to hypothesis 8	285
7.4.5.6	Hypothesis 9: There is no significant difference between male and female respondents with regard to their preferences, and their perceptions of the tutor/college, pertaining to the conceptual continuums.	285
7.4.5.6.1	Oneway ANOVA	285
7.4.5.6.2	Discussion of results with regard to hypothesis 9	291
7.4.5.7	Hypothesis 10: There is no significant difference between external- and internal students with regard to their preferences, and their perceptions of the tutor/college, with regard to the conceptual continuums.	292
7.4.5.7.1	Discussion of results with regard to hypothesis 10	295
<b>7.5</b>	<b>CONCLUSION</b>	<b>295</b>
7.5.1	Differences between the various variables and the Curriculum Focus	295
7.5.2	Hypothesis testing: differences between the various variables and the Curriculum Focus	296
<b>7.6</b>	<b>SUMMARY</b>	<b>297</b>

**CHAPTER 8**

**SUMMARY OF THE STUDY,  
FINDINGS AND CONCLUSIONS, IMPLICATIONS,  
RECOMMENDATIONS AND LIMITATIONS OF THE STUDY**

		<b>Page</b>
<b>8.1</b>	<b>INTRODUCTION</b>	<b>298</b>
<b>8.2</b>	<b>SUMMARY OF THE STUDY</b>	<b>298</b>
<b>8.3</b>	<b>SUMMARY OF THE FINDINGS</b>	<b>299</b>
8.3.1	Summary of the findings of the biographical data	300
8.3.1.1	Distribution of respondents in colleges	300
8.3.1.2	Distribution of internal- and external candidates	300
8.3.1.3	Distribution of year groups	300
8.3.1.4	Distribution of college blocks	300
8.3.1.5	Distribution of the age of respondents	300
8.3.1.6	Distribution of gender	301
8.3.1.7	Distribution of language groups	301
8.3.1.8	Distribution of the different races at colleges A and B for the period 2004-2006	301
8.3.2	Summary of the findings of the statistics on the items and the conceptual continuums	302
8.3.2.1	Reliability of the instrument	302
8.3.2.2	Mean scores per individual items	302
8.3.2.3	Mean scores of responses for the conceptual continuums	302
8.3.2.4	Comparison of the matched pairs <i>t</i> -test mean scores of responses for the conceptual continuums	302
8.3.3	Summary of the findings of the testing of the hypotheses	303
<b>8.4</b>	<b>CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS</b>	<b>309</b>
8.4.1	Reliability of the instrument	309
8.4.1.1	Conclusions	309

	<b>Page</b>	
8.4.1.2	Implications	310
8.4.1.3	Recommendations: duplication of this present study; refinement of the instrument	310
8.4.2	Hypothesis 5: year of study versus the Curriculum Focus	310
8.4.2.1	Conclusions	310
8.4.2.2	Implications	311
8.4.2.3	Recommendations	311
8.4.3	Hypothesis 8: differences between college A and college B	312
8.4.3.1	Conclusions	312
8.4.3.2	Implications	312
8.4.3.3	Recommendations	313
8.4.4	Hypothesis 9: gender versus Curriculum Focus	313
8.4.4.1	Conclusions	313
8.4.4.2	Implications	313
8.4.4.3	Recommendations	313
8.4.5	Hypothesis 1: respondents' preferences relating to the conceptual continuums	314
8.4.5.1	Correlations where a Pearson $r > 0.5$ was identified	314
8.4.5.1.1	Conclusions	314
8.4.5.1.2	Implications	314
8.4.5.1.3	Recommendations	314
8.4.5.2	Continuums among which no significant correlations exist	315
8.4.5.2.1	Conclusions	315
8.4.5.2.2	Implications	315
8.4.5.2.3	Recommendations	315
8.4.6	Hypothesis 2: respondents' perceptions regarding the tutor/college relating to the conceptual continuums	315
8.4.6.1	Correlations where a Pearson $r > 0.6$ was identified	315
8.4.6.1.1	Conclusions	315
8.4.6.1.2	Implications	315
8.4.6.1.3	Recommendations	316

	<b>Page</b>	
8.4.6.2	Continuums among which no significant correlations exist with regard to respondents' perceptions of the tutor/college	316
8.4.6.2.1	Conclusions	316
8.4.6.2.2	Implications	316
8.4.6.2.3	Recommendations	317
8.4.7	Hypothesis 3: respondents' preferences versus their perceptions	317
8.4.7.1	Conclusions	317
8.4.7.2	Implications	317
8.4.7.3	Recommendations	317
8.4.8	Summary of general recommendations for education	318
8.4.8.1	Monitor implementation of research done in college A	318
8.4.8.2	Paradigm shift	319
<b>8.5</b>	<b>LIMITATIONS OF THE STUDY</b>	<b>319</b>
8.5.1	The Hawthorne effect	319
8.5.2	Population	319
<b>8.6</b>	<b>ATTAINMENT OF RESEARCH OBJECTIVES</b>	<b>320</b>
<b>8.7</b>	<b>CONCLUSION</b>	<b>320</b>

**LIST OF BIBLIOGRAPHY AND APPENDIXES**

	<b>Page</b>
<b>BIBLIOGRAPHY</b>	<b>321</b>
<b>SOURCES REFERRED TO:</b>	321
<b>SOURCES CONSULTED:</b>	343
<b>APPENDIX A(i):</b> PERMISSION REQUESTED FROM THE GAUTENG PROVINCIAL GOVERNMENT TO UNDERTAKE THE PILOT STUDY	356
<b>APPENDIX A(ii):</b> PERMISSION REQUESTED FROM THE GAUTENG PROVINCIAL GOVERNMENT TO UNDERTAKE THE STUDY	361
<b>APPENDIX B(i):</b> PERMISSION GRANTED BY GAUTENG PROVINCIAL GOVERNMENT TO UNDERTAKE A PILOT STUDY	362
<b>APPENDIX B(ii):</b> PERMISSION GRANTED BY GAUTENG PROVINCIAL GOVERNMENT TO UNDERTAKE THE STUDY	363
<b>APPENDIX C(i):</b> PERMISSION REQUESTED FROM PARTICIPATING COLLEGE A TO UNDERTAKE THE STUDY	364
<b>APPENDIX C(ii):</b> PERMISSION REQUESTED FROM PARTICIPATING COLLEGE B TO UNDERTAKE THE STUDY	367
<b>APPENDIX C(iii):</b> PERMISSION REQUESTED FROM PARTICIPATING COLLEGE B TO UNDERTAKE THE STUDY AT A LATER DATE	369
<b>APPENDIX D(i):</b> PERMISSION GRANTED FROM PARTICIPATING COLLEGE A TO UNDERTAKE THE STUDY	370
<b>APPENDIX D(ii):</b> REPLY: PERMISSION GRANTED FROM PARTICIPATING COLLEGE B TO UNDERTAKE THE STUDY	371
<b>APPENDIX E:</b> CONCEPTUAL FRAMEWORK: TRAINING-EDUCATION CONTINUUM	372
<b>APPENDIX F(i):</b> POST-PRETEST QUESTIONNAIRE FOR THE VAS	373
<b>APPENDIX F(ii):</b> POST-PRETEST QUESTIONNAIRE FOR THE TWO-CHOICE COMPARATIVE-VALUE-STATEMENT ITEMS	376

		<b>Page</b>
<b>APPENDIX G:</b>	CRITERIA FOR THE HUMANISTIC-EDUCATIVE-CARING PARADIGM	378
<b>TABLE G.1:</b>	CRITERIA FOR POSITIONS ON LEARNER MATURITY CONTINUUM	378
<b>TABLE G2:</b>	CRITERIA FOR LEARNING TYPOLOGY	388
<b>TABLE G3:</b>	CRITERIA FOR TEACHER-STUDENT INTERACTIONS	390
<b>TABLE G3.1:</b>	CRITERIA FOR EDUCATIVE TEACHER-STUDENT INTERACTIONS	390
<b>TABLE G3.2:</b>	CRITERIA FOR STIMULUS-RESPONSE TEACHER-STUDENT INTERACTIONS	395
<b>TABLE G4:</b>	CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES	397
<b>TABLE G4.1:</b>	CRITERIA FOR SELECTING AND DEVISING EDUCATIVE LEARNING EXPERIENCES	397
<b>TABLE G4.2:</b>	CRITERIA FOR SELECTING AND DEVISING STIMULUS-RESPONSE LEARNING EXPERIENCES	400
<b>APPENDIX H:</b>	THE INSTRUMENT USING THE TWO-CHOICE COMPARATIVE-VALUE-STATEMENT ITEMS	401

**LIST OF TABLES**

	<b>Page</b>
<b>TABLE 1.1:</b> SCHEMATIC REPRESENTATION OF THE RESEARCH METHODOLOGY	27
<b>TABLE 2.1:</b> TEACHER-STUDENT INTERACTIONS	64
<b>TABLE 2.2:</b> CATEGORIES OF EDUCATIVE LEARNING EXPERIENCES	68
<b>TABLE 3.1:</b> TYLER'S FOUR QUESTIONS AND BEVIS AND WATSON'S CONCEPTUAL CONTINUUMS	91
<b>TABLE 4.1:</b> TEACHER STRATEGIES AND BEHAVIOURS: HIGH AND LOW GROWTH CONDITIONS	109
<b>TABLE 4.2:</b> HISTORY OF AFFECT IN THE CURRICULUM	117
<b>TABLE 4.3:</b> A COMPARISON OF ASSUMPTIONS AND PROCESSES OF TEACHER-DIRECTED (PEDAGOGICAL) LEARNING AND SELF-DIRECTED (ANDRAGOGICAL) LEARNING	129
<b>TABLE 6.1:</b> DISTRIBUTION OF THE 181 ITEMS	173
<b>TABLE 6.2:</b> RESULTS OF ANALYSIS OF THE QUESTIONNAIRE AFTER THE PRETEST STUDY	176
<b>TABLE 6.3:</b> SAMPLE DISTRIBUTION ACCORDING TO COLLEGE AND ACADEMIC YEAR GROUPS	189
<b>TABLE 6.4:</b> EXAMPLES OF ITEMS CONTAINED IN THE BEVIS AND WATSON CONCEPTUAL CONTINUUMS	192
<b>TABLE 6.5:</b> TOTAL NUMBER OF ITEMS AND CORRESPONDING QUESTION NUMBERS FOR THE BEVIS AND WATSON CONCEPTUAL CONTINUUMS	193
<b>TABLE 7.1:</b> FREQUENCY DISTRIBUTION OF RESPONDENTS IN COLLEGES (N = 299)	205
<b>TABLE 7.2:</b> FREQUENCY DISTRIBUTION OF INTERNAL- AND EXTERNAL CANDIDATES (N = 299)	205
<b>TABLE 7.3:</b> FREQUENCY DISTRIBUTION OF YEAR GROUPS (N = 299)	206

	<b>Page</b>
<b>TABLE 7.4:</b> FREQUENCY DISTRIBUTION OF COLLEGE BLOCK PERIODS (N = 299)	206
<b>TABLE 7.5:</b> FREQUENCY DISTRIBUTION OF THE AGE OF RESPONDENTS (N = 299)	207
<b>TABLE 7.6:</b> FREQUENCY DISTRIBUTION OF GENDER (N = 299)	208
<b>TABLE 7.7:</b> FREQUENCY DISTRIBUTION OF LANGUAGE GROUPS (N = 299)	208
<b>TABLE 7.7(a):</b> FREQUENCY DISTRIBUTION OF THE GENDER AND RACE OF INTERNAL- AND EXTERNAL CANDIDATES SELECTED AT COLLEGE A FOR THE PERIOD 2004-2006	210
<b>TABLE 7.7(b):</b> FREQUENCY DISTRIBUTION OF THE GENDER AND RACE OF INTERNAL- AND EXTERNAL CANDIDATES SELECTED AT COLLEGE B FOR THE PERIOD 2004-2006	211
<b>TABLE 7.8:</b> ALPHA RELIABILITY COEFFICIENTS OF THE CONCEPTUAL CONTINUUMS FOR STUDENTS' PREFERENCES AND PERCEPTIONS OF TUTORS/COLLEGES	213
<b>TABLE 7.9(a):</b> MEANS FOR ITEMS 1–20: STUDENT: LEARNER MATURITY CONTINUUM	217
<b>TABLE 7.9(b):</b> MEANS FOR ITEMS 21–33: STUDENT: TEACHER-STUDENT RELATIONSHIPS	220
<b>TABLE 7.9(c):</b> MEANS FOR ITEMS 34–44: STUDENT: TEACHER-STUDENT STRUCTURE	221
<b>TABLE 7.9(d):</b> MEANS FOR ITEMS 45–60: STUDENT: TYPOLOGY OF LEARNING	223
<b>TABLE 7.9(e):</b> MEANS FOR ITEMS 61–73: STUDENT: CRITERIA FOR TEACHER-STUDENT INTERACTIONS	224
<b>TABLE 7.9(f):</b> MEANS FOR ITEMS 74–90: STUDENT: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES	226
<b>TABLE 7.9(g):</b> MEANS FOR ITEMS 91–109: TUTOR: LEARNER MATURITY CONTINUUM	228
<b>TABLE 7.9(h):</b> MEANS FOR ITEMS 110–120: TUTOR: TEACHER-STUDENT RELATIONSHIPS	229

	<b>Page</b>
<b>TABLE 7.9(i):</b> MEANS FOR ITEMS 121–130: TUTOR: TEACHER-STUDENT STRUCTURE	230
<b>TABLE 7.9(j):</b> MEANS FOR ITEMS 131–144: TUTOR: TYPOLOGY OF LEARNING	231
<b>TABLE 7.9(k):</b> MEANS FOR ITEMS 145–160: TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS	233
<b>TABLE 7.9(l):</b> MEANS FOR ITEMS 161–181: TUTOR: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES	234
<b>TABLE 7.9(m):</b> SUMMARY OF THE SPECIFIC RESPONSES PER INDIVIDUAL ITEMS	235
<b>TABLE 7.10:</b> MEAN SCORES OF RESPONSES PER CONCEPTUAL CONTINUUM	236
<b>TABLE 7.10(a):</b> SUMMARY OF NUMBER OF AVERAGE SCORES PER CONCEPTUAL CONTINUUM FALLING WITHIN A 25%* INTERVAL	237
<b>TABLE 7.11(a):</b> COMPARISONS OF MEAN SCORES OF RESPONSES PER CONCEPTUAL CONTINUUM RELATED TO STUDENT-PREFERENCE AND PERCEPTION OF TUTOR/COLLEGE	239
<b>TABLE 7.11(b):</b> COMPARISONS OF DIFFERENCES OF MEAN SCORES OF RESPONSES PER CONCEPTUAL CONTINUUM RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF TUTOR/COLLEGE	240
<b>TABLE 7.12:</b> CORRELATION COEFFICIENTS AMONGST STUDENT PREFERENCE PER CONCEPTUAL CONTINUUM	242
<b>TABLE 7.13:</b> CORRELATION COEFFICIENTS AMONGST STUDENT PERCEPTION OF THE TUTOR/COLLEGE	244
<b>TABLE 7.14:</b> PEARSON CORRELATION COEFFICIENTS BETWEEN STUDENT- PREFERENCE AND PERCEPTION OF TUTOR/COLLEGE PER CONCEPTUAL CONTINUUM	247
<b>TABLE 7.15:</b> CORRELATIONS BETWEEN THE SCORES OBTAINED FOR THE BEVIS AND WATSON CONCEPTUAL CONTINUUMS AND THE AGE OF THE RESPONDENTS	248

	<b>Page</b>
<b>TABLE 7.16:</b> ONEWAY ANOVA OF MEAN SCORES PER LEVEL OF ADVANCEMENT OF RESPONDENTS AND THEIR PREFERENCES AND PERCEPTIONS IN TERMS OF THE FOUR CONCEPTUAL CONTINUUMS	250
<b>TABLE 7.17:</b> ANOVA OF MEAN SCORES PER LEVEL OF ADVANCEMENT OF RESPONDENTS AND THEIR PREFERENCES AND PERCEPTIONS IN TERMS OF THE FOUR CONCEPTUAL CONTINUUMS	252
<b>TABLE 7.18:</b> MULTIPLE COMPARISONS OF THE CURRICULUM FOCUS OF THE FIRST, SECOND, THIRD AND FOURTH YEAR STUDENTS WITH REGARD TO STUDENT PREFERENCE	254
<b>TABLE 7.19:</b> MULTIPLE COMPARISONS OF THE CURRICULUM FOCUS OF THE FIRST, SECOND, THIRD AND FOURTH YEAR STUDENTS WITH REGARD TO STUDENT PERCEPTION OF THE TUTOR	255
<b>TABLE 7.20:</b> HOMOGENOUS SUBGROUPS PER YEAR LEVEL RELATING TO TUTOR: LEARNER MATURITY CONTINUUM	257
<b>TABLE 7.21:</b> HOMOGENOUS SUBGROUPS PER YEAR LEVEL RELATING TO TUTOR: TYPOLOGY OF LEARNING	258
<b>TABLE 7.22:</b> HOMOGENOUS SUBGROUPS PER YEAR LEVEL RELATING TO TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS	259
<b>TABLE 7.23:</b> HOMOGENOUS SUBGROUPS PER YEAR LEVEL PERTAINING TO TUTOR: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES	260
<b>TABLE 7.24:</b> MEAN SCORES RELATING TO COLLEGE BLOCK PERIODS AND RESPONDENTS' PREFERENCES AND THEIR PERCEPTIONS OF TUTORS/COLLEGE WITH REGARD TO THE DIFFERENT CONCEPTUAL CONTINUUMS	265
<b>TABLE 7.25:</b> ONEWAY ANOVA OF COLLEGE BLOCK PERIODS AND RESPONDENTS' PREFERENCES AND THEIR PERCEPTIONS OF TUTORS/COLLEGE WITH REGARD TO THE DIFFERENT CONCEPTUAL CONTINUUMS	266

	<b>Page</b>
<b>TABLE 7.26:</b> ONEWAY ANOVA OF MEAN SCORES RELATING TO LANGUAGE AND RESPONDENTS' PREFERENCES AND THEIR PERCEPTIONS OF TUTORS/COLLEGE WITH REGARD TO THE DIFFERENT CONCEPTUAL CONTINUUMS	268
<b>TABLE 7.27:</b> ANOVA OF LANGUAGE AND RESPONDENTS' PREFERENCES AND THEIR PERCEPTIONS OF TUTORS/COLLEGE WITH REGARD TO THE DIFFERENT CONCEPTUAL CONTINUUMS	269
<b>TABLE 7.28:</b> MULTIPLE COMPARISONS OF THE DIFFERENCE IN THE FOCUS IN THE CONCEPTUAL CONTINUUMS ACCORDING TO LANGUAGE AND STUDENT PREFERENCE	271
<b>TABLE 7.29:</b> MULTIPLE COMPARISONS OF THE DIFFERENCE IN THE FOCUS IN THE CONCEPTUAL CONTINUUMS ACCORDING TO LANGUAGE AND STUDENT PERCEPTION OF THE TUTOR/COLLEGE	272
<b>TABLE 7.30:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: LEARNER MATURITY CONTINUUM	274
<b>TABLE 7.31:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: TEACHER-STUDENT STRUCTURE	275
<b>TABLE 7.32:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: TYPOLOGY OF LEARNING	276
<b>TABLE 7.33:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: CRITERIA FOR TEACHER-STUDENT INTERACTIONS	277
<b>TABLE 7.34:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES	278
<b>TABLE 7.35:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO TUTOR: TEACHER-STUDENT STRUCTURE	279
<b>TABLE 7.36:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS	280

	<b>Page</b>
<b>TABLE 7.37:</b> ONEWAY ANOVA FOR COLLEGES PERTAINING TO STUDENT PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE RELATING TO THE CONCEPTUAL CONTINUUMS	282
<b>TABLE 7.38:</b> ANOVA OF DIFFERENCES BETWEEN THE TWO COLLEGES WITH REGARD TO STUDENT PREFERENCE AND PERCEPTION OF THE TUTOR	283
<b>TABLE 7.39:</b> ONEWAY ANOVA OF GENDER RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE REGARDING DIFFERENT CONCEPTUAL CONTINUUMS	286
<b>TABLE 7.40:</b> ANOVA OF GENDER RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE REGARDING DIFFERENT CONCEPTUAL CONTINUUMS	287
<b>TABLE 7.41:</b> ONEWAY ANOVA OF INTERNAL- AND EXTERNAL RESPONDENTS RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE REGARDING THE DIFFERENT CONCEPTUAL CONTINUUMS	293
<b>TABLE 7.42:</b> ANOVA OF INTERNAL- AND EXTERNAL RESPONDENTS RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE REGARDING THE DIFFERENT CONCEPTUAL CONTINUUMS	294
<b>TABLE 7.43:</b> SIGNIFICANT DIFFERENCES AND CORRELATIONS IN STUDENT PREFERENCE AND STUDENT TUTOR PERCEPTION AND CORRELATIONS WITH REGARDS TO THE CONCEPTUAL CONTINUUMS	297
<b>TABLE 8.1:</b> SUMMARY OF THE FINDINGS OF THE TESTING OF THE HYPOTHESES	303
<b>TABLE 8.2:</b> DEGREE OF RELATEDNESS OF CORRELATION	309

**LIST OF FIGURES**

	<b>Page</b>
<b>FIGURE 1.1:</b> CONCEPTUAL FRAMEWORK: TRAINING- EDUCATION CONTINUUM	17
<b>FIGURE 1.2:</b> CRITERIA FOR CONCEPTUAL CONTINUUMS: TEACHER-STUDENT INTERACTIONS AND LEARNING EXPERIENCES	19
<b>FIGURE 2.1:</b> IMMATURE POSITIONS AND OPPOSITE POLES	42
<b>FIGURE 2.2:</b> PERRY'S SCHEME OF INTELLECTUAL AND ETHICAL DEVELOPMENT	56
<b>FIGURE 2.3:</b> DEVELOPMENTAL INSTRUCTION MODEL	59
<b>FIGURE 3.1:</b> TEACHER-STUDENT RELATIONSHIP, TEACHER STRUCTURE AND STUDENT-SELF STRUCTURE	94
<b>FIGURE 6.1:</b> AN EXAMPLE OF A TWO-CHOICE COMPARATIVE- VALUE-STATEMENT ITEM	172
<b>FIGURE 6.2:</b> SAMPLING DESIGN: TESTING PHASE	191
<b>FIGURE 7.1:</b> CORRELATION COEFFICIENTS AMONGST STUDENT PREFERENCE PER CONCEPTUAL CONTINUUM	243
<b>FIGURE 7.2:</b> CORRELATION COEFFICIENTS AMONGST STUDENT PERCEPTION OF THE TUTOR/COLLEGE	246
<b>FIGURE 7.3:</b> HOMOGENOUS SUBGROUPS PER YEAR LEVEL MEANS PLOT FOR TUTOR: LEARNER MATURITY CONTINUUM	257
<b>FIGURE 7.4:</b> HOMOGENOUS SUBGROUPS PER YEAR LEVEL MEANS PLOT FOR TUTOR: TYPOLOGY OF LEARNING	258
<b>FIGURE 7.5:</b> HOMOGENOUS SUBGROUPS PER YEAR LEVEL MEANS PLOT FOR TUTOR: CRITERIA FOR TEACHER- STUDENT INTERACTIONS	259
<b>FIGURE 7.6:</b> HOMOGENOUS SUBGROUPS PER YEAR LEVEL MEANS PLOT FOR TUTOR: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES	260
<b>FIGURE 7.7:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: LEARNER MATURITY CONTINUUM	274

	<b>Page</b>
<b>FIGURE 7.8:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: TEACHER-STUDENT STRUCTURE	275
<b>FIGURE 7.9:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: TYPOLOGY OF LEARNING	276
<b>FIGURE 7.10:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: CRITERIA FOR TEACHER-STUDENT INTERACTIONS	277
<b>FIGURE 7.11:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES	278
<b>FIGURE 7.12:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR TUTOR: TEACHER-STUDENT STRUCTURE	279
<b>FIGURE 7.13:</b> HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS	280
<b>FIGURE 7.14:</b> DIFFERENCES BETWEEN THE TWO COLLEGES WITH REGARD TO THE STUDENT: TEACHER-STUDENT RELATIONSHIPS AND TYPOLOGY OF LEARNING AND THE TUTOR: TYPOLOGY OF LEARNING AND CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIECES	284
<b>FIGURE 7.15:</b> HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR STUDENT: TYPOLOGY OF LEARNING	288
<b>FIGURE 7.16:</b> HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR STUDENT: TEACHER-STUDENT INTERACTIONS	289
<b>FIGURE 7.17:</b> HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR TUTOR: TEACHER-STUDENT RELATIONSHIP	289
<b>FIGURE 7.18:</b> HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR TUTOR: TEACHER-STUDENT STRUCTURE	290
<b>FIGURE 7.19:</b> HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR TUTOR: TEACHER-STUDENT INTERACTIONS	290

## GLOSSARY

### **Affective**

Affective means feeling or emotion (King 1984:3), the feeling or emotional aspect of experience and learning (Cline, Necochea & Brown 2000:2).

### **Affective behaviour**

Affective behaviour refers to conduct that reflects feelings, interests, sentiments, awareness, attitudes, values, beliefs, needs and emotional responses (Davis 1981:1588; King 1984:3; Montalvo 1989(b):91).

### **Affective education**

Affective education is an educational process that recognises, fosters improvement in, and utilises emotions, attitudes and values as part of the individual's learning and motivational characteristics (Hawkins 1985:36).

### **Affective skills**

Affective skills are specific, experiential skills commonly ascribed to an affective educational programme such as adequate depth of feelings, adequate expression and control of feelings, ability to cope with problem feelings and encouragement of positive feelings (Hawkins 1985:36).

### **Assessment**

Assessment refers to the process of obtaining data to ascertain the academic progress the student had made during her course of study. Assessment may be continuous, periodic, formative, summative, norm- and criterion referenced (Quinn 2000:201-203).

### **Behaviour**

Behaviour is defined as a response to one or more stimuli and describes the *observable* outcome of learning within a specific theoretical framework (Reilly & Oermann 1990:8).

### **Behavioural objectives**

Behavioural objectives are expected behavioural outcomes of the training process, either for an individual experience or a total programme of studies. Learning as an outcome is manifested by either an *observable* or inferred change in behaviour (Huckabay 1980:15; Quinn 2000:117, 137; Reilly & Oermann 1990:7).

### **Behaviourism**

When applied to education, behaviourism refers to the specific theory of learning which stresses a direct relationship between a stimulus (S) and a response (R) as depicted in the paradigm, S-R (Huckabay 1980:11; Reilly & Oermann 1990:8).

### **Behaviouristic educational milieu**

A behaviouristic educational milieu is an environment where the primary emphasis is on the attainment of pre-selected educational objectives, in order to produce an *observable* change in the behaviour of the student as proof that learning has occurred (Huckabay 1980:15; Quinn 2000:117, 137; Reilly & Oermann 1990:7).

### **Caring**

Caring is a human process involving the cognitive, affective and psycho-motor aspects with the beauty, art, ethics, intuition, aesthetics and spiritual awareness of the inter-subjective human-to-human caring process and moral ideas (Bevis & Watson 1989:53).

### **Caring interaction**

Caring interaction incorporates attitudinal structures of an interpersonal caring process between a nurse educator and a student nurse. It is characterised by perceptions of positive regard, warmth, empathic understanding, congruence, self-disclosure and genuineness (Sheston in Leininger & Watson 1990:117).

### **Caring nurse**

A caring nurse is a nurse who is both trained and educated. This dual concept of training and education as a basis for professional preparation relates to the concept that an educated person is someone who is a knowledgeable, competent practitioner, well equipped with the technology and techniques of her profession (Searle, Brink & Beukes 1986:104, 107).

### **Caring transaction**

A caring transaction incorporates activities related structures of an interpersonal caring process between a nurse educator and a student nurse. It is characterised by a dialogical quality of existential awareness, congruent role expectations, mutual goal setting and responsibility as well as mutual positive change (Sheston in Leininger & Watson 1990:117).

### **Characteristics of an instrument**

Characteristics of an instrument are certain criteria to which an instrument must conform in order to be assessed as having validity and reliability (Krefting 1991:214; Wilson 1993:143). Examples of the characteristics are reliability, validity, sensitivity, objectivity and ethical acceptability.

### **Confluent education**

Hawkins (1985:36) stated that confluent education is an arrangement of time, materials and learning experiences to give recognition to the effect of different cognitive and affective traits on content mastery. Francke and Erkens (1994:354, 360), stated that confluent education is a way and a process of teaching and learning in which the affective domain and the cognitive domain flow together.

### **Curriculum**

From the perspective of a Humanistic-Educative-Caring Curriculum Paradigm, curriculum may be defined as the *interactions* and *transactions* that occur between and among students and teachers with the intent that learning occurs (Bevis & Watson 1989:5).

From the perspective of a behaviourist or a stimulus-response curriculum model, curriculum may be defined as the *content* that has to be learned through the attainment of pre-selected behavioural outcomes.

### **Education**

Education is a process where interactions and learning are the main focus with the aim of producing an educated nurse who displays the ability to think analytically, critically, evaluatively and creatively and can exercise independent judgement of scientific and non-scientific data during the nursing of a patient or client. During this process the learner is

enriched in the syntactical, contextual and inquiry categories of learning and grows in maturity (Bevis & Watson 1989:73).

### **Educated nurse**

An educated person has the ability to think and reason, that is, she is creative, knowledgeable and analytically minded and understands the *why* and *how* of the transmission of knowledge. In this lies the potential for extending the boundaries of knowledge (Searle, Brink & Beukes 1986:106). The outlook of an educated nurse has been broadened and transformed by what she has learned. This transformation of outlook engenders a sense of commitment which is the essence of a professional service to mankind (Searle et al 1986:106).

An educated nurse is one who understands man's struggle for existence and a meaningful life, one with an extensive knowledge of the ethos of nursing, its ethics and philosophy and of the scientific foundations and technical skills of the science and art of nursing (Searle et al 1986:105-106, 110).

### **Empirical referents**

Empirical referents are classes or categories of actual phenomena that by their existence or presence demonstrate the occurrence of the phenomenon itself. The items in a questionnaire on a specific topic are a theoretical example hereof.

Defining or critical attributes refer to the cluster of attributes that are the most frequently associated with the concept and that allows the analyst the broadest insight into the concept (Chinn & Cramer 2004:146; Walker & Avant 1995:42). Critical/defining attributes and empirical referents are often the same especially when the concept is found in the practical/clinical field. However, if concepts are highly abstract, so might be the attributes and accordingly, empirical referents might be difficult to establish.

Empirical referents, once identified, are extremely useful in developing instruments with which to measure phenomena. They are also very useful in practice since they provide the clinician with clear, observable phenomena by which to "diagnose" the existence of a concept in the clinical field (Chinn & Cramer 2004:146; Walker & Avant 1995:46).

### **Ethical acceptability**

Ethical acceptability refers to the adherence by the researcher to the professional, legal and social obligations to the respondents in order that the rights of the respondents are protected. An example of ethical acceptability is ensuring that respondents participate voluntarily in the study (Polit & Beck 2004:159, 717).

### **Evaluation**

Evaluation refers to the process of making a value judgement based on the data produced during the assessment of a student's academic development (Quinn 2000:201).

### **External students**

External students are appointed in student posts and come directly from the community (see internal students).

### **Four-year comprehensive course**

The four-year comprehensive course refers to the course leading to registration as a nurse (general, psychiatric and community) and midwife according to Regulation R425 (South Africa 1985:1).

### **Humanism**

Humanism relates to a human or an individual who is a person and describes the particular nature of the humanness of an individual (Kruger & Whittle 1982:11; Soanes & Hawker 2005:493).

### **Humanistic**

Humanistic is any system or mode of thought in which human interests, values and dignity are taken to be of primary importance, as in moral judgements (King 1984:3).

### **Inferred behaviour**

Inferred behaviour relates to those intellectual skills which are indirectly observed. For example, although the skill of analysis is evident in a written presentation of a certain situation, the principles of logic and critical thinking required to achieve this analysis have to be indirectly inferred (Reilly & Oermann 1990:7).

### **Internal students**

Internal students are employed and paid by the Gauteng Department of Health. They receive study leave to complete the four-year comprehensive diploma course (see external students).

### **Learning**

Learning in the context of this study is viewed as an educative process involving the transactions and interactions which occur between and among teachers and students (Bevis & Watson 1989:5).

### **Nurse tutor**

A nurse tutor is a registered nurse directly involved in the theoretical and clinical education and training of student nurses. It thus includes both tutors registered with the South African Nursing Council as nurse tutors and registered professional nurses involved in the theoretical and clinical education and training of nurses, whether qualified as registered nurse tutors or not (van der Wal 1992:23).

### **Nursing college**

According to the South African Nursing Council, a nursing college is described as a post-secondary educational institution sanctioned by the South African Nursing Council to provide professional nursing education at a basic and post-basic level (South Africa 1985:1).

### **Nursing education**

Nursing education is a process of guiding, assisting and providing ways that will enable students to learn the art and science of nursing and to apply caring interactions and transactions within a nursing educational milieu (Fischer, Boshoff & Ehlers 2001:68). The product of this process is an educated, caring nurse.

### **Nursing educational milieu**

For the purpose of this study, a nursing educational milieu is an environment where all the interactions and transactions necessary to produce an educated, caring nurse occur between and among students and teachers (Bevis & Watson 1989:53, 73; Sheston in Leininger & Watson 1990:117).

### **Objectivity**

Objectivity refers to the use of facts without distortion of the personal feelings, beliefs, values, attitudes and biases of the researcher and/or the respondent (LoBiondo-Wood & Haber 1994:507; Wilson 1993:336).

### **Paradigm**

A paradigm is a way of looking at natural phenomena encompassing a set of philosophical assumptions that guides one's approach to enquiry (Polit & Beck 2004:13, 726).

### **Reliability**

Reliability is the consistency, constancy or dependability, accuracy and precision with which an instrument measures the attribute it is designed to measure (LoBiondo-Wood & Haber 1994:510; Polit & Beck 2004:36, 416, 730; Wilson 1993:339).

### **Research instrument**

An instrument, for example, a questionnaire, is a research tool or device that is designed to measure a specific variable and is utilised to collect and record data (LoBiondo-Wood & Haber 1994:358; Polit & Hungler 1987:530; Wilson 1993:142).

### **Sensitivity**

Sensitivity of an instrument refers to how small a variation in an attribute can be reliably detected and measured (Polit & Hungler 1987:330; Polit & Beck 2004:302-303).

### **Student nurse**

For this study, a student nurse is defined as an individual, male or female, registered at a Gauteng Provincial college of nursing for the four-year comprehensive diploma course according to Regulation R425 of 22 February 1985, at different levels (years) of advancement (Fischer, Boshoff & Ehlers 2001:68; Khanyile & Mfidi 2005:71). The course is referred to in this study as the R425 course.

### **Training**

From a behaviouristic viewpoint, training is a process where stimulus-response principles are the main focus, with the aim of producing a trained nurse who has acquired skills through attainment of pre-selected behavioural outcomes in the theoretical and clinical situation (Huckabay 1980:15-16; Reilly & Oermann 1990:xix). Training involves a change in behaviour which is visible to the observer (Bloom 1956:45).

### **Validity**

Validity is the relevance of a measure. A valid instrument measures the concept or construct it claims to measure (Polit & Beck 2004:35-36, 422; Wilson 1993:343)

## **CHAPTER 1**

### **ORIENTATION TO THE STUDY**

#### **1.1 INTRODUCTION**

It is a much debated issue that the humanistic and caring aspect in nursing appears to have been lost in a highly technological and sophisticated health milieu (Benner & Wrubel 1989:xv; Hawthorne & Yurkovich 1995:1088-1089; Kyle 1995:506). Compounding this issue is the fact that nurses are *trained*, in a behaviouristic (stimulus-response) milieu, as opposed to being educated, in a humanistic, educative, caring milieu (Bevis 1989(a):4-5). This creates serious problems as nurses deal with human beings who require a humanistic, educative caring milieu where they are viewed as a whole or total person and not as sick parts (Searle, Brink & Beukes 1986:88). If a caring and educated professional status is to be obtained, then surely the educational milieu must facilitate this process. Consequently, it is important to ascertain the educational focus in a nursing college so that the nurse tutor, in partnership with the student, may take the appropriate steps to facilitate the process of producing an educated *and* caring nurse. To contribute towards this vision, this study focuses on the latter aspect by quantitatively investigating the nature of nursing education within the Bevis and Watson Humanistic-Educative-Caring-Curriculum Paradigm versus a Behaviouristic (Stimulus-Response) Curriculum Paradigm, from the perspective of student nurses.

#### **1.2 PROBLEM FORMULATION**

##### **1.2.1 Background to the problem**

A previous study, (Mouton 1997) investigated, within the qualitative paradigm, the educational focus of tutors and students of a nursing college, from the perspective of Bevis and Watson's Humanistic-Educative-Caring Curriculum Paradigm versus a Behaviouristic (Stimulus-Response) Curriculum Paradigm (see figure 1.1). In this 1997 study, tutors described the maturity level of students, how students learn, the teacher-student interactions and the learning experiences of students undertaking the four-year comprehensive course according to Regulation R425 as amended. The latter regulation (Regulation R425) relates to the approval of, and the minimum requirements for, the education and training of a nurse

(general, psychiatric and community) and midwife, leading to registration (South Africa 1985:1).

It was found that although there was a definite move in the college towards an educational focus, several training aspects were still deeply entrenched in the behaviouristic educational milieu. In the first year, *training* of students appeared to be the norm. In the second year, progression was seen to be in a *transitional* phase. At this point, it appeared as if tutors were well on their way to implementing educative principles, but during the third year a relapse occurred and students again adopted behaviouristic principles in the way they learned. The latter pattern was perpetuated during the fourth year (Mouton 1997:247). Some of the training trends manifested included the implementation of study guides with their overemphasis on the attainment of behavioural objectives as proof of learning; the immaturity of students as evidenced by their dependence on the tutors and their inability to take responsibility for their own learning; students learned rules and procedures by means of rote learning; the lecture was the main teaching method and the tutor was seen as an authority figure. Research conducted in Scotland confirmed the use of the lecture method as a teaching method in the traditional nursing programme (Jones & Johnston 2006:943).

Thus, the major implication in the 1997 study centred on the issue that the tutor and the student have to move from the implementation of a behaviouristic (stimulus-response) curriculum, to a humanistic-educative-caring curriculum paradigm, from the first year of study to ensure that the concept education (see glossary) remains the focal point throughout the R425 course undertaken by the students.

The above statement implies that the tutor has to create a humanistic-educative-caring learning environment from her<sup>1</sup> first contact with the student. Thus, in the first year, the tutor must already implement educative principles, which enable the student to move from an immature position to a mature position on the Learner Maturity Continuum (see figure 1.1).

<sup>1</sup> To avoid the cumbersome repetition of he/she, his/her, himself/herself, female gender terminology namely she, her, herself, is applied consistently throughout the study. Thus, any reference to female gender includes male gender. Additionally, if it is clear from the context that the researcher or respondent is a male, the masculine pronoun has been used.

To achieve this, the tutor has to change her focus from content to student. Tutors have to ensure that the process of learning is emphasised, implying that it is more important *how* the student learns than what she learns. A shift is required from the attainment of behavioural objectives to the attainment of broad, educative goals. Students have to be actively involved in, and take responsibility for their own learning. Tutors and students have to collaborate as co-learners; the tutor as the expert learner and the student as the novice learner (Bevis 1989:(b)131; Diekelmann 1990:303; Durgahee 1998:163). The tutor also has to adapt her teaching methods to the way a student learns and in partnership with the student, select *educative learning experiences*. Evaluation has to be frequent and aimed at determining the progress, development and growth of the student towards maturity and responsible learning. Thus, the tutor has to ensure that the content becomes the vehicle around which scholarly activities are developed. By implementing sound educative principles from the first year of study, the tutor and student will create a solid educative foundation upon which the second, third and fourth years of study will be built. In addition, this would provide the foundation for continued, self-directed, life-long learning so needed in an ever-changing professional and practice milieu, such as the health care delivery milieu.

However, the paradigm shift from behaviourism to a humanistic-educative-caring approach, will not be an easy task for various reasons. Firstly, the tutors and students will have to realise that rigidity and limitations are self-imposed. The latter situation stems mainly from the fact that the majority of tutors and students have been educated in an educational milieu where they were unaccustomed to, and even afraid of, moving from the known to the unknown. The unknown factor exposed tutors to a certain element of risk-taking with the ever-present fear of criticism, rejection and disapproval from their colleagues. This fear, in turn, has proven to be a significant obstacle to creativity and has inhibited creative teaching by the tutor and learning by the student (Mouton 1997:249). Passivity on the part of learners also figured prominently in these “educational” settings.

Secondly, the tutor finds herself in a world where the moral imperative to care, appears to have been supplanted with a dominant perspective of self-indulgence and disrespect for human life and dignity (Johns 1996:1135). Thus, the shift to a humanistic-educative-caring paradigm requires the tutor to make a deliberate and decisive choice for the moral value of caring. This choice will require a great deal of courage and self-assertiveness (Mouton

1997:249). Internationally, during the past few years, nursing education has leaned greatly on a behaviouristic (stimulus-response) curriculum paradigm, that is, the functional or structural approach to the detriment of a humanistic-educative-caring approach. The latter statement is given credence by perusal of educational literature pertaining to aspects relating to the curriculum, which reveal emphasis on behaviourism in both general and nursing education (Becker, Viljoen, Botma & Bester 2003:57; Klein 1986:32; Kliebard 1995:81; Marsh 1992:107; Slattery 1995:1, 47). For instance, in America, Klein (1986:32) stated that Tyler's syllabus, "*Basic Principles of Curriculum and Instruction*" (1950) was selected by an honorary group of Professors of Curriculum, as one of two publications which has had the most influence in the field of curriculum development. Further, the Tyler model is applied as accreditation criteria for American schools of nursing, which served to entrench behaviourism in nursing institutions (Bevis 1989(a):4-5; Diekelmann 1990:300-301; Martin 1989:109). In Great Britain, nursing education is still based on an apprenticeship type of training (Potgieter 1992:19). The latter aspect is corroborated by Quinn (2000:1) who stated that in the United Kingdom, the nursing curriculum is based on the instrumental ideology. Consequently, the main purpose of the curriculum is to produce a nursing workforce that is equipped to deal with the demands of its role and therefore, a key principle is the vocational relevance of the curriculum. Additionally, he adds that nursing education concepts such as the needs, aspirations and personal growth of the individual are not totally negated but that they are of secondary importance to the main purpose.

In South Africa, perusal of various documents and regulations published by the South African Nursing Council (SANC) revealed the wide use of Tylerian principles. For example, the SANC sets minimum requirements for subject content and practice guidelines in regulations (South Africa:1985:3) and directives (guidelines), which emanate from the Nursing Act 1978 (Act no 50 of 1978). Regulation R425 prescribes programme objectives, subjects and a minimum pass mark of 50% in each subject (South Africa 1985:2-3). A nursing guideline, such as the guideline for the course leading to registration as a nurse (general, psychiatric and community) and midwife (SANC 1985:4) specifies stage objectives and defines an objective as "*a specific description of measurable behaviour required from somebody at a given stage*". According to Bevis and Watson (1989:31, 265-266; see section 2.3), the concept *measurable behaviour* is a debatable issue as not all learning results in observable behavioural

changes. The mere fact that learning cannot be measured, or is not observable, is not necessarily indicative that learning has not occurred.

During August 1999, the SANC held a national summit on nursing where two discussion documents were issued. Document A was entitled “Education and training of professional nurses in South Africa: guidelines for transforming nursing education” (SANC 1999(a)). Document B was entitled “Minimum requirement for the education and training and guide on the teaching of students in the programme leading to registration as a nurse (general, psychiatric and community) and midwife” (SANC 1999(b)). The latter two documents were only discussion documents. The SANC is in the process of formulating new regulations and guidelines for nursing education programmes and the new nursing act still has to be proclaimed operational by the President. However, the two discussion documents contain numerous references to behaviouristic principles. For instance, document A refers to the education and *training* of nurses and to outcomes and *objectives* under evaluation (SANC 1999(a):1-3, 10). Document B contains contradictory and confusing references to stage *objectives* and learning outcomes in the same, and in different paragraphs. The document further refers to *training* and a minimum requirement of 4000 hours for clinical placement and defines outcomes as the contextually demonstrated *products* of the learning process (SANC 1999(b):9-10, 17-18).

The objective or behavioural approach, or the product model or behavioural-objectives model in nursing education has been under fire. Its usefulness and appropriateness in a professional educational programme is being questioned. Especially in the United States of America (USA), a human science approach in opposition to a natural science approach is propagated (Bevis 1989(a):4-5; Leino-Kilpi 1989:61-62). In an article on the 10th Anniversary Conference on Research in Nursing Education, sponsored by the Council for the Society for Research in Nursing Education (CSRNE) in America, Brink (1992:33) reported about the current buzz-word in nursing education, namely, curriculum revolution (Bevis 1989(a):4). Brink (1992:33) stated that “*the trend is to move away from the Tylerian (the Behavioural-Objectives) Model of curriculum development, which has prescribed nursing curriculum and the direction of nursing thought for the last 35 years, to a holistic caring model of curriculum development*”.

A human science approach is important because nursing is a people orientated discipline, where human interactions and the caring aspect should feature prominently. Therefore, it must be emphasised that nursing cannot be placed in a mechanistic, atomistic formula as the feelings, attitudes and personal experiences of people have to be considered at all times (Benner & Wrubel 1989:6).

Leino-Kilpi (1989:61, 65) found that student nurse graduandi in Finland had a highly atomistic, fragmentary understanding of professional knowledge. In South Africa, Waterson, Harms, Qupe, Maritz, Manning, Makobe and Chabeli (2006(a):60-61) found that students lacked theory-practice integration due to curriculum fragmentation and recommended that students develop a *deep* approach to learning. These findings are discouraging as the primary goal in nursing education is to learn to be caring towards human beings, integrally as well as individually (Brink 1990:38). This caring approach requires a holistic approach to educating and training students, so that they conceive knowledge and the patient as a *whole*. In South Africa, Searle et al (1986:88) also stated “*the patient should be treated as a totality, not as sick parts*”. Wholeness is one of the underlying principles of Bevis and Watson's Curriculum Paradigm. Therefore, students should experience knowledge as an integrated whole.

In summary, attention has been focused and is refocused on nursing as a caring profession with the resultant focusing on the curriculum and the way nurses are educated (Bauer 1990:257-258). Nurses deal with human beings and this situation requires a humanistic, educative, caring milieu where the nurse is educated as opposed to trained (Bevis 1989:(b)126-127). The latter re-emphasises the fact that nursing is people orientated and, thus, allied to the human sciences and the humanities and is not exclusive to the natural sciences (Ford & Profetto-McGrath 1994:341-342).

### **1.2.2 Problem statement**

In today's highly technological and sophisticated health milieu a humanistic and caring nurse is required. However, the problem that exists in nursing education is that the favoured Tylerian rationale or objectives model does not provide for all aspects of a “caring science” and for professionalism (Bevis 1989(a):4-5). Tylerian behaviourism is excellent for the mere memorisation of knowledge and skills but caring involves more than knowledge and skills

(van der Wal 1999(b):189). Caring needs to be transmitted and translated during interactions and transactions in the theoretical and clinical situation, not only on a cognitive dimension but also on an interpersonal, humanistic, humane and caring dimension (van der Wal 1999(b):191-192).

Unfortunately, behaviourism has led to an oppressive curriculum that has in turn, led to the nurse being professionally socialised in an oppressive and controlling manner. Consequently, the nurse finds it difficult to care and to be caring in such an oppressive environment (Bevis & Murray 1990:328).

According to Paterson and Crawford (1994:168-169), the educational milieu has many behaviouristic constraints that inhibit the implementation of the caring imperative. One such constraint is the extremely limited period of time spent individually with students in the classroom and in the clinical situation. Time limitations in the classroom have been compounded by the overloading of the curriculum with unnecessary content which has led to the implementation of learning and teaching strategies, such as lecturing and learning by the evaluation method of teaching, that is, learning what the tutor expects the student to know. The latter aspects are corroborated by de Villiers (1996:14-15, 17, 19) and Waterson et al (2006(a):56, 64; see section 5.2.1). These strategies have resulted in a student who is dependent on the teacher and values pleasing the teacher more than the actual generation of knowledge. Clinically, the student spends a short period of time in any one practice situation and this is exacerbated by the fact that the tutor lacks adequate preparation for her clinical teaching role. During evaluation, the tutor is seen to be both the coach and the referee. The evaluator-student power structure during evaluation has led to separateness or distancing between the tutor and the student which is not conducive to fostering a humanistic-educative-caring ambience. Additionally, the student is assessed according to measurable and observable standards and norms derived from experts. Criteria such as risk taking, creativity and humanitarian values are either negated as trivial or not taken into consideration during assessment. At this point it is important to note that it is not the intention of the researcher to discard substantive knowledge, but to add a humanistic dimension to it.

Nurse educators need to move from the implementation of a behaviouristic (stimulus-response) curriculum paradigm, to a humanistic-educative-caring curriculum paradigm. This

paradigm shift will ensure that the concept education remains the focal point throughout the educational programme of students. To accomplish the latter, the nurse educator needs to determine the present point at which students find themselves regarding the Humanistic-Educative-Caring Curriculum Paradigm versus the Stimulus-Response Paradigm.

Additionally, when the current socio-economic situation is viewed, South Africa emerges as a nation at risk. This is due to the emergence of changing values; instability of society, the home and family; high levels of poverty and unemployment; increasing divorce rates; crime; illegitimate births; drugs; alcohol, women and child abuse; and a general questioning of values by people of all ages (see sections 5.2.5; 5.2.6). Neither the home nor the schools have been able to address these problems. As an adjunct, the caring ethic in nursing has either been eroded or is absent from the nursing milieu. The erosion of caring is corroborated by Mackintosh (2006:958, 960) who found that during the professional socialisation of student nurses, the importance of caring was reduced, cynical attitudes were adopted and students became disillusioned about caring due to time constraints and just seeing to the physical needs of patients. Consequently, we need to incorporate a humanistic philosophy as part of our curriculum. There has to be a practical blending of the affective, cognitive and behavioural aspects of the curriculum. It is time to stop paying lip service to formal documentation and time to see that the curriculum is implemented to produce caring nurses. A departure point could be the development of an instrument that a tutor and a student could use to assess whether students are either being trained to get the job done or for financial gain, or being educated to equip them to become lifelong, caring professionals and also getting the job done.

Tutors and students require a readily available instrument to determine whether their educational focus is behaviourist or educative. As no research instrument has as yet been developed to test the Bevis and Watson model in South Africa, such an instrument was designed during the present research. It provides for the objective evaluation of the nursing education focus of students at a college. This instrument was designed according to the Bevis and Watson conceptualised four mini models namely: Learner Maturity Continuum, Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences. Each of these mini-models provides a continuum ranging between behaviourism (stimulus-response) and a humanistic-educative caring curriculum paradigm.

For the present study, the researcher added the two conceptual continuums Teacher-student relationship and Teacher-student structure to the four Bevis and Watson mini-models. The Teacher-student structure conceptual continuum is a combination of the concepts teacher structure and student self-structure (see figure 1.1).

Consequently, throughout this study the six concepts depicted in the conceptual framework are referred to as conceptual continuums.

### **1.2.3 Research question**

Modern technology, materialism and the Tylerian/Behaviouristic/Stimulus Response or Objectives Paradigm (Bevis 1989(a):4-5); do not provide for a caring “science” and professionalism. These latter aspects oppose the Humanistic-Educative-Caring Curriculum Paradigm in nursing and nursing education leading to the formulation of the following *guiding* question for this research:

**“What is the educational focus of a nursing college when viewed within Bevis and Watson’s Humanistic-Educative-Caring Curriculum Paradigm versus a Tylerian Behaviouristic (Stimulus-Response) Curriculum Paradigm”?**

### **1.2.4 Purpose of the study**

The purpose of the study was to develop and test a quantitative measurement instrument based on the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm versus the Tylerian Behaviouristic (Stimulus-Response) Curriculum Paradigm to determine student status with regards to the six conceptual continuums contained in the Bevis and Watson model. Empirical referents, formulated for the four mini-models during the previous study conducted by the researcher (Mouton 1997), are incorporated in the instrument and served as standards against which the educational focus of students was determined on the Training-Education Continuum. This instrument provided a foundation for determining the educational focus of the *student*.

### **1.2.5 Objectives**

The study consisted of a developmental and a testing phase with objectives set for each phase.

### **1.2.5.1 Objectives during the developmental phase**

The objectives during the development phase were, based on research conducted by Mouton (1997) and the present literature review, to:

- formulate empirical referents, for the six conceptual continuums within the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm and the Stimulus-Response (Behaviourist) Curriculum Paradigm
- refine these empirical referents for the six conceptual continuums
- develop a response format and instructions for respondents
- validate the refined empirical referents, response format and the instructions for respondents by means of expert input and sample congruent (pretest) input
- incorporate the validated empirical referents, response format and instructions for respondents into an instrument.

### **1.2.5.2 Objectives during the testing phase**

Objectives during the testing phase were to:

- pretest the newly developed instrument, using a sample congruent (pretest) group
- test the validity, reliability and characteristics of the instrument by implementing it at two nursing colleges in the Gauteng Province.

### **1.2.6 Assumptions**

Assumptions are basic principles that are accepted as being true on the basis of logic or reason, without proof or verification (Burns & Grove 2003:41, 55, 138, 474; Mouton 1996:123; Polit & Hungler 1999:10-11, 695). The following assumptions, applicable to this study, were formulated with reference to the three areas of commitment of any research undertaking as proposed by Kuhn (in Mouton & Marais 1990:146-147; Mouton 1996:123-124) namely:

- assumptions regarding theoretic-conceptual commitments
- assumptions regarding methodological-technical commitments
- assumptions pertaining to ontological commitments.

### **1.2.6.1 Theoretic-conceptual commitments**

Theoretic-conceptual commitments are commitments to the accuracy or truth of the theories and laws of the particular paradigm (Mouton & Marais 1990:147; Mouton 1996:123-124; Polit & Hungler 1999:10-11).

The following quantitative (positivist) theoretic-conceptual commitments were stated:

- the six conceptual continuums namely the Learner Maturity Continuum, the Teacher-student relationship, the Teacher-student structure, the Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences, contained in Bevis and Watson's Curriculum Paradigm formed a suitable conceptual foundation and model for this study
- the concepts comprising the Bevis and Watson model provided a scientific base enabling the researcher to determine the educational focus of students at a nursing college.

### **1.2.6.2 Methodological-technical commitments**

Methodological-technical commitments refer to the criteria of the methodology and instruments by which a scientifically valid view may be realised (Mouton & Marais 1990:147; Mouton 1996:124; Polit & Hungler 1999:10-11).

In this regard it is assumed that:

- the quantitative approach provides an adequate foundation to construct and test a theoretically based instrument
- questionnaire(s) containing closed-ended questions would elicit appropriate quantitative data from respondents
- language contained in the questionnaire has the same meaning to all respondents and when presented with statements, individuals can indicate the applicability of these statements to their situation
- inferential statistics provided an adequate scientific foundation to ensure validity and reliability during the testing phase of the instrument.

### 1.2.6.3 Ontological commitments

The word ontological is derived from the following:

<i>ontic</i> meaning	=	real existence, givenness of something
	=	essence of something
	=	essence or real existence is sought in the abstract for example, the essence of the humanistic-educative-caring curriculum
<i>logy</i> meaning	=	logos, thought
<i>ontology</i> meaning	=	study of being or reality.

With regards to the present research the term *ontological* also equates to the term *empirical*. Ontological commitments are assumptions concerning the essence of the research object and empirics (Mouton & Marais 1990:147; Mouton 1996:46, 124; Polit & Hungler 1999:10-11).

In this regard it is assumed that:

- the concepts in the Bevis and Watson model describes an aspect of the reality of nursing and nursing education
- the Bevis and Watson model captures central concepts in their most essential and general form
- students can give objective information regarding the six conceptual continuums contained in the Bevis and Watson model.

### 1.2.7 Hypotheses

The three main hypotheses developed for the present study are only listed in this section but are discussed in detail in section 6.5.1.1

#### 1.2.7.1 Hypothesis 1

There is a positive relationship amongst the conceptual continuums regarding respondents' preferences.

#### 1.2.7.2 Hypothesis 2

There is a positive relationship amongst the conceptual continuums regarding the perceptions respondents have of the tutor/college.

### **1.2.7.3 Hypothesis 3**

There is no relationship with regard to the conceptual continuums between the preferences of respondents and the perceptions they have of the tutor/college.

In addition to these three hypotheses relating to the concepts contained in the conceptual framework internally, alternative hypotheses were also stated regarding the biographical data and the six conceptual continuums contained in the conceptual framework (see section 6.5.1.2).

## **1.3 SIGNIFICANCE OF THE STUDY**

The significance of the study is discussed under the aspects of direction and focus, scientific foundation, curriculum refocus and the quality assurance instrument.

### **1.3.1 Direction and focus**

Nursing is a caring profession and caring demands a humanistic-educative-caring environment as indicated by the findings of previous research (Mouton 1997:164-165, 235, 240). Additionally, the Humanistic-Educative-Caring Paradigm is important as it emphasises professionalism, self-directedness and empowerment of the student. Conversely, the Behaviouristic (Stimulus-Response) Paradigm emphasises training, that narrowly directs and oppresses the student. Caring compels the nurse to take the initiative and through self-directedness ensures that her knowledge, skills, values and attitudes are continuously updated to empower her to provide a caring, professional nursing service. Therefore, implementation of the findings of the constructed instrument (once it has been fully developed and tested) should provide direction and focus regarding the educational perspective held by student nurses. Both tutor and student may, individually or in partnership, implement the instrument to determine the position of the learner on the learner maturity continuum, the type of learning displayed by the student and the teacher-student interactions and learning experiences that are being implemented. A humanistic-educative-caring orientation of the student nurse may indicate the student's progression towards independent, self-directed professional maturity whereas a more behaviouristic orientation might indicate a need to implement measures to enable the student to progress towards a more humanistic-educative-caring orientation.

### **1.3.2 Scientific foundation of nursing**

Nursing, as a profession, and nursing education as a subdivision of that profession, are obliged to develop, maintain and add to a body of scientifically obtained knowledge. As this knowledge must be free of any speculation and empirically grounded, this study provides the beginnings of a scientifically formulated instrument to determine the educational focus of students at nursing colleges. Additionally, the instrument may provide baseline data in the form of empirical referents (Chinn & Cramer 2004:146; Walker & Avant 1995:46), indicating how to ensure the development of an educated, caring professional nurse.

### **1.3.3 Curriculum refocus**

An important benefit emanating from this study is the refocusing of attention on the curriculum and the fact that nursing is a caring profession and as such, it is allied to the human sciences as well as to the natural science approach (Ford & Profetto-McGrath 1994:341-342). This instrument could indicate that the focus of the tutors and students of a college requires a shift to produce educated, caring nurses as opposed to nurses who only possess skills and fragmented knowledge without mastering the caring process (Mashaba & Brink 1994:279) in nursing, nursing education and within themselves. This caring aspect is of paramount importance in the highly technological environment of health care and the onus is on the nurse to create a therapeutic environment, where the patient is treated as a *whole* human being and not as a mere object (Bauer 1990:259; Bevis & Watson 1989:1; Hawthorne & Yurkovich 1995:1088-1089; Kyle 1995:506; Pearson 1998:246, 257-259). In addition, caring is equally important in the light of the apparent poor state of care and caring delivered in health care facilities as reported on in the media (O'Donoghue, Jooste & Botes 2004:80-81, 83) and indicated by the numerous disciplinary hearings held by the SANC (Magagula 2006:25; O'Donoghue et al 2004:81-82). Partly as a result of the latter, the South African government initiated the moral regeneration movement and implemented the popular Batho Pele Principles (DPSA 2003; GDOH 2003:39; see section 5.2.7.4; Zuma 2002(a):2) in the health care arena.

Additionally, if tutors at a nursing college intend to initiate a paradigm shift from training to education, the instrument could provide a means to determine the general atmosphere ("air") at the college. Thus, the instrument could provide baseline data regarding the behaviourist or humanistic-educative-caring perspective from which the tutor has to depart. The instrument

could also indicate specific aspects of the six conceptual continuums that require change and remedial action.

The latter may guide the tutor towards more effective implementation of the curriculum; provide direct benefits to both the tutor and student and indirectly to the patient, through improvement in nursing practice and the quality of nursing care.

#### **1.3.4 Quality assurance instrument**

This instrument, once finally refined, could be implemented as a quality assurance instrument on an individual, departmental and organisational level. The implementation of the instrument by the individual student, nurse educator and academic head of department may ensure that the student undergoes a comprehensive, professional, educational programme and that ultimately, the patient receives quality, nursing care. The latter aspect is in line with the ten point plan of the South African National Department of Health, which states that improved quality of care is one of the national health priorities (GDOH 2003(a):8; DOH 2005:52-53). The Gauteng Department of Health (GDOH) endorses this point and states that the quality of patient care should be improved through the implementation of its quality assurance programme (GDOH 2003(a):5, 8-9, 36).

### **1.4 CONCEPTUAL FRAMEWORK**

The conceptual framework (see figure 1.1), within which this study was conducted, emanated from the literature review undertaken by the researcher during a previous study (Mouton 1997). The conceptual framework comprises a Curriculum Focus, the six conceptual continuums contained in the Bevis and Watson Curriculum Paradigm and a Training-Education Continuum. The researcher views the conceptual framework as a suitable foundation for this study (see section 2.2).

#### **1.4.1 Description of the conceptual framework**

Each concept comprising the conceptual framework is discussed in the following section. A more detailed description is provided in sections 2.4 and 2.5.

#### **1.4.1.1 Curriculum Focus**

The Curriculum Focus emphasises stimulus-response principles and interactions and learning. An example of a stimulus-response item from the Learner Maturity Continuum is “I like to please the nurse educator in order to obtain good grades” and an item from interactions and learning is “I like to take full responsibility for my own learning” (Mouton 1997:223, 228). The first example indicates a more behaviourist orientation and the second example a more humanistic, educative, caring orientation.

#### **1.4.1.2 The Bevis and Watson six conceptual continuums**

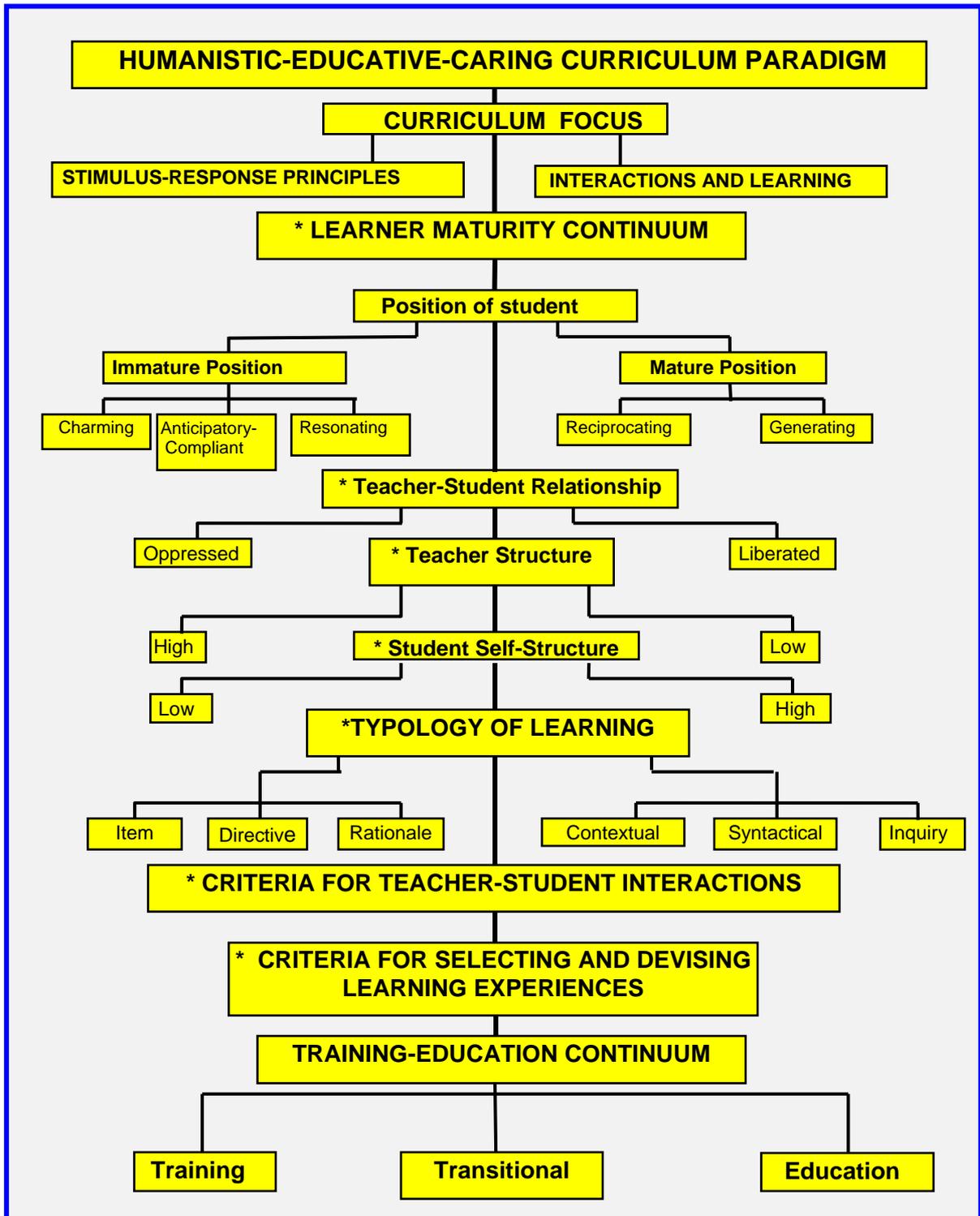
The six conceptual continuums consist of the Learner Maturity Continuum, Teacher-student relationship, Teacher-student structure, Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences.

#### **The Learner Maturity Continuum**

The Learner Maturity Continuum consists of three immature positions, namely, charming, anticipatory-compliant and resonating and also two mature positions, namely, reciprocating and generating. The immature positions also have flip sides namely hostile, passive-aggressive and critical positions.

#### **Teacher-student relationship and Teacher-student structure**

The positions on the Learner Maturity Continuum also represent the relationship between the student and the teacher. The immature positions represent oppressed and the mature positions, a liberated relationship (Bevis & Watson 1989:81, 83; see figure 1.1). Further, in the immature positions, the Teacher structure is high and the Student self-structure is low. In the mature positions the opposite situation occurs namely, the Teacher structure is low and the Student self-structure is high. Teacher-student relationship, Teacher structure and Student self-structure refer to the extent of the domineering versus cooperative involvement of the teacher and the student in the learning process. The latter aspects are discussed in sections 2.5.1.3 and 2.5.1.4.



\* Equals six conceptual continuums. Teacher structure and Student self-structure are combined to form the Teacher-student structure. (Adapted from Bevis & Watson 1989:83, 88, 97, 206)

**FIGURE 1.1: CONCEPTUAL FRAMEWORK: TRAINING-EDUCATION CONTINUUM**

**NB:** See folder insert appendix E, for your convenience and easy reference throughout reading this report.

### **The Typology of Learning**

The Typology of Learning is described according to six types of learning namely item, directive, rationale, contextual, syntactical and inquiry.

### **Criteria for Teacher-Student Interactions**

The Criteria for Teacher-Student Interactions comprise the categories *educative* teacher-student interactions and *stimulus-response* teacher-student interactions (see figure 1.2).

### **Criteria for Selecting and Devising Learning Experiences**

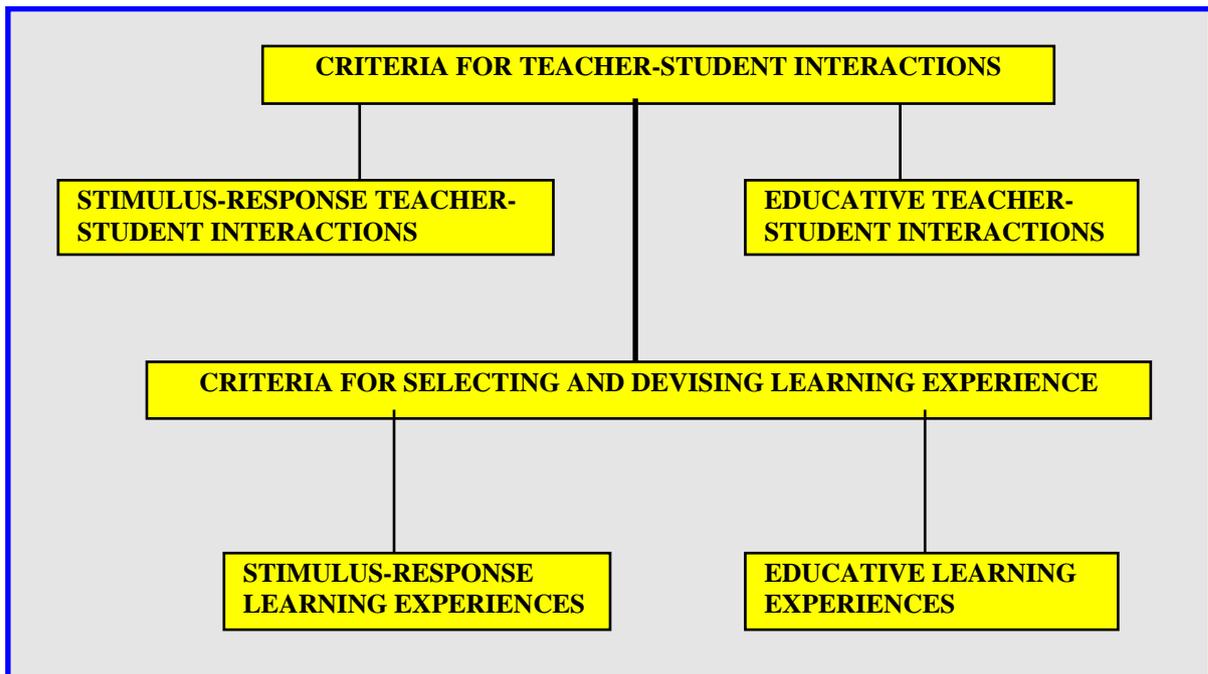
Criteria for Selecting and Devising Learning Experiences comprise the categories *educative* learning experiences and *stimulus-response* learning experiences (see figure 1.2).

The word *educative* and the category *stimulus-response* were added by the researcher during the 1997 research study to the conceptual continuums: *Criteria for Teacher-Student Interactions* and *Criteria for Selecting and Devising Learning Experiences* to differentiate between the concepts *training* and *education* contained in the Training-Education Continuum. This differentiation was necessary as in the conceptual continuums: Learner Maturity Continuum and the Typology of Learning, Bevis and Watson clearly distinguish between a behaviouristic (stimulus-response) and a humanistic-educative-caring curriculum paradigm. However, in the conceptual continuums: *Criteria for Teacher-Student Interactions* and the *Criteria for Selecting and Devising Learning Experiences* only *educative* criteria are stated by Bevis and Watson (1989:79, 102-103).

#### **1.4.1.3 Training-Education Continuum**

The Training-Education Continuum ranged from:

- a training position to
- a transitional position to
- an educational position.



(Adapted from Bevis & Watson 1989:83, 88, 97, 206)

**FIGURE 1.2: CRITERIA FOR CONCEPTUAL CONTINUUMS: TEACHER-STUDENT INTERACTIONS AND LEARNING EXPERIENCES**

During a previous study by Mouton (1997), the Training-Education Continuum was used in conjunction with criteria formulated for the six conceptual continuums, to ascertain the educational focus of the personnel employed at a nursing college. During a literature review, criteria were obtained from the work by Bevis and Watson (1989:83-94; 379-382), the Tyler rationale, other literature sources and data analysed during interviews. Additionally, during the literature review, alternative terms emerged for the two main concepts in this study namely *behaviourism* and *educative-caring*. Behaviourism may be equated with *pedagogy*, directive learning, instruction and training. Andragogy, *humanistic education*, *confluent education* (Francke & Erkens 1994:354, 360) and *affective education* are more akin to an educative-caring paradigm.

During the present study, an in-depth literature review, incorporating all the concepts contained in the conceptual framework and recent, relevant research studies, was undertaken. The literature review is reported on in detail in chapters 3, 4 and 5.

## **1.5 RESEARCH METHODOLOGY**

### **1.5.1 Research design**

A quantitative approach, using a non-experimental research design was undertaken to formulate and test the measuring instrument (questionnaire) designed during this study. The study consisted of a *developmental* and *testing phase*. The design was chosen as it facilitates the development, validation or evaluation of research instruments (tools) and techniques (Burns & Grove 2003:27-28, 494; Lo-Biondo Wood & Haber 2002:222, 229-231; Polit & Hungler 1999:184; Wilson 1993:135, 335) and for reasons as explicated by the assumptions underlying this research (see section 1.2.6).

### **1.5.2 Research technique and instrument**

The research technique employed in the study was questioning by means of a structured questionnaire comprising closed-ended items (Two-Choice Comparative-Value-Statement Items) and questions regarding biographical details of respondents (Wilson 1993:223).

### **1.5.3 Sampling design**

During the developmental phase, the sample comprised national and international literature. During the testing phase, a probability sampling design was utilised. The sampling method was a stratified, simple, random sampling (Burns & Grove 2003:241-245, 495-496; de Vos 1998:195, 197). The probability sampling design was chosen in order to maximise homogeneity, randomisation, representativeness, validity and reliability of the instrument (Lo-Biondo Wood & Haber 1994:290-291, 295-299; Mouton 1996:136; Polit & Hungler 1999:285-287; Wilson 1993:176). The target population consisted of all the students registered for the four-year comprehensive diploma course at colleges of nursing in the Gauteng Province. The accessible population consisted of students registered for the four-year comprehensive diploma course at two state colleges of nursing in the Gauteng Province (Bless & Higson-Smith 1995:85, 87-88; Burns & Grove 2003:233-234; Lo-Biondo Wood & Haber 1994:288; Polit & Hungler 1999:287; Wilson 1993:135, 335).

### **1.5.4 Pretesting the instrument**

The instrument was pretested to detect any problems that may be encountered during the research study. The instrument was tested for clarity of instructions, relevancy, usability and completion time, to refine and introduce modifications where required and to ascertain

validity and reliability (Bless & Higson-Smith 1995:43, 50; Burns & Grove 1999:40; de Vos 1998:395-396; Fouché 1998:158; Mouton 2001:103-104; Polit & Beck 2004:51, 196, 727; Strydom 1998:178-188; 379, 382).

A probability sampling design was utilised and the method was a proportional, stratified, simple, random sample. During the pretesting of the instrument using the Visual Analogue Scale (VAS), the sample comprised eleven (11) respondents and during the pretesting of the instrument using the Two-Choice Comparative-Value-Statement Items (Shostrom, Knapp & Knapp 1976:33; van der Wal 1992:93), the sample comprised nine (9) respondents (Burns & Grove 1999:280-281; Polit & Beck 2004:354). The respondents participating in the pretesting of the instrument were excluded from the empirical study. The sampling procedure is discussed in detail in section 6.4.4.

#### **1.5.5 Data collection methods**

During the developmental phase data was collected by means of a literature review. During the testing phase data was collected by means of the newly developed instrument. The testing phase involved testing the validity, reliability and characteristics of the instrument by administering it to respondents (students) in two nursing colleges in the Gauteng Province.

#### **1.5.6 Data analysis**

During the developmental phase, data from literature was analysed by means of descriptive techniques including qualitative content analysis (Polit & Hungler 1999:698). During the testing phase, data was analysed by means of descriptive statistics such as tables, graphs, measures of central tendency as well as the standard deviation. Inferential statistics such as the Pearson-Product Moment correlation, the F test and Scheffé test were also utilised. (LoBiondo-Wood & Haber 1994:386, 390, 397-398, 405, 418; Polit & Hungler 1999:439, 469; Wilson 1993:189, 192, 195-196, 200, 204, 332-334). The Statistical Package for the Social Sciences (SPSS) was utilised to analyse data.

#### **1.5.7 Developmental phase: validity and reliability during data collection and analysis**

During data collection, focusing on the concepts contained in the conceptual framework and reviewing relevant research articles and studies was an attempt at maximising the reliability

and validity of the research instrument. By perusing the items in the instrument, behaviouristic and humanistic items could be identified; thereby enhancing face validity. During data analysis, content validity of the criteria for the six conceptual continuums, Training-Education Continuum and the scale and instructions for respondents was enhanced by applying content analysis (see sections 6.4.2; 6.4.3).

### **1.5.8 Testing phase: validity and reliability during data collection and analysis**

Validity and reliability are two important variables that have to be taken into account during any quantitative research study. *Reliability* refers to the consistency, constancy or dependability, accuracy and precision with which an instrument measures the attributes it is designed to measure (LoBiondo-Wood & Haber 1994:510; Polit & Hungler 1999:713; Wilson 1993:339). *Validity* in turn, refers to the relevance of a measure. A valid instrument measures the concept or construct it claims to measure (Polit & Hungler 1999:717; Wilson 1993:343).

Tests used to test reliability were the coefficient alpha (Cronbach's alpha), analysis of variance (Oneway ANOVA, ANOVA), Pearson Product-Moment correlation and the Scheffé test (Burns & Grove 1999:317, 320-321; Polit & Beck 2004:489, 494-495; Polit & Hungler 1999:415; Treece & Treece 1986:261). The types of validity established were face, content, construct and criterion validity. Content validity of the criteria for the six conceptual continuums and Training-Education Continuum was established during the first phase of the study, thus enhancing validity and reliability (Wilson 1993:156). A schematic representation of the progression of the research methodology is depicted in table 1.1. All aspects relating to the research methodology are described in detail in chapter 6: Research Methodology.

## **1.6 ETHICAL CONSIDERATIONS**

Ethical issues pertinent to the testing phase are acceptability of the instrument, consent and guarantee of privacy. Guarantee of privacy entails the principles of anonymity and confidentiality. Ethical acceptability refers to the adherence by the researcher to the professional, legal and social obligations to the respondents in order that the rights of the respondents are protected. An example of ethical acceptability is ensuring the voluntary participation by the respondent (Polit & Hungler 1999:139-140). Thus, ethical acceptability might have enhanced the validity and reliability of the study. Ethical considerations are discussed in detail in chapter 6: Research Methodology.

## 1.7 LIMITATIONS OF THE STUDY

Limitations relating to this study are the possibility of the Hawthorne effect and issues relating to data collection and analysis. However, it is important to note that this is only the beginning of the development of this instrument as it takes time to fully develop a standardised instrument.

*The Hawthorne* effect may be defined as the effect on the dependent variable caused by the respondents awareness that they are special participants under study (Mouton & Marais 1990:86; Polit & Hungler 1999:184-185, 703; Wilson 1993:10) Thus, although the assumption was accepted that respondents would complete the questionnaire honestly and with integrity, they might have answered questions in a manner which they perceived as being more polite and not really as they felt about, or perceived them. They may even have given the answers they thought the researcher expected. The latter aspects are discussed in detail in chapter 8.

## 1.8 TERMINOLOGY

The terminology applicable to this study is included in a glossary. Only a few of the key definitions are discussed in this section.

### **Behaviourism**

When applied to education, behaviourism refers to the specific theory of learning which stresses a direct relationship between a stimulus (S) and a response (R) as depicted in the paradigm, S-R (Huckabay 1980:11; Louw & Edwards 1997:227-230; Quinn 2000:14, 111-112, 117, 137-138; Reilly & Oermann 1990:8). During the learning process, the primary emphasis is on the attainment of pre-selected educational objectives (the stimulus), in order to produce an *observable* change in the behaviour (response) of the student as proof that learning has occurred. Behavioural objectives are expected behavioural outcomes of the training process, either for a single experience or a total programme of studies (Huckabay 1980:15; Quinn 2000:111-120, 137-148; Reilly & Oermann 1990:7).

### **Caring**

Caring is a human process involving the cognitive, affective and psycho-motor domains and figures in beauty, art, ethics, intuition, aesthetics and spiritual awareness and inter-subjective

human-to-human caring processes and moral ideas and ideals (Bevis & Watson 1989:53).

According to Pearson (1998:247), caring is the central mission of a nurse and may be defined as a broad, global and human concept based on an attitude of personal involvement where an individual is assisted to grow and is empowered through this growth process. Caring is further defined in section 2.3.

### **Curriculum**

From the perspective of a humanistic-educative-caring curriculum paradigm, *curriculum* may be defined as the *interactions* and *transactions* that occur between and among students and teachers with the intent that learning occurs (Bevis & Watson 1989:5).

From the perspective of a behaviourist or a stimulus-response curriculum model, *curriculum* may be defined as the *content* that has to be learned through the attainment of pre-selected behavioural objectives.

### **Education**

Education is a process where interactions and learning are the main focus with the aim of producing an educated nurse who displays the ability to think analytically, critically, evaluatively and creatively and can exercise independent judgement of scientific and non-scientific data during the nursing of a patient or client. During this process the learner is enriched in the syntactical, *contextual and inquiry* categories of learning and grows in maturity (Bevis & Watson 1989:73). Education is imperative for caring. Education is further defined in section 2.3.

### **Humanism and Humanistic**

Humanism describes the particular nature of the humanness of an individual (Kruger & Whittle 1982:11). Humanistic is any system or mode of thought in which human interests, values and dignity are taken to be of primary importance, as in moral judgements (King 1984:3).

According to Quinn (2000:15), humanistic psychology refers to the study of the thoughts, feelings, experiences, values and attitudes of a human being.

Fagermoen (1999:136) refers to humanism as the tendency to emphasise humans, their status, importance, powers, achievements or authority. Humanism may also be referred to as a school of thought, a philosophical movement, a worldview where human beings are the focal point and a strand such as *religious humanism*. The common ontological characteristics across different denominations are the centrality of man, his powers and potentialities.

Woolfolk (1995:333, 493) defines humanistic as an approach to motivation that emphasises personal freedom, choice, self-determination and striving for personal growth.

## **1.9 OUTLINE OF THE RESEARCH REPORT**

The report consists of 8 chapters set out as follows:

### **Chapter 1**

An orientation to the study is provided in this chapter. The background to the problem, problem statement, research question, purpose of the study, objectives, assumptions, significance of the study, conceptual framework, research methodology, terminology and format of the research report are discussed.

### **Chapter 2**

In chapter 2 the Bevis and Watson model is conceptualised.

### **Chapter 3**

Chapter 3 comprised the first section of the literature review. Literature supporting the Tyler rationale/Stimulus Response/Behaviouristic curriculum paradigm is reviewed in this chapter.

### **Chapter 4**

Chapter 4 comprised the second section of the literature review. Literature supporting the Humanistic-Educative-Caring-Curriculum Paradigm is reviewed in this chapter.

### **Chapter 5**

Chapter 5 comprised the third section of the literature review. Literature pertaining to the recent trends and issues in South Africa and how these relate to the present study, is discussed.

**Chapter 6**

The research methodology, reliability and validity are discussed in this chapter.

**Chapter 7**

The results of the study, involving the presentation and discussion of the findings, are outlined in this chapter.

**Chapter 8**

A summary of the findings and conclusions, implications, recommendations and limitations of the study are presented in this chapter.

**1.10 OUTLINE OF THE RESEARCH METHODOLOGY**

Table 1.1 which follows on the next page is a schematic representation depicting the progression of the research methodology.

**TABLE 1.1: SCHEMATIC REPRESENTATION OF THE RESEARCH METHODOLOGY**

RESEARCH OBJECTIVES	DATA COLLECTION	DATA ANALYSIS	RESPONDENT / SAMPLE	STRATEGIES FOR VALIDITY AND RELIABILITY
<p><b>Developmental phase</b></p> <ul style="list-style-type: none"> <li>• Formulation of empirical referents for the six conceptual continuums namely the Learner Maturity Continuum, the Teacher-student relationship, the Teacher-student structure, the Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences within the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm and the Stimulus-Response (Behaviourist) Curriculum Paradigm.</li> </ul>	<ul style="list-style-type: none"> <li>• MA (Cur) degree</li> <li>• Literature review</li> </ul>	<ul style="list-style-type: none"> <li>• MA (Cur) degree</li> <li>• Content analysis according to Polit &amp; Hungler (1999:210-228):               <ul style="list-style-type: none"> <li>◊ Selection of the unit of content to be analysed</li> <li>◊ Development of a category system for classifying the unit of content</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• MA (Cur) degree</li> <li>• National literature: books, articles, research studies</li> <li>• International literature: books, articles, research studies</li> </ul>	<ul style="list-style-type: none"> <li>• Content analysis according to Polit &amp; Hungler (1999:210-228)</li> </ul>

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**TABLE 1.1: Continued**

RESEARCH OBJECTIVES	DATA COLLECTION	DATA ANALYSIS	RESPONDENT / SAMPLE	STRATEGIES FOR VALIDITY AND RELIABILITY
<ul style="list-style-type: none"> <li>Refinement of the empirical referents for the six conceptual continuums and the Training-Education Continuum within the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm and the Stimulus-Response (Behaviourist) Curriculum Paradigm</li> </ul>	<ul style="list-style-type: none"> <li>Literature review</li> </ul>	<ul style="list-style-type: none"> <li>Content analysis according to Polit &amp; Hungler (1999:210-228):               <ul style="list-style-type: none"> <li>Selection of the unit of content to be analysed</li> <li>Development of a category system for classifying the unit of content</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>National literature: books, articles, research studies</li> <li>International literature: books, articles, research studies</li> </ul>	<ul style="list-style-type: none"> <li>Relevant research articles and studies</li> <li>Content analysis</li> </ul>
<ul style="list-style-type: none"> <li>Selection of a scaling technique and development of a response format and instructions for respondents</li> </ul>	<ul style="list-style-type: none"> <li>Literature review</li> </ul>	<ul style="list-style-type: none"> <li>Content analysis according to Polit &amp; Hungler (1999:210-228):               <ul style="list-style-type: none"> <li>Selection of the unit of content to be analysed</li> <li>Development of a category system for classifying the unit of content</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>National literature: books, articles, research studies</li> <li>International literature: books, articles, research studies</li> </ul>	<ul style="list-style-type: none"> <li>Relevant research articles and studies</li> <li>Content analysis</li> </ul>

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**TABLE 1.1: Continued**

RESEARCH OBJECTIVES	DATA COLLECTION	DATA ANALYSIS	RESPONDENT / SAMPLE	STRATEGIES FOR VALIDITY AND RELIABILITY
<ul style="list-style-type: none"> <li>• Validation of the refined empirical referents for the six conceptual continuums, the Training -Education Continuum, the scaling technique, response format and the instructions for the respondents</li>   <li>• Incorporation of the validated empirical referents, Training-Education Continuum, the scaling technique, response format and instructions for respondents in an instrument</li> </ul>	<ul style="list-style-type: none"> <li>• Draft instrument</li> </ul>	<ul style="list-style-type: none"> <li>• Statistical calculations               <ul style="list-style-type: none"> <li>◊ Descriptive strategies</li> </ul> </li>   <li>• Computer programmes               <ul style="list-style-type: none"> <li>◊ Microsoft Word</li> <li>◊ Excel</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Probability sampling design</li> <li>• Method: stratified, simple, random sample</li> <li>• Sample: students from one of the participating colleges in the Gauteng Province were stratified according to the different levels (year) of advancement as follows:               <ul style="list-style-type: none"> <li>◊ First year</li> <li>◊ Second year</li> <li>◊ Third year</li> <li>◊ Fourth year</li> </ul> </li> <li>• A simple, random sample was then taken from 11 of the second year students to pretest the instrument using the Visual Analogue Scale (VAS)</li> </ul>	<ul style="list-style-type: none"> <li>• Strategies for ensuring validity and reliability:               <ul style="list-style-type: none"> <li>◊ Pretest study</li> <li>◊ Statistician</li> <li>◊ Relevant, descriptive statistical calculations</li> </ul> </li> <li>• Descriptive strategies               <ul style="list-style-type: none"> <li>- Content analysis</li> <li>- Tables</li> <li>- Median</li> <li>- Mean</li> </ul> </li> </ul>

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TABLE 1.1: Continued

RESEARCH OBJECTIVES	DATA COLLECTION	DATA ANALYSIS	RESPONDENT / SAMPLE	STRATEGIES FOR VALIDITY AND RELIABILITY
<p><b>Testing phase</b></p> <ul style="list-style-type: none"> <li>• Pretest the newly developed instrument for validity and reliability</li> </ul>	<ul style="list-style-type: none"> <li>• Newly developed instrument</li> </ul>	<ul style="list-style-type: none"> <li>• Statistical calculations               <ul style="list-style-type: none"> <li>◊ Descriptive strategies</li> <li>◊ Inferential strategies</li> </ul> </li> <li>• Computer programmes               <ul style="list-style-type: none"> <li>◊ Microsoft Word</li> <li>◊ Excel</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Probability sampling design</li> <li>• Method: stratified, simple, random sample</li> <li>• Sample: students from one of the participating colleges in the Gauteng Province were stratified according to the different levels (year) of advancement as follows:               <ul style="list-style-type: none"> <li>◊ First year</li> <li>◊ Second year</li> <li>◊ Third year</li> <li>◊ Fourth years</li> </ul> </li> <li>• A simple, random sample was then taken from nine of the second year students to pretest the instrument using the Two-Choice Comparative-Value-Statement Items</li> </ul>	<ul style="list-style-type: none"> <li>• Strategies for ensuring validity and reliability:               <ul style="list-style-type: none"> <li>◊ Pretest study to pretest the instrument</li> <li>◊ Statistician</li> <li>◊ Relevant, descriptive and statistical calculations</li> </ul> </li> <li>• Descriptive strategies               <ul style="list-style-type: none"> <li>- Content analysis</li> <li>- Table</li> <li>- Median</li> <li>- Mean</li> </ul> </li> </ul>

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TABLE 1.1: Continued

RESEARCH OBJECTIVES	DATA COLLECTION	DATA ANALYSIS	RESPONDENT / SAMPLE	STRATEGIES FOR VALIDITY AND RELIABILITY
<ul style="list-style-type: none"> <li>• Test the validity, reliability and characteristics of the instrument by implementation at two nursing colleges in order to determine the Humanistic-Educative-Caring or Stimulus-Response (Behaviourist) orientation of nursing education from the perspective of the student.</li> </ul>	<ul style="list-style-type: none"> <li>• Newly developed instrument</li> </ul>	<ul style="list-style-type: none"> <li>• Statistical calculations               <ul style="list-style-type: none"> <li>◊ Descriptive strategies</li> <li>◊ Inferential strategies</li> </ul> </li> <li>• Computer programmes               <ul style="list-style-type: none"> <li>◊ Statistical Package for the Social Sciences (SPSS)</li> <li>◊ Microsoft Word</li> <li>◊ Excel</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Probability sampling design</li> <li>• Method: stratified, simple, random sample</li> <li>• Sample: students from two of the participating colleges in the Gauteng Province were stratified according to the different levels (year) of advancement of students as follows:               <ul style="list-style-type: none"> <li>◊ First year</li> <li>◊ Second year</li> <li>◊ Third year</li> <li>◊ Fourth year</li> </ul> </li> </ul> <p>A simple, random sample was then taken as follows:</p> <ul style="list-style-type: none"> <li>◊ First year – 80 Students</li> <li>◊ Second year – 80 Students</li> <li>◊ Third year – 80 Students</li> <li>◊ Fourth year – 80 Students</li> </ul>	<ul style="list-style-type: none"> <li>• Strategies for ensuring validity and reliability:               <ul style="list-style-type: none"> <li>◊ Statistician</li> <li>◊ Relevant, descriptive and inferential statistical calculations</li> </ul> </li> <li>• Descriptive strategies               <ul style="list-style-type: none"> <li>– Content analysis</li> <li>– Table</li> <li>– Median</li> <li>– Mean</li> <li>– Range</li> <li>– Standard deviation</li> </ul> </li> <li>• Inferential strategies               <ul style="list-style-type: none"> <li>– Factor analysis</li> <li>– Product moment correlation co-efficient (Pearson's <math>r</math>)</li> <li>– <math>t</math>-test</li> <li>– Cronbach alpha</li> <li>– ANOVA</li> <li>– Scheffé test</li> <li>– F test</li> </ul> </li> </ul>

## **1.11 SUMMARY**

Nursing deals with people and should reflect caring, human interactions in which patients are seen as *whole* beings within their physical, psychological, spiritual and social dimensions. This perspective requires an educated nurse who does not merely have knowledge, but also displays insight, caring, compassion, reflection, creativity, flexibility and understanding. In addition, the educational milieu in nursing education should reflect such caring considerations. Bevis and Watson's Curriculum Paradigm offers a way of producing this educated, caring nurse in such a milieu.

Chapter 1 orientated the reader to the study by describing the problem formulation, the significance of the study, the conceptual framework, the research methodology, terminology and the outline of the research report.

The following chapter details the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm; the theoretical and conceptual structure on which the present research was based.

## **CHAPTER 2**

### **THEORETICAL FRAMEWORK THE BEVIS AND WATSON MODEL**

#### **2.1 INTRODUCTION**

In chapter 1 an orientation to this study was provided by discussing the background to the problem, the problem statement, research question, purpose of the study, objectives, assumptions, significance of the study, conceptual framework, research methodology, terminology and the outline of the research report.

In this chapter, the conceptualisation of the Bevis and Watson Humanistic-Educative-Caring-Curriculum Paradigm is discussed according to the following aspects:

- conceptual framework
- clarification of terminology
- Bevis and Watson's Humanistic-Educative-Caring Curriculum Paradigm.

#### **2.2 CONCEPTUAL FRAMEWORK**

The conceptual framework within which this study was conducted (see figure 1.1 and folder insert appendix E) emanated from a previous qualitative research study undertaken by the researcher (Mouton 1997). The conceptual framework comprises a Curriculum Focus and six conceptual continuums. The Curriculum Focus represents a continuum between training and education. A training focus emphasises stimulus-response principles, that is, Tylerian behaviourism and an education focus emphasises interactions and learning, that is, the Bevis and Watson Humanistic-Educative-Caring perspective. The six conceptual continuums comprise the Learner Maturity Continuum, Teacher-student relationship, Teacher-student structure, Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences. These six conceptual continuums each relate to the Curriculum Focus continuum.

The reader is again reminded that for the present study, the researcher added the two conceptual continuums Teacher-student relationship and Teacher-student structure to the four Bevis and Watson mini-models. The Teacher-student structure conceptual continuum is a combination of the concepts teacher structure and student self-structure (see figure 1.1). As a result, throughout this study the six concepts comprising the conceptual framework are referred to as conceptual continuums.

The researcher viewed this conceptual framework a suitable conceptual foundation for this study as it:

- provided a network of concepts and relationships within which the question pertaining to this study was posed and data generated were integrated (Burns & Grove 2003:142, 154-156; Woods & Catanzaro 1988:66)
- integrated the six conceptual continuums and suggested relationships to be considered in the study design (Burns & Grove 2003:142, 154-156; Woods & Catanzaro 1988:66)
- provided a context for interpreting research findings that might otherwise be isolated and difficult to interpret (Burns & Grove 2003:142, 154-156; Lo-Biondo Wood & Haber 1994:144; Polit & Beck 2004:119-120, 134-135)
- allowed for the derivation of hypotheses to be tested
- succinctly summarises the main events of the behaviourist-humanist controversy in nursing education.

### **2.3 CLARIFICATION OF TERMINOLOGY**

In this section, the following terminology is discussed in terms of Bevis and Watson's Humanistic-Educative-Caring Curriculum Paradigm:

- learning
- training
- education
- educated nurse
- caring nurse.

The reason for the "one sided" discussion is that Bevis and Watson's work is in a sense reactionary; a humanistic-educative-caring reaction to Tylerian behaviourism.

## **Learning**

Humanists view the learner as a unique individual and learning as a personal search for meaning. In this quest for meaning; growth, development and empowerment of the human being occurs and the learner attains self-actualisation (see section 4.4.2.1). Many aspects of learning cannot be evaluated. For example, understanding or caring. However, because caring and understanding cannot be measured does not mean that they do not exist (Bevis & Watson 1987:31, 265-266; Learn 1990:238-239). To humanists, learning is an active process where learners take responsibility for their learning by setting their own goals. As learners live in a continually, changing environment which requires continuous adaptation and reorientation, it is vital that learners be educated rather than merely trained, as educated minds will enable them to use strategies such as enquiry and problem solving, to deal with their ever changing and evolving circumstances.

Learning, in the educational context is viewed as a process involving the transactions and interactions that occur between and among teachers and students (Bevis & Watson 1989:5). Thus, Bevis and Watson (1989:265) define educative learning as a process in which an individual cultivates the disciplined scholarship and experience necessary for expertise. This includes: acquiring insight; noticing patterns; finding meaning and significance; observing balance and *wholeness*; making compassionate and wise judgement while acquiring foresight; generating creative and flexible strategies; developing informed and skilled intentionality; identifying with the ethical and cultural traditions of the field; grasping the deeper structures of the knowledge base; expanding critical thinking ability and creativity; and finding pathways to new knowledge.

Carper (1978:14), stated that learning can be achieved through reflection on practice by applying the fundamental patterns of knowing in nursing she identified, namely: empirical, ethical, personal and aesthetic patterns of knowing (Johns 1995:226-227). These patterns or ways of knowing are discrete but interrelated with, from a humanistic-educative-caring perspective, the aesthetic way of knowing forming the core and being informed by the empirical, the personal and the ethical dimensions of practice. This arrangement of Carper's patterns of knowing has definite educational and didactic implications. Fay (1987 cited in Johns 1995:226) states that learning, through reflection is a process of enlightenment, empowerment and emancipation, has special appeal in this regard. In the same vein, La

Monica (1985:2) views learning as a continual process in which the student is an active participant. *Each facet* of the learner, thus all patterns of knowing, her thoughts, feelings and body are integrated into a learning modality that is based on content and experience. Learning in this situation becomes an individualised and aesthetic experience.

Other definitions of learning which also emphasise some human and humanistic-educative-caring aspects include Woolfolk's (1995:196) definition that learning is a relatively permanent change in the knowledge or behaviour of an individual as a result of *experience*. *Experiential learning* according to Rogers and Freiberg (1994:36) entails elements such as: quality of personal involvement, it is self-initiated, pervasive, evaluated by the learner and its essence is meaning. In this instance Gagne (1985:2) states that learning entails a "*change in human disposition or capability, which can be retained, and which is not simply ascribable to the process of growth*" (Knowles, Holton & Swanson 1998:12, 17).

Gravett (1995(b):2-3, 14) states that learning is viewed by many educational reformers as *conceptual change*. Conceptual change is defined as a *qualitative* change in the way an individual understands, conceptualises, experiences and interprets subject matter, that is, concepts, principles and methods, of the particular discipline under study.

As far back as 1983, Alexander (1983:31), emphasised learning in nursing as learning to care for whole people with different appearances, ways of behaving and often vastly different experiences of life. As a result, people have different problems, accomplishments, joys and fears. Hockey (1980 in Alexander 1983:31) states that *education for care* includes empathy, respect for the individual, application of theory to practice, decision making, manual skill and education for change.

From the aspects stated by Hockey (1980 in Alexander 1983:31) learning to nurse involves Bloom's domains of learning and is concerned with the development and integration of:

- knowledge, intellectual skills and abilities (the cognitive domain)
- attitudes, values and the ability to adjust adequately in order to cope with different situations (the affective domain)

- skilled and dexterous manual techniques (the psychomotor domain).

The reference of Hockey (1980 cited in Alexander 1983:31) to “education for care” is better understood or defined by the term “caring”. Understandably this also applies to a humanistic-educative-caring perspective. “Education for care” further implies that care and caring are the central and essential ethics in nursing. Klimek (1990:178) also regards nursing ethics as the ethics of care. This is corroborated by Fry (1988 in Klimek 1990:178).

Caring (see section 1.8), according to Bevis and Watson (1989:53), is a human process involving the cognitive, affective and psychomotor aspects with the beauty, art, ethics, intuition, aesthetics and spiritual awareness of the inter-subjective human-to-human caring process and moral ideas. Therefore caring, like learning, is seen as an integration of all the latter aspects. More accurately, all latter aspects plus putting aesthetical and moral knowing central among these.

Benner and Wrubel (in Moccia 1990:212), define caring as “being connected, to have things matter, as a fusion of thought, feeling and action and because it fuses knowing and being, it is essential to our existence. Caring sets up what matters, creates possibility, connection, concern and the actual sharing of help, allows one individual to give and another individual to receive”.

Leininger (1984 in McGee 1998:78) defines care as “an essential human need for the full development, health maintenance and survival of human beings in all world cultures”. She views caring as the “direct, or indirect, nurturant and skilful activities, processes and decisions related to assisting people in such a manner that reflects behavioural attributes which are empathetic, supportive, compassionate, protective, succorant, educational and dependent on the needs, problems, values and goals of the individual or group being assisted” (Klimek 1990:178). Caring and care, thus, remind one that the primary emphasis in nursing education should be on the education, and not the training, of the student nurse (Bevis & Watson 1989:5-6, 80-81, 91).

### **Training**

According to the Bevis and Watson paradigm, a nurse should be educated and not trained. However, as Brady (2005:7) indicates, students learn in different ways and according to their needs or outcomes. Therefore, at times, training elements might find their way into the educational setting, but is never the norm in nursing education. Therefore, the nurse is not only trained to learn and conquer skills, but is educated to anticipate all possible outcomes. Training is explained in greater detail in section 3.2.2.

### **Education**

Bevis and Watson (1989:158) stated that education provides the educated person with more, and different, ways to view their own world. Obtaining more knowledge is indicative of an educational view, as more knowledge not only broadens the learner's view but leads to an educated mind that is able to enquire, criticize, analyse, create and solve problems. On the other hand, the mere art of utilising knowledge may imply a training perspective with product line thinking, where a technique is learned through repetition and merely transposed to another, similar situation. During this process of education, the learner is enriched in the syntactical, contextual and inquiry categories of learning and grows in maturity (Bevis & Watson 1989:73) as indicated by the conceptual model.

According to Peters (1965:25 in Searle et al 1986:105) education "*implies that something worthwhile has been intentionally transmitted in a morally acceptable manner*". This *something* can be cognitive, psychomotor or affective, however, it is always encapsulated in morality and therefore also in ethics and aesthetics; true education. The emphasis is thus on the *person* and not the specialised vocation called nursing (Searle et al 1986:105). It is, therefore, imperative to not only teach individuals to be lifelong learners but to ensure that their education concentrates on the whole person, their cognitive, affective and psycho-motor domains in an integrated manner and not in a fragmented manner. Again, the *integrative* matter is caring, the caring ethic, ethics and aesthetics; the humanistic-educative-caring ingredient.

### **Educated Nurse**

An educated person has the ability to think and reason, that is, being creative, knowledgeable and analytically minded, and understands the *why* and *how* of the transmission of knowledge.

In this lies the potential for extending the boundaries of knowledge (Searle et al 1986:106) and also the possibility to self-transcendence. The outlook of an educated nurse has been broadened and transformed by what she has learned. This transformation of outlook engenders a sense of commitment which is the essence of a professional service to humankind (Searle et al 1986:106). In the Bevis and Watson model the process of learning, the *how*, is emphasised so that the nurse realises that as an independent learner, she is obligated to continuously update her knowledge and become a life-long learner, in order to provide a caring service to unique individuals and groups.

According to Searle (et al 1986:105), an educated nurse is an expert in a particular field, has a broad knowledge of the world in which she lives, a wide understanding of humankind whom she serves and an understanding of the meaning of her own existence in relation to the world in which she lives with others. Additionally, Searle et al (1986:105–106, 110) view an educated nurse as one who understands mankind's struggle for existence and a meaningful life, one with an extensive knowledge of the ethos of nursing, its ethics and philosophy and of the scientific foundations and technical skills of the science and art of nursing.

### **Caring Nurse**

A caring nurse is a nurse who is both trained and educated. This dual concept of training and education, as a basis for professional nurse preparation, stems from the basic structure of caring itself as consisting of both feelings and doing, more specifically as consisting of a will orientation, feelings, generic and professional caring knowledge and actions (van der Wal 1999(a):64-67). Training would point to “professional” knowledge and skill and actions based on these in the absence of a morally informed will and feelings. It is the morally informed will and feeling, feelings in the sense of intersubjective human to human connection and appreciation and the taking of actions guided by such appreciation that leave the nurse educated. Thus, a nurse who is educated, cares, and will ensure that her technical expertise is used in a way that the patient and/or doctor will be confident that she is able to ensure their safety and succour. Concern and caring leads the nurse to acquire the depth and breadth of knowledge, vision and understanding that will enable her to deal with individuals in their social setting and with the increasing complex and varied responsibilities she is required to shoulder (Searle et al 1986:110).

In summary, Bevis and Watson (1989:159) state that *"education provides a critical thought process with all that it implies including a sensitivity and respect for life that denotes a compassionate identity with all humanity, an attainment of style with its power and restraint, that is, its elegance, an ability to anticipate and confront difficult and complex problems and participate with others in developing creative and flexible options and the general moral obligation to act to improve global life. This implies mature wisdom, which includes such aspects as perspective, patience, historical views that help one see patterns and significance and hope"*.

#### **2.4 THE BEVIS AND WATSON HUMANISTIC-EDUCATIVE-CARING CURRICULUM PARADIGM**

A paradigm is a way of looking at natural phenomena encompassing a set of philosophical assumptions that guides one's approach to enquiry (Polit & Beck 2004:13, 726). According to the Oxford English Dictionary (Soanes & Hawker 2005:736), a paradigm is a typical example, a pattern or model of something. A paradigm shift refers to a fundamental change in approach or in the assumptions underlying something. The Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm takes a new look at nursing education and the pattern or model that should guide a paradigm shift. For certain colleges, the Bevis and Watson paradigm may well constitute a shift from behaviourism to humanism, education and caring.

The curriculum paradigm of Bevis and Watson (see figure 1.1 and appendix E) has as a point of departure, the premise that curriculum is the transactions and interactions that occur between student and teacher and amongst students with the intent that learning takes place (Bevis & Watson 1989:189).

In this paradigm there is a change of alliance from

Student	+	teacher and content	=	learning
		<b>to</b>		
student and teacher	+	content	=	learning.

The teacher and the student are viewed as co-learners; the teacher is the expert learner and the student the novice learner (Bevis & Watson 1989:87; Diekelmann 1990:303). In co-operation with the student, the teacher gives expert criticism through her experience and interactions.

The aim of the Bevis and Watson paradigm is to produce an educated graduate who is independent, self-directed, self-motivated, a life-long learner with an inquiring mind and familiar with inquiring approaches to learning (Bevis & Watson 1989:81, 278-279). The latter paradigm underwrites principles such as caring, education, wholes and liberation (see appendix G), as reflected by the six conceptual continuums contained in this paradigm. The paradigm develops excellence and, if correctly implemented, may produce a professional, educated, caring nurse and not only a trained or skilled nurse. In order to achieve this, all six conceptual continuums have to be considered and will be discussed accordingly in the following section.

## **2.5 DESCRIPTION OF THE BEVIS AND WATSON MODEL**

The reader is referred to the folder insert appendix E for convenience and easy reference during the discussion that follows. The Bevis and Watson model, which structures their paradigm, contains six conceptual continuums namely the:

- Learner Maturity Continuum
- Teacher-student relationship
- Teacher-student structure
- Typology of Learning
- Criteria for Teacher-Student Interactions
- Criteria for Selecting and Devising Learning Experiences.

### **2.5.1 Learner Maturity Continuum**

The Learner Maturity Continuum conceptual continuum defines the degrees of learner maturity. There are five basic student positions on the continuum. They are from lowest to highest position: charming, anticipatory-compliant and resonating, which represent an immature position, and reciprocating and generating representing, a mature position. Each position has certain distinguishing learner characteristics which are described according to the following aspects:

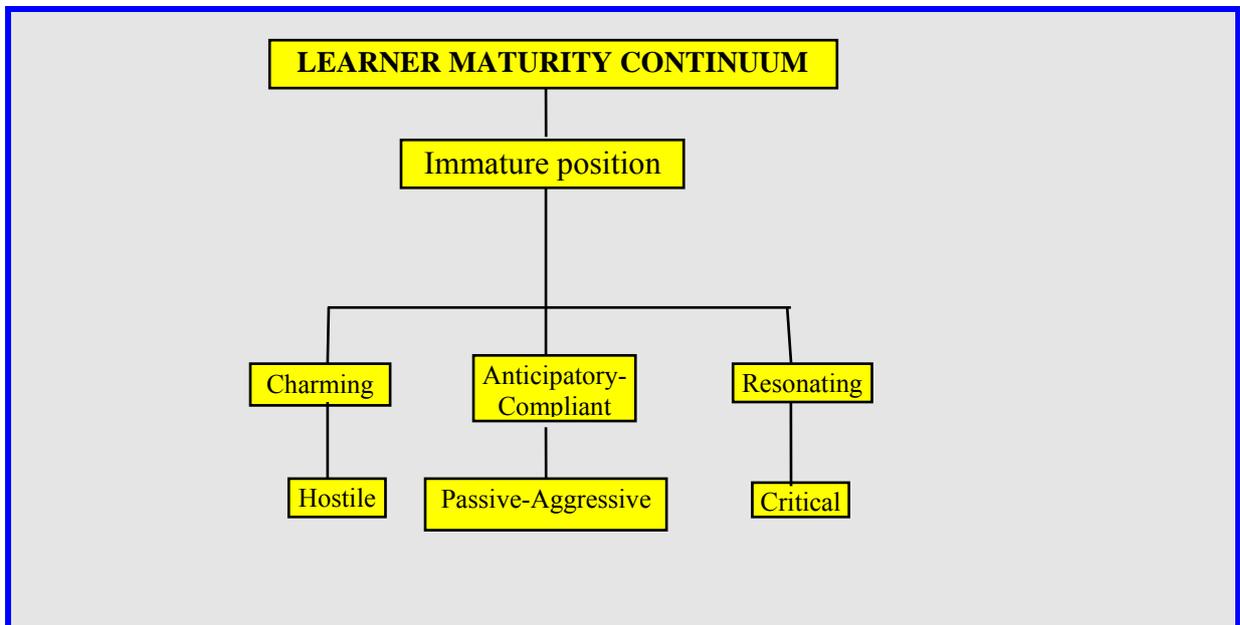
- position of student
- goal of student
- teacher-student relationship
- learner characteristics
- teacher structure
- student self-structure.

Criteria for the Learner Maturity Continuum are summarised in appendix G.

Each immature position (see figure 2.1) has an opposite pole namely:

- Charming versus hostile
- Anticipatory-compliant versus passive-aggressive and
- Resonating versus critical (Bevis & Watson 1989:85-86).

The only aspect used to describe the opposite poles was learner characteristics.



(Adapted from Bevis & Watson 1989:85-86)

**FIGURE 2.1: IMMATURE POSITIONS AND OPPOSITE POLES**

Additionally, these positions also represent the relationship between the student and the teacher. The immature positions represent oppressed and the mature positions, a liberated relationship (Bevis & Watson 1989:81, 83; see figure 1.1). Further, in the immature positions,

the teacher structure is high and the student self-structure is low. In the mature positions the opposite situation occurs namely, the teacher structure is low and the student self-structure is high. Teacher-student relationship, teacher structure and student self-structure refer to the extent of the domineering versus cooperative involvement of the teacher and the student in the learning process. The latter aspects are discussed in section 2.5.1.4.

The aim of the Learner Maturity Continuum is to attain the characteristics that distinguish maximum learner maturity. The immature positions will produce a trained or skilled nurse while the mature positions will produce a “humanistic-educative-caring” nurse. The Learner Maturity Continuum can be entered at any position. It is not necessary to always begin in the oppressed position. Regression to lower levels is also possible, as these positions represent the relationship between the teacher and the student and relationships may, and do, change over time. The type of educational environment may also change from a liberated one to an oppressed one. For example, if the teacher perceives that the student has regressed to an immature position, she may revert to an oppressed relationship with the student. If the student encounters a teacher in another subject and is treated as immature, for example, at the anticipatory-compliant level, the student may revert to this position by displaying behaviour characteristic of that immature level.

The criteria for the Learner Maturity Continuum are summarised in appendix G.

### **2.5.1.1 Immature positions**

#### **Charming**

At this point on the continuum there is a parent-child relationship between the teacher and the student. The student wants to please the teacher so that she will get the teacher’s attention and be liked. The focus is on obtaining good grades (Bevis & Watson 1989:83). The flip side of charming is hostile where the student appears to bristle even though she may be silent, not saying much to either other students or the teacher.

#### **Anticipatory-compliant**

At this position the student guesses what the tutor expects and adapts as required. It is also a parent-child relationship with the focus on obtaining a good grade and not on learning. The

student guesses or anticipates what content the teacher views as important and complies by studying only what the teacher wants learned (Bevis & Watson 1989:84). The flip side of the anticipatory-compliant position is passive-aggressive where the student is resistant to suggestions regarding what the tutor thinks is adequate scholarship. Some of the indirect ways of displaying resistance are misunderstanding directions, forgetting homework and assignments and being slow or stubborn.

Regarding examinations, Miller and Parlett (1974 in Alexander 1983:50) found that cue-conscious students are aware that it could be helpful to be perceptive and receptive of any clues given by the teacher. Cue-seekers, therefore, deliberately sought out staff and generally acted very positively in their search for information which might be helpful in passing examinations. This type of behaviour is analogous with the immature anticipatory-compliant position of the student on the Learner Maturity Continuum. The student is anticipatory in that her energy is spent on trying to “figure or psych out” what the teacher requires and compliant by studying what she anticipates the teacher wants learned (Bevis & Watson 1989:84).

The learner characteristics (see appendix G) indicative of the anticipatory-compliant position remind one of Weiner's attribution theory of motivation. Weiner (1979:3) described his theory as an explanation that focuses on how people explain the causes of their own successes or failures, that is, what influences their motivation (Quinn 2000:21-22; Woolfolk 1995:346-347). A central concept to attribution theory is Rotter's idea of locus of control which can be either internal or external (Frost 1994:698; Malan & Rothmann 2002:2, 5; Quinn 2000:21-22; Weiner 1979:6). The anticipatory-compliant student has an external locus of control as she attributes responsibility for her success or failure to her ability to *psych out* the teacher and learn what the teacher wants learned. The applicable concepts from the theories of Weiner and Rotter have been added to the anticipatory-compliant criteria (see appendix G).

The charming and anticipatory-compliant positions also remind one of the lower levels of Kohlberg's theory of moral development. According to Kohlberg, the student progresses through different levels and stages of moral development. The charming position reminds one of the pre-conventional level: stage 1: the punishment-obedience orientation. At the pre-conventional level the individual is responsible to cultural rules and labels of good and bad, right and wrong but interprets these labels in terms of either the physical or hedonistic

consequences of action. For example punishment, reward, exchange of favours, or in terms of the physical power of those who make the rules and labels.

At stage 1 of Kohlberg's theory the student acts just to avoid punishment, or in deference to the power figure. She does not respect the authority of the power figure for the moral principle from which their reasoning may emanate, but from the basic need to avoid being punished. For example, the student at the charming position who wants to please the teacher so that she can be noticed, liked and obtain good grades (Kohlberg 1981:17; Pienaar 1998:94).

At stage 2 of Kohlberg's theory, the instrumental relativist orientation, the right action of the student consists of that which instrumentally satisfies her own needs and occasionally the needs of others. She views human relations in terms related to those of the market place. Elements of sharing are present, but are interpreted in a physical and pragmatic way and relative to hedonistic consequences, for example, "you scratch my back and I'll scratch yours" (Budhal 1998:40; Kohlberg 1981:17). This is applicable to the student at the anticipatory-compliant position who spends all her time and energy attempting to pre-guess what the teacher wants her to learn, in order to satisfy her own need to obtain good grades. Thus, Kohlberg's earlier stages of moral development show the same dependability on opinions of others, that is, external issues, as do the positions of student immaturity.

The applicable issues from the theory of Kohlberg have been added to the Learner Maturity Continuum at the charming and anticipatory-compliant positions (see appendix G).

### **Resonating**

The resonating position is the transitional or central point on the continuum. According to the Oxford English Dictionary (Soanes & Hawker 2005:876), the word resonant means echoing, resounding with, reverberating, continuing to sound, reinforced or prolonged by vibration or reflection. The students are influenced by the charismatic leadership of the teacher whom they view as attractive, stimulating and enjoyable. Students are highly motivated and display great respect, admiration and confidence in the teacher. Students read and prepare for class not wanting to miss any part of the experience and they are eager recipients of the teacher's wit, information and wisdom. This is the most productive of the oppressed positions, but the

student is still primarily a passive learner with the teacher in control of the learning situation. However, it is a good position from which to move into the liberated positions as the charismatic personality of the teacher may stimulate a love of learning and open the minds of students to become enquiring and curious. Additionally, the students may develop confidence in the ability of the teacher to guide learning and this confidence in turn may provide a platform for liberation and independence (Bevis & Watson 1989:84-85). The flip side of resonating is critical where the critical part of the student is always in gear. The tutor receives tremendous criticism and it is impossible to please the student who is a master of the double bind. Double bind refers to the student who always sees two opposite sides or poles to a situation. For example, the tests cannot just be *satisfactory*, they are either too easy or too difficult.

Additionally, the three immature positions on the continuum are reminiscent of pedagogy. Pedagogy is defined as the art and science of teaching children. It is a Greek word where *paed* means child and *agogos* learning. At these positions, the tutor is treating the student or the student wants to, or it suits the student to be treated, as a child and to be led by the tutor (Knowles & Associates 1984:9-12; Knowles 1990:54-63; Knowles et al 1998:36). The relationship of the teacher and the student is one of oppression by the teacher of the student. This oppression by the teacher may elicit feelings of hostility, passive-aggressiveness and criticism (Bevis & Watson 1989:84; see figures 1.1, 2.1).

### **2.5.1.2 Mature positions**

#### **Reciprocating**

At this point, the responsibility for learning rests with the student who seeks her own learning patterns. She has a more adult relationship with the teacher. This relationship revolves around transactions, which meet the criteria for educative teacher-student relationships and are involved in learning episodes that meet the criteria for educative learning experiences (Bevis & Watson 1989:86; see appendix G).

The reciprocating position is reminiscent of andragogy which is defined as the art and science of teaching adults. During the application of andragogy, the adult teacher-student relationship is characterised by mutual respect and a teacher who as a facilitator of learning, provides guidelines and support for the student who actively participates in the learning process

(Chabeli 2006:84; Mouton 1997:226-227). The educational environment is one of liberation where the students exchange ideas, challenge each other and the teacher (Bevis & Watson 1989:86; Mouton 1997:226-227; see figures 1.1).

The facilitator role is confirmed by Brammer (2006:968) who found that registered nurses perceived their role in student learning as a facilitator. The facilitative role is defined as a learning partnership where students were assisted to attain nursing goals, to understand the holistic view of nursing and to develop professionally for their role as registered nurses.

### **Generating**

At this point the student initiates problems and uses her initiative and creativity to solve these problems. The teacher is used as a consultant and expert learner. Evaluation for grades is replaced by criticism. The generating position is indicative of a liberated teacher-student relationship where students feel free to engage the teacher in open dialogue, share feelings and knowledge, explore ideas relevant to their goals and directions, search and enquire for meaning and where mutual trust, respect, support and collaboration exist (Bevis & Watson 1989:86-87; Mouton 1997:228-230; see appendix G).

The generating position is reminiscent of Schon's reflective practice which is a dynamic and continuing process (Quinn 2000:568-570). Schon focuses on the relationship between academic knowledge and the competence involved in professional practice (Durgahee 1998:158). He states that technical rationality defines professional practice as the application of general, standardised, theoretical principles to the solving of practice problems. However, problems are rarely standard or predictable but in reality, involve the use of tacit, intuitive knowledge. During interactions and transactions with patients, the practitioner has the ability to reflect upon this knowledge and to deal with unique, unpredictable or conflicting situations (Evans 2000:133). Practice is the expression of an important form of knowledge referred to as reflective knowledge by Jarvis (1993:178) and this knowledge is embedded in action (Durgahee 1996:425-426). When something unusual is encountered, the practitioner steps back and reflects on what he or she is doing and thereby restructures understanding. It can be referred to as reflection-in-action; thinking as you act and reflection-on-action, that is, focusing on your actions retrospectively and at a place distant from the event (Evans 2000:133; Khanyile 2000:74; Quinn 2000:568-570).

### 2.5.1.3 Teacher-student relationship

The mature positions necessitate a liberated educational environment. This liberated educational environment (see appendix E) reminds one of the Rogers student-centred approach to learning (Quinn 2000:53; Rogers & Freiberg 1996:154), where an important factor is the relationship that exists between the facilitator and the learner. The teacher as a facilitator of learning shares feelings as well as knowledge with students, is viewed as an authentic person by the students, accepts and trusts the students to whom she is empathic, sympathetic and understanding (Chabeli 2006:84; Knowles et al 1998:85-87, 198-201).

In support of the teacher as a facilitator of learning, Evans (2000:137) stated that the student-teacher relationship created the core for clinical learning and growth of students. Brammer (2006:968) identified the role of the *registered* nurse in student learning as a facilitator.

Brady (2005:6, 13) states that the relationship between the teacher and the student is the most important aspect of teaching. She maintains that the three major relationship skills that a teacher requires are those expounded by Rogers namely prizing the feelings, opinions and person of the learner; empathic understanding and realness that is exhibited by the teacher being herself and accepting her feelings.

Student participation, involvement and absence of threats in the classroom are also emphasised in Teacher-student relationship (Knowles 1990:41-43, 77-89; Quinn 2000:54). In America, in a study entitled "*The lived experience of nursing education: a phenomenological study*" Nelms (1990:295) found that when describing the ideal teacher, students expected to be recognised as a person and a fellow human being and to be allowed to see the personhood of the teacher.

Regarding creativity and the absence of threats, Pruitt (1989:53) stated that creativity is fostered in a learning environment where a student is allowed freedom to make mistakes and to fail. In fact, the student is taught that rejection and failure are an important part of the creative process. Additionally, "*high doses of encouragement are necessary to keep the creative process alive*" (Pruitt 1989:53).

In support of absence of threats, George (1992 in Clark 1998:145) indicated that a creative

learning environment is depicted by thinking being more valued than memory, where the learner is expected to make a contribution which is appreciated and expected, unusual learner ideas are supported, failure is seen as a learning opportunity and students must be prepared to take risks.

According to King (1984:17), freedom in the classroom in the most humanistic sense means freedom from ridicule, freedom to experiment and to take personal risks in a supportive environment and freedom to explore personal meaning.

Further, this liberated teacher-student relationship resembles the andragogical theory of Knowles (1995:103-107; Knowles et al 1998:4, 64-68, 72, 180-183). Knowles based his theory of andragogy on the differences he perceived between pedagogy, the science of teaching children and andragogy, the science of teaching adults. The differences are based on the assumptions about the learner on five dimensions namely the concept of the learner, the role of the learner's experience, the learner's readiness to learn, the learner's orientation to learning and motivation to learn. The implementation of andragogical theory involves a process design consisting of seven process elements. One of the seven elements in his theory relates to setting the climate for learning to ensure that learning and academic growth occurs. This includes the physical and psychological climate and involves such aspects as mutual respect, collaboration, mutual trust, supportiveness, openness, authenticity, a climate of pleasure and humanness where the teacher and student form a partnership for facilitation of effective learning (Galbraith 1992:11; Quinn 2000:57-59). This facilitation entails emphasis being placed on teaching the student the process of acquiring knowledge (Hollis 1991:51-52). Resources are provided so that the student is able to teach herself. The teacher is merely the facilitator and not the *teller* or purveyor of knowledge. The nurse displays self-direction, readiness and intrinsic motivation during the acquisition of knowledge (Quinn 2000:58-59). The afore-mentioned aspects are supported by Galbraith (1992:10-11, 20) in an article in which he describes the "*Nine Principles of Good Facilitation*" (see section 2.5.2.1).

In support of setting the climate for learning, de Villiers (2001:39-40) stated that learning should be achieved in a learning climate that is interactive, collaborative and democratic. In this environment, learners must engage in dialogue and reflective discussion and be allowed

to take risks in order to solve problems creatively and be seen as a co-learner with the nurse educator.

The applicable issues from the theories of Knowles and Rogers and the work of Galbraith and Pruitt have been added to the Learner Maturity Continuum at the generating position (see appendix G).

#### **2.5.1.4 Teacher structure and Student self-structure**

According to Bevis and Watson (1989:78, 88), Teacher structure and Student self-structure refer to the extent of the involvement of the teacher and student in the learning process. The more students can decide for themselves, the more humanistic the educational environment will be in which the student will learn. In immature positions, teacher structure is high and in the mature positions, it is low. Student self-structure is low during immature positions and high during mature positions. Consequently, the aspect under discussion here is how can the mature student positions of reciprocating and generating be facilitated so that the learning process will produce an educated, caring nurse? (Bevis & Watson 1989:88; see figure 1.1). Structure is also related to the teacher-student relationship, in which inference or cause-effect relationships are difficult to determine. King (1984:17) views structure as fair ground rules, fair constraints and honest, open communication. McGovern and Valiga (1997:32), define structure as the amount, on a continuum from minimal to extensive, of direction provided to students during learning experiences.

#### **2.5.2 Typology of Learning**

In this section the following aspects are discussed:

- the different types of learning
- the Learning Typology.

##### **2.5.2.1 Different types of learning**

Prior to discussing the Bevis and Watson Typology of Learning conceptual continuum, it is necessary to consider the fact that each student is an individual and as such learns in a different manner to other individuals (Brady 2005:7). Some students learn through listening, observing, questioning; others by reading or doing things, that is, active

participation (Brink 1988:11; Davis 1990:405; Rogers & Freiberg 1994:189). Human learning is multifaceted as many internal and external environmental factors influence the ability of the individual to learn (van Hoozer, Bratton, Ostmo, Weinholtz, Craft, Gjerde & Albanese 1987:47). Learning style is concerned with the *how of learning* and refers to the distinctive behaviours or patterns that indicate how an individual learns from, and adapts to, the environment or how she prefers to learn (Brink 1988:11). In contemporary society, learning is change and change is an ongoing, accelerating and constant process. It is, therefore, imperative that students learn not only *how* to learn, that is, “know how” or procedural knowledge but also *what* to learn, that is, “know that” or declarative knowledge (Benner 1984 in Gendron 1990:281). Rogers (in Quinn 2000:54) stated, “The most socially useful learning in the modern world is the learning of the process of learning”.

Galbraith (1992:10-11, 20) believes that facilitation should assist learners in *learning how to learn*. He further states that he has no clear-cut definition of facilitation but has developed a set of nine principles of good facilitation. The principles are grounded in the conceptual and practical application of knowledge and experience of facilitation and the adult learning process. The nine principles are: develop a philosophy, understand the uniqueness of (adult) learners, eliminate load factor, provide a vision, be authentic and credible, provide challenges, foster praxis, attend to how learners experience learning and encourage independence. In support of Galbraith, Lekalakala-Mokgele and du Rand (2005:25) state that facilitation is based on the principles of adult learning and involves the participation of both the learner and the facilitator through the process of interaction.

Other authors who subscribe to the fact that there are different types of learning are Brady (2005:7), Hagland (1994:690), Huckabay (1980:11-12), Knowles (1990:2, 11), Knowles et al (1998:1, 14, 20), Kolb (1976 in DeCoux 1990:202), Pickworth & Schoeman (2000:44), Leino-Kilpi (1989:62-63), Pask (1976:132), Quinn (2000:15, 32, 46, 66), Reilly & Oermann (1990:28-30) and Woolfolk (1995:17, 128-129).

David Kolb views learning as a process of human development that is gained through experience (Pickworth & Schoeman 2000:44). His experiential learning model describes four basic learning styles, namely diverger, assimilator, converger and accommodator (Brink

1988:12; Brockhaus, Woods & Brockhaus 1981:27; Christensen, Lee & Bugg 1979:52; Crous, de Villiers, Mouton & Beyers 1995:66-67; Hodges 1988:342; Quinn 2000:62-63) The learning process is viewed as a four-stage cycle involving concrete experience, reflective observation, abstract conceptualisation and active experimentation (de Villiers 2001:39; Laschinger & Boss 1984:376; Pickworth & Schoeman 2000:44; Quinn 2000:62-63; Rich & Parker 1995:1051; van Schoor 1987:117; Wong, Kember, Chung & Yan 1995:49). Kolb's theory fits into the contextual, syntactical and inquiry educative types of learning of the Bevis and Watson model. The Kolb learning cycle is initiated by a professional or personal concrete experience that the student considers interesting or problematic, that is, syntactical learning. The student observes and gathers information about the experiences, reflects and analyses the experience until some "theory" or insight emerges, that is, abstract conceptualisation occurs; inquiry learning. These new concepts are then tested in new situations or used to modify existing practices, that is, contextual learning.

Kolb's model integrates experience, perception, cognition and behaviour (Holbert & Thomas 1988:31; Ridley, Laschinger and Goldenberg 1995:58-59). Holbert and Thomas used Kolb's model (1988:32-34) to guide the design and implementation of an instructional unit on gerontological nursing. They indicated that the use of the learning cycle offers nurse educators an approach for preparing students to integrate humanistic, caring, expert knowledge and technological competence. These concepts are all relevant to the Bevis and Watson model.

In contrast DeCoux (1990:202-207) reviewed the application of the Kolb Learning Style Inventory (LSI) in the examination of learning styles amongst nursing students (Ridley et al 1995:58-59). Various research studies were examined regarding generic (traditional) and RN<sup>2</sup> (non-traditional) students, Baccalaureate and associate degree or diploma students, learning style and achievement, teacher/learner learning style match and learning style and the nursing process. DeCoux found minimal support for the validity or utility of the instrument (LSI). In general, lack of significant relationships between learning style and other variables was

<sup>2</sup> Individuals with Baccalaureate or higher degrees in other fields who are career-changers and enter nursing (Brink 1992(a):34).

revealed in research conducted with nursing students. In the light of these latter stated findings, she recommended that Kolb's LSI not be used in nursing education. In South Africa, Luthuli, Masiea and Zuma (1992:30) expressed reservations about the feasibility of applying the western model of learning to black students. Some of the theories applied in the western model are behaviourist, cognitive and humanistic learning theories.

Thus, these theories were developed by western theorists in the western context and must of necessity be biased in favour of western culture. The authors further stated that the cultural background of black nursing students differs from those of their white counterparts. Black students come from a restricted life world where the majority of students have had minimal or no access to television, books or radios. The language of instruction is regarded as foreign to them as it is not their mother tongue. Thus, the black student enters nursing in an environment where she has to adapt to and internalise the sub-culture of nursing and the professional role, use technical terms and operate foreign technological gadgets and equipment. These authors further state that the humanist theory, if developed and extended, could possibly be applied to the cultural dimension of learning for the black student (Luthuli et al 1992:32-33). It is the contention of the researcher that the restricted cultural background of the black student could be accommodated within the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm. The students would be viewed as human beings with their own culture and would be taught to develop the ability to integrate humanistic, caring, expert knowledge and technological competence.

In South Africa, Nolte, Heyns and Venter (1997:167) conducted a study entitled "Building blocks for bridging programmes". The participants were black students who attended bridging programmes as they had a matriculation certificate but no matriculation exemption. On successful completion of the bridging programme, students were allowed to register for a degree of their choice. In support of the findings of Luthuli et al (1992:30), Nolte et al (1996:167, 174-175) found that the cultural backgrounds of black and white students differ and that black students were faced with numerous social and emotional challenges. Black students encountered high educational demands and expectations but lacked not only the educational background to adjust to these demands but also the financial, social and environmental resources. Changes occurred in their relationships with their parents and family as a result of their exposure to new lifestyles and cultures. Black students had to deal with

their perceived “differentness” with regards to white students, in terms of their language, habits, customs and appearance.

### **2.5.2.2 Description of the Typology of Learning**

The Typology of Learning conceptual continuum may be used for selecting and sorting educational content, moving students forward on the Learner Maturity Continuum and for devising or choosing educative teacher-student interactions and learning experiences (Bevis & Watson 1989:91). However, it is the contention of the researcher that the unpredictable, evolving and constantly changing nature of nursing practice demands a nurse who not only has a sound knowledge base but one who is able to integrate her knowledge at the bedside, that is, to obtain praxis. Therefore, the main outcome of the Typology of Learning should be the facilitation of cognitive development to empower the student to progress along the learning continuum to become an educated, caring nurse who is able to be reflective-in-practice, manage diverse nursing situations by employing reason and decision-making that is contextually based. McGovern and Valiga (1997:29) state that more advanced levels of cognitive development are a prerequisite for students to think in more complex ways and engage in critical and independent thinking and moral reasoning.

Consequently, students need to implement the Bevis and Watson contextual, syntactical and inquiry educative types of learning in order to demonstrate cognitive growth which is defined by McGovern and Valiga (1997:29) as an ability to “employ independent decision-making, provide nursing care despite conflicting or ambiguous information, engage in critical thinking, and appreciate that a particular decision may be right for some but not for others”.

According to Bevis and Watson (1989:92) the Typology of Learning conceptual continuum (see appendix G), consists of six types of learning. The first three; item, directive and rationale learning can be placed on the immature side of the Learner Maturity Continuum and the last three; contextual, syntactical and inquiry on the mature side of the continuum. The first three types of learning lead to training and the last three types to education.

It is important to remember that all the types of learning are appropriate depending on the circumstances of the learning experiences (Brady 2005:7). During her education, a nurse has to acquire certain skills, for example, taking a temperature, where item, directive and rationale

learning may be the appropriate types of learning to implement. However, Bevis and Watson (1989:73, 87-88), stress that the emphasis should be on the education and not the training aspect of the student; that the learning continuum be ultimately extended to range from training to education.

#### **2.5.2.2.1 Item learning**

This category deals with the student learning separate pieces of information, individual factors and simple relationships such as lists. Item learning helps acquire skills or tasks mechanically and ritualistically, for example how to bath a baby (Bevis & Krulik 1991:363; Bevis & Watson 1989:91; see appendix G).

Item learning is reminiscent of the work undertaken in Scandinavia, by Marton and Svensson (1982) and Marton and Saljo (1984) which is described in a study undertaken by Leino-Kilpi (1989:62). These authors describe an atomistic or surface approach to learning. During the atomistic or surface approach to learning, the student concentrates on facts, details and separate parts and does not attempt to achieve an integral picture of the subject matter (Gravett 1995(a):2; Masitsa 2006:489; see appendix G). Details or facts are not combined with reference to the main theme. The latter aspect may also be assessed or measured by inspecting tests and assessing learning sessions. The student adopts a passive attitude with no personal involvement. Thus, the outcome remains narrow and restricted, that is, surface learning occurs (Gravett 1995(a):2; Hattie & Watkins 1988:345; Leino-Kilpi 1989:62-63; Mountford & Rogers 1996:1129).

In line with the above finding, McGovern and Valiga (1997:29-30) found that students tend to be at the lower levels, that is, dualism and multiplicity, of Perry's scheme of cognitive/intellectual and ethical development rather than at the more advanced levels of relativism and commitment. The scheme consists of four major categories namely dualism, multiplicity, relativism and commitment. Each category is described in detail using nine specific positions on the scale (see figure 2.2).

1	2	3	4	5	6	7	8	9
<b>Perry Position</b>								
<b>Perry Category</b>								
Dualism		Multiplicity		Relativism			Commitment	

(Mc Govern & Valiga 1997:30)

**FIGURE 2.2: PERRY'S SCHEME OF INTELLECTUAL AND ETHICAL DEVELOPMENT**

In Perry's scheme, positions one and two represent a view of the world of knowledge as dualistic. Dualistic students view the world as black-or-white, right-or-wrong (Evans 2000:134). These students believe there are right answers to all questions and that some authority, for example, a teacher, a textbook or a parent, knows the right answer. They see themselves as passive learners or receptacles ready to receive truth and they have difficulty managing conflicting points of view (McGovern and Valiga (1997:29-30).

Positions three and four represent a multiplistic view of knowledge. Initially at position three, multiplistic students accept that there is uncertainty in the world, but believe that this uncertainty is only temporary until some authority finds the answer. Once students have progressed to position four, they accept that legitimate uncertainty and multiple viewpoints exist. However, they believe that one opinion is just as valid as the next one and find it difficult to judge the soundness of an opinion or point of view (McGovern and Valiga 1997:29-30).

Knowledge is recognised as relative at positions five and six. Relativistic students no longer expect or accept a universal truth and realise that individuals need to make their own choices and decisions based on their own values, experiences and perceptions of truth. This latter situation requires a major shift in the manner in which students think regarding their view of themselves as learners, the role of teachers and other authorities such as books and parents. A prerequisite for engaging in critical thinking and moral reasoning is the achievement of a position five, level of thinking. Therefore, students must display a dramatic shift to intellectual independence evidenced by the manner in which they accept responsibility for their own learning (McGovern & Valiga 1997:29-30).

Positions seven, eight and nine represent a view of knowledge as commitment. During progression to positions seven, eight and nine, students gradually accept responsibility within the pluralistic world and act through commitment to establish their personal identities. At the commitment positions, students acknowledge that they have diverse, conflicting personal issues and these force them to make choices related to their careers, relationships with peers and significant others and value systems (McGovern & Valiga 1997:29-30).

McGovern and Valiga (1997:31, 34) investigated the effects of planned developmental instruction strategies on cognitive growth of freshman nursing students. They found that developmental instruction influenced the cognitive development of students by promoting critical thinking, empowering students to take responsibility for their own learning and assisting teachers to consider their own prejudices and world perspectives during their responses to student comments and whilst giving feedback. Developmental instruction strategies may be formulated within existing course contexts, that is, course content and course work requirements such as assignments. Examples of developmental strategies are writing, debating, group discussions, group projects, creative projects such as audiovisual presentations, short stories, poems, collages and pieces of music or art which are presented to peer groups (McGovern & Valiga 1997:29-32).

With regard to group work and group discussions, Brysiewicz, Cassimjee and McNerney (2002:15-18) reported that these methods had advantages and disadvantages. Students reported irritating aspects of group work such as domination, laughing at mistakes, disruptive behaviour and non-participation. Some of the things most appreciated about group work were teamwork, improved learning, opportunity to clarify issues and respect. Amongst the aspects students expected from the group were participation, meeting group goals and aims, cooperation, sharing information, communication and responsibility. Some of the aspects students were willing to do for the group were to access and share information, participate actively, cooperate, prepare for group work, help and encourage others, follow group rules and listen to others (Brysiewicz et al 2002:15-18).

Regarding writing being used as a developmental strategy, Beeson (1996:259) found that essay writing assisted students to synthesise factual knowledge. Additionally, writing assists learning by allowing reviewing, re-evaluation and manipulation of ideas and active

participation allows the learner to delve deeper, obtain more meaning and thus a better understanding of what is being learned (Beeson 1996:259). Sonnier (1989:168-170) states that using writing as a teaching method has many advantages such as reinforcing learning, promoting group understanding, assisting students to learn about themselves, making learning fun, raising self-esteem and keeping a journal.

The Developmental Instruction Model (see figure 2.3) consists of the concepts *challenge* and *support*. Support is offered for the present level of cognitive development and affirmation for what has already been achieved and cognitive growth is challenged by offering alternative explanations and contexts. Cognitive change is accomplished through the interaction of learners with increasingly complex environments (McGovern and Valiga 1997:29-31). Four variables are used to describe the challenge and support concepts. The variables are the amount of *structure* in the learning environment, the degree of *personalism* exhibited by the teacher, the degree of *diversity* allowed or encouraged in class and course work and the type of learning *experiences*. Diversity refers to the number of alternatives or perspectives that are encouraged or presented during a learning experience to enable a student to attain learning outcomes. Types of learning experiences refer to the extent to which students are directly involved in learning activities, for example, peer evaluations by critiquing work of other students. *Structure* refers to the amount of direction provided to students. *Personalism* refers to ways in which the teacher and the learning environment communicate openness, mutual trust and respect and a willingness to take risks in the process of learning. In other words, personalism pertains to a psychological, educational environment that is conducive to learning. The variables *diversity* and *vicarious* learning provide challenge and support is provided by the variables, a high degree of structure and a highly personal atmosphere. Each of the four variables of the model exists on a continuum. (see figure 2.3). The teacher promotes cognitive growth by providing an appropriate balance between the concepts; challenge and support (McGovern and Valiga 1997:31-33).

Variable	
(Challenge)	(Support)
<b>DEGREE OF DIVERSITY</b>	
Extensive -----	Minimal
<b>TYPE OF LEARNING EXPERIENCES</b>	
Vicarious -----	Direct
<b>AMOUNT OF STRUCTURE</b>	
Minimal -----	Extensive
<b>DEGREE OF PERSONALISM</b>	
Moderate -----	Extensive

(McGovern & Valiga 1997:32)

**FIGURE 2.3: DEVELOPMENTAL INSTRUCTION MODEL**

#### 2.5.2.2.2 Directive learning

This category deals with rules and guidelines, the “DO’s” and the “DON’Ts” of tasks. Directive learning follows item learning or can be learned concurrently (Bevis & Krulik 1991:366; Bevis & Watson 1989:93; see appendix G). An example of directive learning is the rules regarding how to prevent hypothermia while bathing the baby.

Directive learning is also reminiscent of the work by Marton and Svensson (1982) and Marton and Saljo (1984), which is described in a study undertaken by Leino-Kilpi (1989:62). The reader is referred to section 2.5.2.2:1.

Directive learning is also reminiscent of Ausubel’s reception or expository learning (Bowen 2004:1; Ouellette 1986:16; Thompson 1999:1-3; Woolfolk 1995:319). Reception learning involves the concept *advance organizer* and the way it is influenced by prior learning. An advanced organizer is a mental construct of learning already attained that assists a learner to master new information by preparing the existing cognitive structures of the learner for the learning experience that is about to occur. During reception learning a student acquires knowledge primarily through being presented with and receiving concepts, principles, facts and ideas (Ouellette 1986:16; Woolfolk 1995:319).

Expository means explaining or setting forth of facts and ideas. During expository teaching, for example, during a lecture the teacher presents material in a complete, carefully organised, sequenced and finished form to the student (Gravett 1994:1-2). The student thus receives the most usable material in the “*most efficient way*“(Ausubel, Norvak & Hanesian 1978:120).

#### **2.5.2.2.3 Rationale learning**

Rationale learning uses theory to support nursing practice. This category of learning deals with the whys, the reasons or rationales of nursing (see appendix G). For example, why is a nursing intervention such as pressure care implemented in a specific manner?

Rationale learning is concerned with learning the underlying theories and rationales; when they apply and their use in practice. It involves arranging items and directives in some logical order and finding theories on which to base nursing practice. It allows the rational use of formal properties of activities and theories and enables an individual, to relate data and ideas and to plan interventions and skills. Rationale learning exerts an influence on judgement and decision-making and enables learners to apply research to practice. It permits grounding practice in realities that are classical and fit known patterns. Rationale learning facilitates the structuring of nursing work and knowledge in a manner consistent with common or expected consequences of nursing care or intervention. For example, basing nursing practice and nursing interventions on the Orem self-care model of nursing (Bevis & Watson 1989:93; Fawcett 1984:175-200; Fitzpatrick & Whall 1983:137-153).

#### **2.5.2.2.4 Contextual learning**

This category forms the cultural framework in which the discipline of nursing and its practice exists (Bevis & Krulik 1991:368). It is the essence of nursing and deals with socialising aspects, nursing literature, world perspectives as a nurse, political expertise and aesthetics (Bevis & Watson 1989:93). It is the aspect of nursing that helps an individual become a person who thinks and feels like a nurse. Contextual learning is the language of nursing and its symbolism, values, ethics and general philosophy (Bevis & Krulik 1991:368; see appendix G). It entails learning to view nursing as a human science to ensure that transactions and interactions with patients and colleagues are caring, compassionate and positive (Bevis & Watson 1989:93). Nursing as a human science focuses on the human response to illness and

the personal meaning it has for the patient (Barker 1998(a):53). In contrast, nursing as a natural science focuses on disease and pathology; the biomedical model (Morolong & Chabeli 2005:45; Pearson 1998:256-257).

For example, from a natural science perspective, during interactions nurses focus on finding out about the patients, learning to understand and know them, gathering data, identifying the problem, that is, increasing emphasis is placed on the nursing diagnosis and nursing care plans (Morolong & Chabeli 2005:41). In comparison, humanistic nursing focuses on affording the patients the opportunity to find out about and understand themselves (Pearson 1998:257). Patients identify their problems, thus decreasing the emphasis on the nursing diagnosis and nursing care plans and consequently, increasing emphasis on self-awareness and plans of the patients (Pearson 1998:257).

#### **2.5.2.2.5 Syntactical learning**

Prior to discussing syntactical learning, it is necessary to clarify the term holism. The term holism is a combination of hol- or *holo-* meaning complete, entire, without division or *whole* and *ism*, suggesting an ideology of wholes. The term holism was initially, formally used during 1926 by Jan C. Smuts, a South African politician and statesman. In its most simplistic sense, it is a philosophy that states that nature or the universe is viewed in terms of wholes that are irreducible to parts and are more than the sum of their parts (Kim 1999:89).

Syntactical learning deals with the logical structure of building and connecting ideas and data into meaningful wholes (Chabeli & Müller 2004:44), broad relationships, insights, patterns between elements and intuition. During syntactical learning, the student delves deeper into learning and finds or seeks meaning and understanding (Bevis & Watson 1989:93-94, 294; Quinn 2000:35; see appendix G). It is the welding together of theory and practice into praxis. Praxis is defined as enabling theory and practice to inform and shape each other and as the precise symbiosis between reflective action and critical theorising (Bevis & Watson 1989:56, 223, 236; Ford & Profetto-McGrath 1994:342; Galbraith 1992:11).

Syntactical learning is reminiscent of the work by Marton and Svensson (1982) and Marton and Saljo (1984) as cited in Leino-Kilpi (1989:62). These authors also describe a *wholistic* or deep approach to learning (Masitsa 2006:489). During the wholistic or deep approach to

learning the student concentrates on wholes, (see appendix G) where she actively and personally attempts to create an integral whole organised around a central theme. An integral whole is formed by organising the relations between the parts of the whole and by utilising details to clarify and support the main theme. During this process deep learning occurs (Hattie & Watkins 1988:345; Leino-Kilpi 1989:62-63; Quinn 2000:35). For example, when a student learns about holistic patient care (the whole), she makes a detailed study of the physical, psychological, social and spiritual dimensions (parts) of patient care by organizing and integrating each dimension into the whole (holistic patient care). Thus, the holistic nursing philosophy enables the nurse to deliver comprehensive nursing care by focussing on all aspects of patient care (Kim 1999:87).

In Scotland, Sutherland (1999:381-389), in a study regarding the learning of mature adult students, found that learners adopted the deep approach to learning.

#### **2.5.2.2.6 Inquiry learning**

This category is the creative aspect of nursing. Inquiry learning is where themes are generated and ideas, dreams and visions are developed (Bevis & Watson 1989:94). The learners strategise, identify, clarify and categorise problems and approaches to solving these problems (Bevis & Krulik 1991:368).

Inquiry learning is reminiscent of Bruner's discovery learning (Woolfolk 1995:317-319). Discovery learning implies that the teacher should provide intriguing questions, (see appendix G) baffling situations or interesting problems that stimulate the students to actively discover the structure of the subject matter for themselves (Quinn 2000:98). Structure refers to the fundamental framework of ideas, relationships or patterns of the subject.

To solve problems the student uses intuitive- and analytical thinking. Intuitive thinking may be defined as imaginative leaps to correct perceptions or workable solutions. Bruner (in Woolfolk 1995:317-319) suggests that teachers can nurture this type of thinking by encouraging students to make guesses based on incomplete evidence and then confirm or disprove the guesses systematically through research. When, for example, a nurse tutor wants a student to learn about raised intracranial pressure; she may ask the student to guess the dangers. Thereafter, the student may, through systematic research, that is, reading about and

discussing the subject with others or doing a case study on a patient with raised intracranial pressure, substantiate the answer. Thus, instead of explaining how to solve a problem, and to actually solve the problem for the student, the teacher provides the means to solve the problem, by providing appropriate material resources or encouraging the student to make observations, form hypotheses (educated guesses), and to test if the answers are correct. Unfortunately, educational practices often discourage intuitive thinking by punishing incorrect guesses and rewarding safe, but uncreative answers.

In support of the previous statement, Hattie and Watkins (1988:346) state that a deep level approach to learning has been shown to be necessary to achieve higher level learning outcomes such as critical thinking and independence of thought. However, independence of thought is often not rewarded by academic grades, especially not in a behaviouristic orientated approach.

Concepts, such as investigating, theorising, researching, idea generating, questioning, intuitive leaps and analysing, mentioned in Bruner's discovery learning are also contained in the Bevis and Watson conceptual continuum: Typology of Learning (Bruner in Woolfolk 1987:275-276; see appendix G).

Regarding analytical thinking, Jacobs, Ott, Sullivan, Ulrich and Short (1997:20) used a literature review, extensive discussion, student participation and evaluation to formulate a theoretical and operational definition of critical thinking. Theoretically, they defined critical thinking as the "repeated examination of problems, questions, issues and situations by comparing, simplifying and synthesising information in an analytical, deliberative, evaluative, decisive way". In nursing, the *operational definition* was defined as "*critical thinking is the repeated synthesis of relevant information, examination of assumptions, identification of patterns, prediction of outcomes, generation of options and choice of actions with increasing independence*" (Jacobs et al 1997:20).

Taba (1971 cited in Kyriacos 1992:48) defined critical thinking as a "*way of life involving many skills and abilities in treating ideas and facts*".

### 2.5.3 Criteria for Teacher-Student Interactions

Criteria for Teacher-Student Interactions may be defined as guidelines relating to the manner in which teachers and students interact with one another in order that learning occurs. For example, the teacher is open and non-defensive with the student (see appendix G). Teacher-Student Interactions are critical to successful teaching and education and only those effective in facilitating the learning of students should be selected.

Interactions may be non-verbal, written or oral. The interactions will reflect the faculty's definition and philosophy of teaching and will relate to their purposes and aims desired for the education of students (Bevis & Watson 1989:192, 195). Certain kinds of teacher-student interactions support educative learning and are useful in moving students forward on the learner maturity continuum. Therefore, educative and caring teacher-student interactions must be selected in order to promote student growth and development (Bevis & Watson 1989:81, 191).

Teacher-Student Interactions are categorised and conceptualised under four broad categories namely creativity, style of presence, reciprocal interactions and teacher-student interactions. These broad categories support contextual, syntactical and inquiry learning (Bevis & Watson 1989:208). Examples of these categories are indicated in table 2.1.

**TABLE 2.1: TEACHER-STUDENT INTERACTIONS**

<b>BROAD CATEGORIES</b>	<b>EXAMPLES</b>	<b>TYPE OF LEARNING FACILITATED</b>
Creativity	Teacher accepts and encourages the student to develop creative approaches to the subject matter (Bevis & Watson 1989:379)	Contextual Syntactical Inquiry
Style of presence	Teacher is accessible for the purpose of an interactive critique of the student's work (Bevis & Watson 1989:379)	
Reciprocal interactions	Teacher-student interactions provide the teacher and student with intellectual stimulation that requires disciplined thinking about the subject area (Bevis & Watson 1989:380)	
Teacher-Student Interactions	Teacher engages the student in activities that develop cognitive structures and positive affective responses (Bevis & Watson 1989:380)	

(Bevis & Watson 1989:208)

Vaughan (1990:925, 929, 932-933) investigated the attitude of student nurses towards teaching/learning methods. Findings from this study indicated that students were more

positively predisposed towards student-centred than teacher-centred, teaching/learning methodologies. The most preferred methods were games and discussions. The least preferred method was the lecture, but was the method most widely used by tutors. The results indicate that students prefer teaching/learning methods that are learner-centred where they can actively participate in the teaching method. This study also highlights the importance of taking the views and individual needs of students into consideration when planning and implementing a curriculum.

In Scotland, in a study, regarding the learning of mature adult students on a professional course, Sutherland (1999:381-389) indicates that learners do not find the lecture a useful teaching strategy. Videbeck (1997 (b):26-27) also states that the lecture continues to be the most frequently used teaching strategy. However, she added that regardless of how *“pertinent, relevant or well delivered a lecture is, it does not provide practice in using critical skills”*.

In line with Vaughan’s view that the individual needs of students have to be taken into consideration, Cioffi and Markham (1997:265, 271) indicated that clinical decision-making by midwives is based mainly on their clinical experiences. Hence, the importance of providing varied clinical experiences when developing midwifery programmes.

Weimer (in Bevis & Watson 1989:205) stated that teachers should clearly think about the knowledge and skills desired in students that will serve them well the rest of their lives, examine what can be done to best achieve this learning and consider ways to enable students to become responsible for their own learning.

In line with Weimer’s view, Oermann (1994:215) in an article entitled *“Reforming nursing education for future practice”* commented on a report by the National League for Nursing published during 1991. This report entitled *“Nursing’s agenda for health care reform”* reported a shift in health care to the community and an expanded community based primary health care role for the nurse of the future. This health care reform also necessitates reform in nursing education such as teaching strategies that promote critical thinking (Kataoka-Yahiro & Saylor 1994:351) among students, more experiential teaching methods, building on past

experiences, providing more opportunities for students to examine ideas and discuss them with teachers and others. These discussions of students' ideas and thinking about practice provide opportunities for development of critical thinking and other cognitive skills, as well as examining values and feelings that learners bring to the clinical situation (Ford & Profetto-McGrath 1994:341; Oermann 1994:218; see appendix G). As stated by Diekelmann (1989:37-38), "*the teacher must be an explorer of meanings with the students*". These concepts are also applicable to the Bevis and Watson model (see appendix G).

In America, McGovern and Valiga (1997:29, 31, 34), investigated the cognitive development of *freshman* nursing students by using Perry's scheme of intellectual and ethical development (see section 2.5.2.2.1). They found that developmental instruction does influence the cognitive development of students as it promotes critical thinking and empowers students. Additionally, a higher level of cognitive development is required to advance to higher levels of moral development. Developmental instruction refers to strategies that promote the concepts of challenge and support; support and affirmation for the present level of cognitive development and challenges cognitive growth by offering alternative explanations and interactions within increasingly complex contexts. The strategies provided for diversity in course assignments, projects and in the way students learned course material, encouraged writing (Mountford & Rogers 1996:1130), debating, active participation, group projects and continuous evaluation. Requiring students to consider numerous views, integrate previously learned material, form and provide rationales for their opinions stimulated critical thinking.

The views expressed by Oermann (1994:215) are in line with views held by South African nurse leaders. Gumbi (1996:5), commenting on primary health care and education, advocates a partnership between the community and the nurse to ensure maximum involvement of the community. She further promotes the idea of a participatory educational context, where the teacher and student are viewed as co-learners and co-decision makers (Durgahee 1998:163). Education should be integrated, community and problem based (Gumbi 1996:4). A nurse is a professional, accountable for her own acts and omissions. Therefore, she requires intellectual, technical and emotional skills that allow her to solve problems and think critically (Gumbi 1996:1).

#### **2.5.4 Criteria for Selecting and Devising Learning Experiences**

Learning experiences (see appendix G) refer to all the processes available to nurses to ensure that learning occurs, for example, reflection, critical thinking, problem solving and writing (Durgahee 1996:419; Mountford & Rogers 1996:1130). When learning experiences are selected and devised, learning types namely item, directive, rationale, contextual, syntactical and inquiry, must be taken into consideration and the student assisted to derive meaning from the learning experiences.

Learning experiences that meet specified criteria, for example, those that enable students to develop critical thinking skills, make judgments about relevant rules and values, maintain personal and professional integrity while rejecting obsolete, outdated rules, values and beliefs (Bevis & Watson 1989:203); those that support educative learning and are concomitantly useful in moving students forward on the Learner Maturity Continuum, should be selected (Bevis & Watson 1989:81).

Regarding the fact that learning types should be considered when learning experiences are selected and devised, Hattie and Watkins (1988:349) reported that students who applied a deep level learning strategy (see section 2.5.2.2.6) preferred classrooms to be enjoyable and orientated to independent study. These students preferred to take responsibility for their own learning, to choose their own way of learning, that is, to learn at their own pace and preferred teaching to be individualised. In support of enjoyable classrooms promoting learning, Grotjahn (in Pasquali 1980:11), states “What is learned in laughter is learned well”. Thus, the complex process of learning abstract ideas can be learned and simplified through the use of humour and laughter (Masitsa 2006:496). George (1992 in Clark 1998:145) states that learners want their teachers to have a sense of humour. The display of appropriate humour is an aspect advocated during teacher-student interactions in the Bevis and Watson paradigm and is substantiated by Mouton (1997:234).

According to Bevis and Watson (1989:198), learning experiences must emphasise connectedness, understanding, collaboration, allow time for knowledge to emerge from first hand experiences and encourage students to evolve their own patterns of work based on the presented problems. Reilly and Oermann (1990:xvii) support this viewpoint by stating that in

the 1990s, interaction was viewed as the key element in the teaching-learning process. Thus, during learning experiences students should be confronted with real problems in order to develop the higher cognitive skills of problem solving, reflection, creativity, critical thinking and evaluation (Chabeli 2006:79, 83).

In support of Reilly and Oermann (1990:xvii), Brady (2005:8) advocates engaging students in learning experiences that foster interactions and exploration by implementing strategies such as discussion, brainstorming, problem solving, simulation, role play and questioning (Chabeli 2006:82). Giordan (2004:4) states that the teaching environment must provide learners with meaningful experiences that stimulate and challenge them to take a questioning approach to learning. According to Bevis and Watson (1989:208), learning experiences are categorised and conceptualised under four broad categories namely introduction, working phase, culmination and resolution (Bevis & Watson 1989:208). Examples of the categories are indicated in table 2.2.

**TABLE 2.2: CATEGORIES OF EDUCATIVE LEARNING EXPERIENCES**

CATEGORIES	EXAMPLES
Introduction	Requires the student to be actively involved in learning (Bevis & Watson 1989:381)
Working phase	Uses writing to encourage students to perceive, create, reflect, represent and inquire (Bevis & Watson 1989:381)
Culmination	Requires the student to use a variety of sources and rationales as evidence from which to draw conclusions (Bevis & Watson 1989:382)
Resolution	Allows the students to actively reflect upon the manner, quality and patterns of change in their own intellectual growth (Bevis & Watson 1989:382)

From a humanistic-educative-caring perspective, a very important aspect of learning experiences is the establishment of a climate conducive to learning, as climate is also viewed as a learning experience (Galbraith 1992:11; Hollis 1991:49). Rogers and Freiberg (1994:188) state that in classrooms where teachers facilitate learning, the *“focus is on creating the climate for learning and the experiences that support student understanding of the wholes rather than its modularised parts”*. Further, no matter how good, effective or what the quantity or quality of learning experiences may be, they will have little impact on the learning

process if the climate is not supportive of learning. Brady (2005:6, 13) supports the latter aspect by stating that relationships are important aspects and that the teacher should create a warm and supportive learning environment. The latter view is endorsed by Francke and Erkens (1994: 360) who concluded that the learning process is affected by the quality of the teacher-student relationships.

In support of a climate conducive to learning, in Israel, Shechtman, Weiser and Kurtz (1993:31-34, 37-38) implemented an intervention programme, based on the values-clarification method. The programme was designed to enhance pupil self-esteem, classroom climate and internal locus of control. Self-esteem was promoted by identification of positive pupil traits, past and present achievements, promoting self-acceptance, recognising sources of support, enhancing a sense of autonomy and receiving positive, constructive feedback from group members. A socio-emotional classroom climate was established by fostering strategies that develop acceptance, tolerance, openness, sensitivity and understanding. Students were encouraged to analyse classroom problems, express their feelings and practise communication skills. Activities were directed at the development of sharing and feedback skills, open discussion, the reduction of stereotypic thinking and effective resolution of classroom conflict. The establishment of a socio-emotional classroom climate further enhanced self-esteem. Internal locus of control was promoted by encouraging students to exercise self-control thus improving classroom interrelations as well as their own self-esteem. The teacher was encouraged to demonstrate understanding, empathy and acceptance thus serving as a role model for positive interaction and personal growth (Nelms, Jones & Gray 1993:18; Shechtman et al 1993:31). These authors found that the programme improved the pupils' self-esteem, classroom climate and internal locus of control.

According to Beane (1990:152-153), custodial climates emphasise maintenance of order, autocratic procedures, student stereotyping or labeling, punitive sanctions, moralising by authorities, impersonalness and obedience. In contrast, humanistic climates are characterised by democratic procedures, high degrees of interaction, personalness, respect for individual dignity, self-discipline, flexibility and participatory decision-making (Beane 1991:127).

Knowles (1990:120, 124) views climate setting, as the most crucial aspect in the learning experience. An effective physical and psychological environment has to be created and maintained. Physical conditions that are comfortable must be provided such as adequate seating, temperature, ventilation, lighting, good acoustics, access to adequate material and human resources and to refreshments and rest rooms (Knowles 1990:85, 121-122). The psychological environment should promote good interpersonal relationships by fostering mutual trust, respect and helpfulness, freedom of expression, acceptance of differences and especially respect for cultural differences, caring and understanding of others (Knowles 1990:85, 122-123). Additionally, during any learning experiences, application of the Herbartian principles of proceeding from the simple to the complex, from the concrete to the abstract and from the known to the unknown, will enhance the psychological learning climate (Quinn 2000:193-195).

The implementation of *peer interaction* as advocated by Gravett (1995(b):16-17) would enhance the psychological environment as described by Knowles in the previous paragraph. This in turn may facilitate learning during learning experiences as peer interaction:

- gives learners the opportunity to reflect on their learning
- allows students to share and negotiate knowledge in a community of learners
- enables the sharing of a complex problem and through this sharing, the problem becomes more manageable for the individual learner and as a result, the construction of understanding is supported
- permits exposure to alternative viewpoints
- creates an atmosphere where learners feel less threatened and will express both negative and positive views, more freely
- facilitates the communication of ideas, as a learner is able to more readily identify a co-learner's misconceptions, as the distance between understandings among students is far less than the distance between the understanding of the student and the teacher.

In support of peer group interaction enhancing the psychological environment, in South Africa, du Plessis (2004:67, 70) investigated a system of peer group supervision and guidance where students received directed assistance and support by peers. The aim of this peer group system was to enable senior students to assist the junior students to become competent second

year nursing practitioners. The results revealed that the junior students experienced the clinical environment as supportive, relaxing, non-threatening and they formed emotional relationships which gave them a sense of security, trust and self-confidence. However, negative aspects related to the programme scheduling and timing were identified by students. Some students stated that they had insufficient time to assimilate content, to think about the care they rendered to patients and to improve their decision making and problem solving skills (du Plessis 2004:73-78)

Cheng (1994:221, 233-234, 236-237) indicated that the quality of the physical and psychological classroom environment was one of the strongest indicators of effective performance of students. In effective classrooms, the physical environment was perceived as being equipped with appropriate physical facilities, having sufficient space, being neat, clean and free of pollution. The psychological environment was characterised by a teacher who cared for the students. This caring was evidenced by the teacher being considerate, paying attention to teaching and not enforcing punishment but giving appropriate rewards. The teacher influenced the students through her professional knowledge, personal morality and personality. Thus, in this instance climate is viewed as a positive learning experience.

Redmond and Sorrell (1996:22, 25, 27) also view the climate setting as an important aspect in learning and have explored the meaning of caring as experienced by students. The two patterns that emerged from their study were the *power of the faculty* and *creating a caring learning environment*. They indicated that the key to creating a caring learning environment lay in first establishing a *caring* relationship with the student. A trusting, supportive teacher-student relationship is necessary for students to think critically and feel empowered to implement caring nursing care. Additionally, Redmond and Sorrell (1996:27) believe that the teacher is the primary instrument in structuring a caring learning environment.

The findings of Redmond and Sorrell are supported by Hughes (1992:60-61) who stated that female nursing students experience a climate of caring through interactions with the teacher. Examples of such interactions are modelling, dialogue, practice and confirmation. During these interactions it is important that the student perceives herself as the recipient of care provided by the teacher. In addition, the student must be able to see and use the *self* as caring.

Additionally, Paterson, Crawford, Saydak, Venkatesh, Tschikota and Aronowitz (1995:600) reported that male nursing students learn to care as nurses through educative learning experiences such as the interactional strategies of storytelling, role modelling, being cared for, the “*aha*” encounter and observing and giving care. In support of role modelling, Grams, Kosowski and Wilson (1997:12) reported that students perceived their nurse educators as role models in their caring groups. In the United States of America, Sedlak (1997:11) indicates that critical thinking is facilitated by dialogues occurring in a supportive environment.

Regarding critical thinking, Videbeck (1997(a):7, 9) found that in the United States of America, critical thinking as an outcome in nursing education (Kataoka-Yahiro & Saylor 1994:351) is currently being evaluated using a variety of methods and processes indicative of educative learning experiences. For example, case study presentation, written nursing care plans, reflective journals or logs (Chabeli 2001:18, 23, 27; Kok & Chabeli 2002:35, 37) process papers or recordings, management or change papers, teaching projects, small group projects, critique of research literature and research projects. These methods should be employed during learning experiences to foster educative learning experiences and the growth of students. The finding by Sedlak (1997:11) and Videbeck (1997(a):7, 9) are supported by the research of McGovern and Valiga (1997:29, see section 2.5.2.2.1).

With regard to critical thinking, Brown and Sorrell (1993 in Beeson 1996:259) indicated that writing clinical journals enhanced critical thinking. Thus the application of certain activities such as writing journals assists in promoting educative learning experiences for the students. The applicable aspects from the work of Cheng, Galbraith, Hattie and Watkins, Hughes, Knowles, Quinn, Redmond and Sorrell, Rogers and Freiberg and Sedlak have been added to the criteria for Learning Experiences (see appendix G).

Regardless of whether a humanistic or behaviouristic approach is used, it is important to remember that students are individuals who use different learning styles and apply their own frame of reference regarding knowledge, experience, values and motivation. It is, therefore, incumbent on the tutor to be creative and utilise an appropriate teaching strategy or strategies applicable to the student’s style of learning, thus facilitating a meaningful teaching-learning experience (Reilly & Oermann 1990:13).

### 2.5.4.1 The impact of Benner's research

Once a nursing college has implemented Bevis and Watson's curriculum paradigm, a logical conclusion would be that a new clinical evaluation system should follow suite. Bevis and Watson suggested applying Benner's evaluation model (Diekelmann 1990:300). It was Benner who first took the Dreyfus and Dreyfus model of skill acquisition and applied it to nursing. In her book, "*From novice to expert*", Benner (1984:46) described the domains of nursing practice. The domains are the helping role, the teaching-coaching function, the diagnostic and patient-monitoring function, effective management of rapidly changing situations, administering and monitoring therapeutic regimes, monitoring and ensuring the quality of health care practices and organisational and work-role competencies.

Each domain is comprised of certain competencies. In the helping role, one example of a competency is providing comfort measures and preservation of dignity and self-esteem in the face of pain and extreme breakdown (Benner 1984:55-56). A second competency relating to the helping role is being with a patient where she uses the term *presencing* (Benner 1984:57-58; Benner & Wrubel 1989:411; Darbyshire, Stewart, Jamieson & Tongue 1990:74-75). Benner's research-based, practice-centred, caring and humanistic approach to evaluation may be the ideal approach to adopt, as this framework encourages the student to view caring *holistically*, critically, reflectively and interpretively (Darbyshire et al 1990:74). In addition, these concepts also correlate with Bevis and Watson's Typology of Learning namely syntactical and inquiry learning, which are found on the education side of the Training-Education Continuum (see figure 1.1; appendix E). An example of this is in syntactical learning where the student deals with the logical structure of data into meaningful wholes; in inquiry learning with analytical, critical, reflective, creative and interpretative ideas and thoughts (Bevis & Watson 1989:93-94).

The research of Benner has impacted on teaching as far afield as Glasgow, Scotland (Clayton & Murray 1989:47-48). Here the authors Darbyshire et al (1990:74-75) report that they have moved away from the behaviourist approach in clinical evaluation and are implementing a Continuous Assessment Profile (CAP), adapted from Benner's domains of nursing practice.

An essential component of this CAP system is the encouragement of students to take increased responsibility for their own learning in the clinical areas (Darbyshire et al 1990:75).

The latter aspects correlate with the Bevis and Watson Learner Maturity Continuum, where the student takes responsibility for her own learning from the mature position of reciprocating (see figure 1.1; appendix E).

Darbyshire et al (1990:74-75) stated that one of their reasons for this move to the Continuous Assessment Profile, is Benner's promotion of the primacy and power of *caring*, as the central theme of nursing care (Benner & Wrubel 1989:5-7; McGee 1998:78). This *caring* aspect has become even more important as internationally, health care is dominated by an era where commercialism and drastic curtailment of financial expenditure prevails. This leaves patients even more vulnerable and dependent on a nurse who cares for them as individuals and views them as *wholistic*, human beings (Darbyshire et al 1990:74-75). Caring and *wholism* are concepts central to the Bevis and Watson Paradigm (see appendix G).

#### **2.5.4.2 Triple Jump method**

Reed (1992:57-59) reported that in Canada, the McMaster University had implemented the Triple Jump method to evaluate clinical competence. The Triple Jump method evaluates the students' degree of self-directedness in relation to their ability to gather information independently and apply their skills of critical analysis, decision-making, problem solving and self-evaluation. These concepts are all relevant to the Bevis and Watson Typology of Learning (see appendix G). The Triple Jump method contains an oral and a practical component. It is a structured exercise with three distinctive steps, hence its name, the Triple Jump.

Step one is problem definition and formulation. The student is presented with a scenario from which an initial hypothesis is identified. The students may then request additional information after which the problems and nursing requirements are summarised. The teacher then inquires about which nursing interventions should be implemented and how the effectiveness of care delivered, will be evaluated. The teacher and student together, identify knowledge deficits that may hinder the student to deliver effective nursing care.

Step two involves two hours of independent study during which the student has to solve the problems in any way she deems fit. When reporting back, the problems must be justified and prioritised.

Step three is self-assessment. The student reflects on her performance and shares perceptions with the examiner who provides immediate feedback.

When reviewing the steps comprising the Triple Jump, the researcher concludes that it would be quite feasible and more appropriate to implement the method at the patient's bedside and not in a simulated position. Nursing is, after all, applied at the patient's bedside.

In South Africa, Khanyile and Mfidi (2005:70, 73), implemented the Triple Jump method as an instrument to collect data to explore the effect of using different curricula approaches. They found no significant differences between a problem based learning and a traditional curricular approach on the development of the clinical reasoning abilities of student nurses.

In conclusion, it is the viewpoint of the researcher that all the concepts contained in Bevis and Watson's Curriculum Paradigm are interrelated for the following reasons:

- the Learner Maturity continuum enables nurse tutors to develop a curriculum that supports learner maturity, for without learner maturity, education reaps few lasting benefits for students
- obtaining clarity regarding the types of learning enables nurse tutors to select types that are educative and thereby facilitate learner maturity
- the criteria for Teacher-Student Interactions enables nurse tutors to modify their relationships with students in ways that support educative learning and therefore, maturity
- the criteria for Selecting and Devising Learning Experiences provide the platform, content and focus for educative learning (Bevis & Watson 1989:89).

Thus, if all the concepts contained in Bevis and Watson's Curriculum Paradigm are optimally combined they will produce an educational milieu which has the potential to provide an educated, caring nurse.

## **2.6 SUMMARY**

This chapter revolved around the conceptualisation of the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm. The following aspects were discussed:

- conceptual framework
- clarification of terminology
- Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm.

Related research studies were also discussed in order to obtain background knowledge and clarification about the problem under study. In the following chapter, literature supporting the Tylerian rationale or behaviouristic paradigm is discussed.

## CHAPTER 3

### LITERATURE REVIEW THE BEHAVIOURISTIC PARADIGM

#### 3.1 INTRODUCTION

In chapter 2, the conceptualisation of the Bevis and Watson Humanistic-Educative-Caring-Curriculum Paradigm was discussed according to the following aspects:

- conceptual framework
- clarification of terminology
- Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm.

In this chapter, literature supporting the Behaviouristic Paradigm is discussed under the following headings:

- clarification of terminology
- behaviouristic framework
- Tylerian rationale
- discussion of the Tyler rationale and the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm.

#### 3.2 CLARIFICATION OF TERMINOLOGY

In this section, for clarification purposes the following terminology pertinent to the Behaviouristic Paradigm is discussed namely:

- learning
- training.

##### 3.2.1 Learning

The behaviouristic approach views learning as an outcome manifested by either an *observable* or inferred change in cognitive, affective and psychomotor behaviour of the learner (Bloom 1956:3, 13, 26; Pienaar 1998:15). This change in behaviour is brought about by the attainment of measurable, educational objectives which are seen as expected behavioural outcomes of the educational process, either for an individual experience or a total programme of studies

(Reilly & Oermann 1990:7). Behaviourists view learning as a passive process where the teacher, as the authority figure, takes responsibility for learning and sets the goals and objectives (Bevis & Watson 1987:7). The learner is viewed as the product of this learning (Bevis 1989(a):4-5). Learning is divided into three separate domains namely cognitive, affective and psycho-motor (Bloom 1956:3, 13, 26). Each of the three divisions is seen as mutually inclusive.

In support of the behaviouristic approach to learning, Louw and Edwards (1997:225) define learning as “any relatively permanent change in behaviour or knowledge, resulting from experience”. Gray and Starke (1988:155) state that “learning is a relatively permanent change in behaviour that results from reinforced practice or experience”. Additionally, Giordan (2004:1) stated that learning is a simple recording mechanism where knowledge is *transmitted* to an individual.

### **3.2.2 Training**

From a behaviouristic viewpoint, training is a process where stimulus-response principles are the main focus, with the aim of producing a trained nurse who has acquired skills through attainment of pre-selected behavioural objectives in the theoretical and clinical situation (Huckabay 1980:15-16; Pienaar 1998:15; Quinn 2000:14, 117, 137-141, 144, 146; Reilly & Oermann 1990:xix). Training involves a change in behaviour which is visible to the observer (Alexander 1983:34-35; Bloom 1956:45; Quinn 2000:14, 111, 139). For example, after a nurse has been instructed how to administer an injection and has practiced the procedure repeatedly, evidence of a change in her behaviour will be demonstrated by her newly acquired skill or ability to administer an injection correctly, competently and safely. However, many aspects of learning cannot be observed and consequently evaluated, for example, how do you measure understanding or caring? Simply because they cannot be measured does not mean that they do not exist (Bevis & Watson 1987:31, 265-266; Learn 1990:238-239).

In support of the skills acquisition in behaviourism, Peters (1965:32 in Searle et al 1986:107) states that training relates to the acquisition of a skill or a particular competence which has to be exercised in relation to a specific end or function. Training implies preparation to do a particular thing; it is specific. MacMillan (1980 in Alexander 1983:33) defined training as essentially task orientated.

Nadler (in Knowles 1990:114) also supported the behaviouristic view when he defined training as “*those activities which are designed to improve performance on the job the employee is presently doing or is being hired to do*”. The purpose of training is to either introduce a new behaviour or modify the existing behaviours so that a particular and specified kind of behaviour results. Glaser (in Knowles 1990:115) defined training as tending towards “*specific objectives such as following certain regulations*”.

### **3.2.3 Education**

Behaviourists do not refer to the education of a student per se; however, the definition by Whitehead (1929 in Bevis & Watson 1989:156) could be used to indicate their views regarding education. Whitehead states that education is the acquisition of the art of the utilisation of knowledge. This definition is applicable as the mere art of utilising knowledge could imply a training perspective with product line thinking, where a technique is learned through repetition and merely transposed to another similar situation. According to Amstutz (1999:22), behavioural learning programmes aim to produce learners with *standardised knowledge* and who *conform* to the prevailing values, views, attitudes and behaviours of the dominant, economic- and social groups in society.

In summary, as learners live in a continually changing environment which requires continuous adaptation, it is vital that the learners are not trained but have educated minds which enable them to use aspects such as enquiry and problem solving, to deal with these ever changing and evolving circumstances.

## **3.3 THE BEHAVIOURISTIC FRAMEWORK**

### **3.3.1 Classical conditioning**

The Behaviouristic Paradigm has its roots in Pavlovian classical conditioning which involves involuntary behaviour patterns (responses) caused by specific stimuli (Louw & Edwards 1997:226, 237; Gray & Starke 1988:155; Pienaar 1998:15). Pavlov experimented on dogs to identify the role of saliva on the digestion of food. He discovered that dogs secreted saliva (Response) when food (Stimulus) was ingested. He had identified the importance of the association or connection between a stimulus and a response and hence the origins of the S-R theory which is demonstrated as follows:

The dog was given the meat powder, referred to as the unconditioned stimulus (UCS) which automatically led to salivation that is the unconditioned response (UCR). The bell is the neutral stimulus as it does not normally elicit salivation. Repeatedly pairing the bell and the food resulted in the dog associating the bell with food and the bell became the conditioned stimulus (CS) which elicited salivation, the (CR) conditioned response (Louw & Edwards 1997:227-228; Gray & Starke 1988:155-156; Quinn 2000:14, 112; van Aarde & Watson 1997:93).

### **3.3.2 Behaviourism**

The experimental work of Pavlov had a profound influence on Watson, referred to as the father of behaviourism (Knowles et al 1998:24). Watson rejected the concept of the conscious mind; referring to it as a little black box (Quinn 2000:14). He stated that only externally, objective, observable behaviour, should be studied and named his perspective behaviourism (Barker 1998(b):44; Louw & Edwards 1997:15, 229; van Aarde & Watson 1997:8). Watson had a stimulus-response approach to behaviour as he believed that behaviour was a learned or conditioned response and could be predicted by studying the environment of the learner (Pienaar 1998:15).

Classical conditioning relates to the Bevis and Watson model at the immature charming position where the student brings the tutor a gift (the stimulus) so that the teacher will like her (the response). Classical conditioning also occurs when a student nurse fears written examinations due to poor performance or being ridiculed for poor performance by the teacher or her peers (Quinn 2000:119).

### **3.3.3 Law of effect**

Another behaviourist, Thorndike (Louw & Edwards 1997:238-239; Gray & Starke 1988:147, 155-156; Quinn 2000:114) expanded on Watson's work. In contrast to Watson who studied behaviour by concentrating on environmental influences prior to behaviour, Thorndike studied behaviour by examining events in the environment that influenced learning. From his observations, Thorndike (Louw & Edwards 1997:238-239; van Aarde & Watson 1997:98) formulated his law of effect which states that "behaviour which leads to a satisfactory result is learned, while behaviour which leads to an unsatisfactory result decreases or becomes less". Thus, Thorndike views learning as a mechanical process where successful responses are

gradually learned due to favourable outcomes being obtained, that is, reinforcement has occurred as the reward acts as a positive reinforcer for the association between a stimulus (S) and a response (R) (Quinn 2000:114; Knowles et al 1998:25).

### **3.3.4 Operant conditioning**

The most famous behaviourist, Skinner, developed operant conditioning based on the work of Thorndike (Barker 1998(b):44; Quinn 2000:114-117). Operant conditioning states that a person operates or acts on the environment to obtain the desired rewards or to avoid undesired punishment. The emphasis is on the consequences of behaviour, that is, the outcomes in the environment that result from the behaviour itself (Louw & Edwards 1997:239; Gray & Starke 1988:156; Quinn 2000:114-117; van Aarde & Watson 1997:98).

Operant conditioning relates to the Bevis and Watson model at the immature anticipatory-compliant position where the student operates on the environment by spending her energy trying to find out what the tutor expects her to learn in order to obtain good grades. Operant conditioning may be used by the teacher to modify unacceptable behaviour exhibited by the student. For example, if the student continuously dominates a group discussion, the teacher may by ignoring the behaviour, ensure that it becomes extinct rather than reinforcing it by continuously drawing attention to, or emphasising, it (Quinn 2000:119-120).

### **3.3.5 Bandura's social learning theory**

Bandura's theory, while being cognitivist, has many aspects that are behaviouristic in nature. For example, social learning is defined as learning which occurs by observing a model or by being taught or instructed. A type of social learning, observational learning, is defined as observing the behaviour of others. Modelling which is a type of observation learning, is defined as learning in which a person learns to reproduce, copy or imitate behaviour exhibited by a model (Louw & Edwards 1997:261-263, 266-267; van Aarde & Watson 1997:106-108). From the latter definitions it appears that the learner learns by observing external, objective behaviour and by continuously copying it, becomes conditioned and exhibits the behaviour of the model. Therefore, social learning explains in greater detail how conditioning operates in human learning.

### **3.3.6 Bruner's theory of discovery learning**

Bruner's theory is classified as a cognitive theory which focuses on the mental structures that learners construct to provide meaning to information during the learning process (Amstutz 1999:23; Flores 2004:2; Quinn 2000:96-99). Bruner's theory of discovery learning states that learners should discover the structure of a subject by actively participating and constructing meaning by means of inductive reasoning. Structure refers to essential information of a subject such as the ideas, relationships and patterns (Woolfolk 1995:317). Aspects of the theory of instruction, as advocated by Bruner (in Byrn 2003:2), are behaviouristic in nature. For example, ways in which a body of knowledge can be structured so that it can be most easily grasped by the learner, the most effective sequences in which to present material and the nature and pacing of rewards and punishments. Structured sequences, reward and punishment are concepts relevant to classical learning and operant conditioning. According to Flores (2001:3) and Smith (2002:4), Bruner advocated that the body of knowledge should be structured or organised in a spiral manner so that students continually build on the basic ideas that they have learned. The latter statement could refer to the behaviouristic principles of repetition, reinforcement and teacher-dominated learning. Whatever viewpoint is taken, it is not humanistic as the humanist point of view is a reaction against both behaviourist and cognitivist thought at the level of the involvement of human experiences, feelings and attitudes in learning.

## **3.4 TYLERIAN RATIONALE AND OUTCOME BASED EDUCATION (OBE)**

As a prelude to the discussion on the Tylerian rationale, Outcome Based Education is first briefly addressed.

### **3.4.1 Outcome Based Education (OBE)**

Outcome Based Education is an approach to learning that is based on achieving outcomes by actually demonstrating, learning that has occurred, in an authentic context. An outcome is the culmination of all the learning experiences, capabilities, knowledge, skills, attitudes and values that the learner undergoes in order to attain the outcome. Outcomes are the result of learning and can be measured and assessed (Olivier 1998:3, 20-22, 38, 47, 62).

Outcome Based Education (OBE) is similar to the Tylerian rationale also referred to as the

behavioural-objectives model or product model. OBE refers to learning outcomes and the Tyler rationale to behavioural objectives that learners have to attain. The outputs of both are products of learning. Both are competency-based; learners are declared competent after they have achieved the relevant outcomes and behavioural objectives. Both lead to *oppression* in the learning environment as *learning* is only attained once the predetermined outcomes and behavioural objectives, prescribed by the tutor, have been attained. The components of an outcome or objective illustrate its rigidity. The components of an outcome are an action verb, an object or a noun and a qualifier (Olivier 1998:25-26). Behavioural objectives are also constructed using a noun, verb and qualifier but are usually referred to as activity (action verb), content (object or noun), condition (qualifier) and criterion which is also a qualifier (Mellish 1982:40).

In Ireland, McKernan (2000:3, 8), also equates OBE education with the Tylerian rationale or objectives model and raises numerous objections to the implementation of OBE. Firstly, he views “knowledge as a tool to think with” and not as an instrument or a means to obtain an end product or outcomes by means of behaviour modification. Secondly, knowledge is open-ended enquiry and as such cannot be reduced to parts, such as behaviours, lists of skills and observable performances that must be learned in a specific sequence. Thirdly, there is no empirical evidence that OBE is more effective than a process model as a means for ensuring effective learning by students. Fourthly, most outcomes only assess recall and not the higher levels of knowledge such as enquiry; some outcomes cannot be assessed or may take years to manifest themselves. Fifthly, OBE as a linear model, limits the amount of knowledge that may be learned by specifying exactly what must be learned and implies a “poverty stricken model of student-teacher interaction” (McKernan 2000:4).

### **3.4.2 Tylerian rationale**

The product model or behavioural-objectives model is ascribed to Ralph Tyler and has been the last bastion of nursing education for the past several decades (Becker et al 2003:57; Klein 1986:32; Slattery 1995:1, 47). In his book “Basic principles of curriculum and instruction” Tyler (1949), propounded a rationale for effective curriculum planning. He viewed education as a process of *changing the behaviour patterns of people, using behaviour in the broad sense to include thinking and feeling as well as overt action* (Pendleton & Myles 1991:220; 236; Tyler 1949:5-6).

Tyler identified four fundamental questions that have to be answered during curriculum development, namely:

- What educational purposes should the school seek to attain?
- How can learning experiences be selected that are likely to be useful in attaining these objectives?
- How can learning experiences be organised for effective instruction?
- How can the effectiveness of learning experiences be evaluated?

(Bloom 1956:25; Quinn 2000:137; Tyler 1949:1).

Tyler's rationale led to the development of the generic model of curriculum planning. This model consists of four components namely objectives, content, method and evaluation. It is an output model and emphasises the achievement of measurable objectives by the student, who is viewed as the product (Bevis 1989(a):4-5). Tyler's behaviouristic model is contradictory to the Bevis and Watson Humanistic-Educative-Caring model which is a process model. In the Bevis and Watson model, the student, who is viewed as a unique, individual human being, searches for personal meaning in what she learns and in the process grows, develops and becomes empowered by this educative process. Some aspects of learning such as intuition and reflection are not measurable, but this does not imply that the learner has not achieved or does not possess them. It is not content that the student has to learn but the process, the how of learning and the importance of becoming a lifelong learner (Bevis & Watson 1987:3, 265-266; Learn 1990:238-239).

The rationale of Tyler can be classified under the educational ideology referred to as instrumentalism (Pendleton & Myles 1991:2-3). This ideology states that the purpose of acquiring knowledge is to ensure safe practitioners to meet the needs of a society which requires a skilled work force. Instrumentalism emphasises training as opposed to education.

#### **3.4.2.1 Instrumentalism**

Two types of instrumentalism are described. One is concerned with the acquisition of skills per se and the other, with the acquisition of general life skills, which can be applied to situations in the workplace. Instrumentalists favour the behavioural-objectives curriculum paradigm. The four key features of such a paradigm are that:

- education can be defined as the process of changing behaviour

- objectives are stated in behavioural form
- objectives are measurable
- both the content of what is taught and the method by which it is taught are seen as a means to attaining these behavioural, measurable objectives (Pendleton & Myles 1991:2-3, 12-13, 21, 44, 221). For example, the tutor decides what content will be taught, sets the behavioural objectives, chooses the teaching strategy such as a lecture where she spoon feeds the learner and evaluates the student by means of a test.

Thus, should an entire nursing curriculum be based on instrumentalism, it would imply *training* rather than *education*.

### 3.4.2.2 Curriculum development

An adherent of the Tyler rationale, Hlebowitch (1992:533-534) re-examined the rationale. According to him “*there are serious instances of distortion and misrepresentation*” between what Tyler actually wrote and what he intended regarding curriculum development. Hlebowitch was referring to an article written by Kliebard during 1970. Kliebard (Hlebowitch 1992:533-534) criticised the Tyler rationale describing it as “*poverty stricken, constricting, tyrannically Behaviouristic in its quality and logically anchored in a line of thought that celebrates superimposing an industrial mentality upon the school curriculum, and a product-control function that justified Behaviouristic and efficiency-driven instruction, an efficiency, production model*”.

Kliebard (1995:81) challenged the Tyler rationale as “*being the only reigning model for curriculum planning*”. In reply Hlebowitch (1992:533, 543; Hlebowitch 1995:90) defended the rationale stating that Tyler did not view his rationale as the only model for curriculum development, but that he, Tyler, in fact saw it as an outline of questions that have to be considered during curriculum development. Kliebard (1995:82) further stated that the rationale failed to structure sufficient boundaries to be used in deciding what should be included in, and by implication, excluded from the curriculum. Although the rationale indisputably specifies that objectives have to be chosen, there are no guidelines as to what objectives to choose. In reply Hlebowitch (1992:535; Hlebowitch 1995:90-91) stated that Tyler advocated using the nature of the learner, values and aims of society and the consideration of specialised subject matter, in order to counteract this mechanistic approach to

curriculum planning. In support of what to include in the curriculum, Gable (1986:1-2) refers to an article, written by Tyler during 1973, entitled “Assessing educational achievement in the affective domain”. In this article, Tyler addressed the reason why, during the 1960s and early 1970s, schools refrained from formulating goals and objectives for the affective domain. According to Tyler, educators regarded affective issues, such as feelings, the prerogative of the home and church. Parents and ministers were much better equipped to teach issues such as feelings and values. Additionally, affective issues were inherent in, or natural outcomes of, the cognitive content learned by students.

Kliebard (1995:83) also criticised and challenged the excessive rigidity and logic of the four questions on which the rationale is based, despite the claim by Hlebowitch (1992:535; Hlebowitch 1995:90, 92) that Tyler had cautioned that the questions need not be used in a stepwise or rigidly linear fashion. In reply to this statement, Kliebard stated that the use of this rigid-logic absolutely requires the pre-determination of objectives at the outset and proceeding stepwise from this point. He stated that it is not possible, for example, to determine if these purposes are being attained unless question one is first answered.

Regarding generality versus specificity, according to Kliebard (1995:84) the “*father of behavioural objectives*”, Tyler, stated that objectives must be stated broadly or generally but immediately insisted that “*concrete behavioural manifestations be spelled out which will count as evidence of the fact that the larger objective has been achieved*”. In reply Hlebowitch (1992:537; Hlebowitch 1995:91) stated that Kliebard is confusing clarity with specificity and that Tyler repeatedly warned against excessive specificity, in defining and measuring behavioural objectives.

In Britain, the General Nursing Council’s educational policy document (77/19 B) stated that one of the characteristics of a satisfactory learning/training setting was that “*learning objectives and opportunities are identified and written worksheets are available for student and pupil nurses*” (Hume 1981:2111). This policy statement of the British General Nursing Council confirms the argument of Kliebard regarding generality versus specificity as stated in the previous paragraph.

In Britain, Hume (1981:2111-2112), comments on the use of joint behavioural objectives that were written for a training school in her area. She states that she is convinced it was a worthwhile exercise for the following reasons:

- the joint exercise of writing objectives has led to a closer relationship between the school and service and a better mutual understanding of the problems associated with the education of nurse learners
- more purposeful learning occurs, with students asking more questions that are relevant to what is being learned
- over-emphasis of content in one area, for example developmental paediatrics, to the detriment of other areas of paediatrics, has been eliminated and rectified
- the use of objectives has provided a partial solution for the shortage of personnel, as teachers are now more effective being goal- and objective directed
- mandatory evaluation, namely tests and examinations, is now based on written objectives and students regard it as a fairer test of their knowledge and abilities
- clinical teaching has improved since professional nurses know exactly what the student is expected to learn.

However, Hume (1981:2111) also readily admits that the use of behavioural objectives, even when collaboratively decided upon by the nursing school and nursing services, also has certain disadvantages namely:

- formulation of learning objectives and the feedback model of education is time-consuming and increases the workload.
- it is easier to transcribe trivial skills into behavioural objectives than more important behaviours which may not be easy to identify or be explicitly stated as behavioural objectives, for example, empathy
- pre-specification of explicit behavioural objectives may prevent the teacher from using instructional opportunities occurring unexpectedly, for example, a patient having an epileptic fit
- the nurse may not be able to attain certain behavioural objectives, for example, if the patients do not accept the management of their own colostomy care, the nurse will be unable to teach them how to manage their self-care at home

- it is difficult to evaluate a *good nurse* using behavioural objectives. In the first instance, how is objectivity going to be assured if what is being measured are behaviours of a *good nurse*. What is a *good nurse*? (Hume 1981:2111). Secondly, there are many other important factors such as empathy, which cannot be objectively and mechanistically measured. It is impossible to measure all the behaviours, so who is going to decide which behaviours will be measured to ensure that not only the trivial objectives are measured?

In support of the previous statement Darbyshire et al (1990:74) also challenged the behaviouristic assumption that “*only those aspects of nursing that can be measured, predicted and guaranteed should be evaluated*”. She further stated “*Some of the most important outcomes of clinical nursing expertise cannot be guaranteed or legislated. They cannot be put into standards of patient care language. And you cannot promise to deliver them yourself, much less demand such feats from other nurses*”.

Bevis and Watson (1989:31, 265-266) adopted a similar position when they stated that it is also not possible, theoretically, to evaluate everything a student learns, for there is no conclusive evidence that, for example, understanding, intuition, insight, caring, compassion, reflection, creativity or flexibility can be measured. In this context, behavioural objectives are viewed as rigid and a deterrent to the dynamic processes involved in the teaching-learning experience (Reilly & Oermann 1990:ix). In this respect Diekelmann (1989:27) also observed “*We need to examine the assumption that if learning has not been evaluated we cannot know or prove that it has occurred. The experience of teachers and students negates this assumption*”.

However, Hume (1981:2112) states that despite these disadvantages the application of behavioural objectives is a vast improvement on what we did prior to its implementation. They have “*improved nursing training immeasurably*” and for this reason should not be discarded until a suitable and viable alternative has been found to replace them. However, the researcher contends that the Bevis and Watson model is a suitable and viable alternative to behaviourism.

Despite the view held by Hume (1981:242) as expressed in the previous paragraph, the exclusive use of behavioural objectives in nursing education is unacceptable, as these objectives become the pivotal point from which the content, teaching methods and evaluation strategies evolve. This leads to a one-sided educational perspective which is detrimental to both the tutor and the student, for the reality of the situation is that the student is dealing exclusively with unique human beings and as such, has to adapt to each unique situation. In order to do this, she does not require *trained behaviour*, but an *educated mind* where she may use analytical, critical, reflective, creative and evaluative thoughts and actions to resolve these situations. She needs to be educated within a humanistic-educative-caring curriculum paradigm.

In support of the view held by Hume, Potgieter (1992:19) stated that in Great Britain, nursing education is still based on an apprenticeship type of training. The latter aspect is corroborated by Quinn (2000:1) who states that in the United Kingdom, the nursing curriculum is based on the instrumental ideology. He indicates that the main purpose of the curriculum is to produce a nursing workforce that is equipped to deal with the demands of the role and therefore, a key principle is the vocational relevance. However, he adds that nursing education concepts such as the needs, aspirations and personal growth of the individual are not negated but that they are of secondary importance to the main purpose.

In summary, during the preceding years, the Tyler rationale has generated considerable controversy. However, amidst all this controversy regarding the behaviouristic approach, it is interesting to note a comment made by Sister Donley (1989:6; Reilly & Oermann 1990:xx) where she states, “*We cannot blame the Tyler Rationale or any organising framework for all of the nursing’s curriculum troubles. It had a positive impact on the quality of nursing education. The strict insistence on measurable objectives backed by the force of law, custom and accreditation has produced an organised evaluation orientated system that provides services of a reliable quality*”.

### **3.5 DISCUSSION OF THE TYLER RATIONALE AND THE BEVIS AND WATSON HUMANISTIC-EDUCATIVE-CARING CURRICULUM PARADIGM**

In the following discussion, the four questions contained in the Tyler rationale and the six conceptual continuums comprising the Bevis and Watson curriculum paradigm, are discussed (see table 3.1). It is important to note that all four of Tyler's questions relate to one or more of the six conceptual continuums. The aim of this discussion is to highlight the differences between the two paradigms thus providing further background knowledge to the problem under study.

**NB:** The reader may want to keep the folder insert, appendix E, ready for the discussion that follows.

#### **3.5.1 Question one**

*“What educational purposes should the school seek to obtain”?*

Tyler's first question relates to pre-selected behavioural objectives (Tyler 1949:1). A prerequisite to the selection and organisation of curriculum content and teaching activities is the selection of behavioural objectives (Guilbert 1987:1.49). This selection is influenced by what students need to know, what society thinks should be taught, what subject specialists consider important to their academic disciplines and values and beliefs consistent with the philosophy of the educational institution (Marsh 1992:107; Reilly & Oermann 1990:31). Thus, the focus of the curriculum in the Tyler rationale is the teacher and the content.

**TABLE 3.1: TYLER'S FOUR QUESTIONS AND BEVIS AND WATSON'S CONCEPTUAL CONTINUUMS**

TYLER'S FOUR QUESTIONS	BEVIS AND WATSON'S CONCEPTUAL CONTINUUMS
1. What educational purposes should the school seek to obtain?	1. Learner Maturity Continuum 2. Teacher-student relationship 3. Teacher-student structure
2. How can learning experiences be selected which are likely to be useful in attaining these objectives?	4. Typology of Learning
3. How can learning experiences be organised for effective instruction?	5. Teacher-Student Interactions
4. How can effectiveness of learning experiences be evaluated?	6. Learning Experiences

When Tyler's first question is viewed from the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm, it is important to note that broad, educative aims have to be attained, not pre-selected objectives. The most important aspect is not content, the opinions of society or specialists but the alliance existing between the teacher and student; for it is from the interactions and transactions between the teacher and the student that learning occurs. In relationship to the Learner Maturity Continuum of Bevis and Watson, at each position on the continuum the student displays certain characteristics. The characteristics are indicative of what the student regards as being important, to attain her aims and satisfy the teacher, during the learning process. At the charming position for example, her aim is to obtain good grades and at the anticipatory-compliant position to only study what she thinks the teacher views as important. The resonating position is a transitional period, where she either remains at the training stage or crosses over to the educational side of the continuum.

At the reciprocating position the student takes responsibility for her own learning and at the generating position her aim is to use the teacher merely as a consultant (Marsh 1992:107; Reilly & Oermann 1990:31). Thus, at the charming, anticipating-compliant and resonating positions the student is being *trained* and at the reciprocating and generating positions, she is being *educated*. The use of pre-selected behavioural objectives in a curriculum results in the

student adopting the three immature positions on the Learner Maturity Continuum. This may be viewed as a defence mechanism in order to survive the oppressive teacher behaviour and obtain acceptable grades (Bevis & Watson 1989:83; see figure 1.1).

Thus, the essence is that the behaviouristic approach cultivates, fosters and maintains a subservient immature student. This latter state of affairs is totally incompatible with the character of the professional, independent nurse practitioner the behaviourists supposedly aim to produce.

### **3.5.1.1 Teacher-student relationship, Teacher structure and Student self-structure**

As a preamble to the discussion that follows regarding immature and mature positions on the Learner Maturity Continuum, the above stated concepts are briefly defined. Teacher-student relationship, Teacher structure and Student self-structure refer to the extent of the involvement of the teacher and the student in the learning process (see section 2.5.1, 2.5.1.4; figure 3.1). In the immature positions, the Teacher-student relationship is one of oppression and in the mature positions, it is liberating. Teacher structure is high in the immature positions and low in the mature positions. Student self-structure is low in the immature positions and high in the mature positions.

### **3.5.1.2 Immature positions on the Learner Maturity Continuum**

At the immature positions on the Learner Maturity Continuum, the relationship between the teacher and an immature student is one of oppression and dominance by the teacher (see figure 1.1). The student is viewed as a child who has to be controlled by the parent (the tutor). The teacher is the authoritarian figure who strictly directs and controls every facet of learning. The tutor is the purveyor of knowledge while the student sits passively, absorbing content. The student learns by attaining behavioural objectives. Evaluation is based on a change in behaviour with the focus on skills training (Bevis & Watson 1989:83, 85, 121-122).

The latter situation is indicative of Berne's transactional analysis theory where individuals adopt a critical parent or adapted compliant child ego state (Louw & Edwards 1997:573; van Aarde & Watson 1997:205). Transactional analysis is a method of analysing the communication patterns of interaction that occurs between individuals during relationships.

Aspects such as an individual's posture, verbalisation, voice, attitudes and feelings are analysed. Berne's theory postulates that an individual displays the self from different psychological positions. In other words, an individual has three main sources of behaviour or ego states namely the parent, the adult and the child.

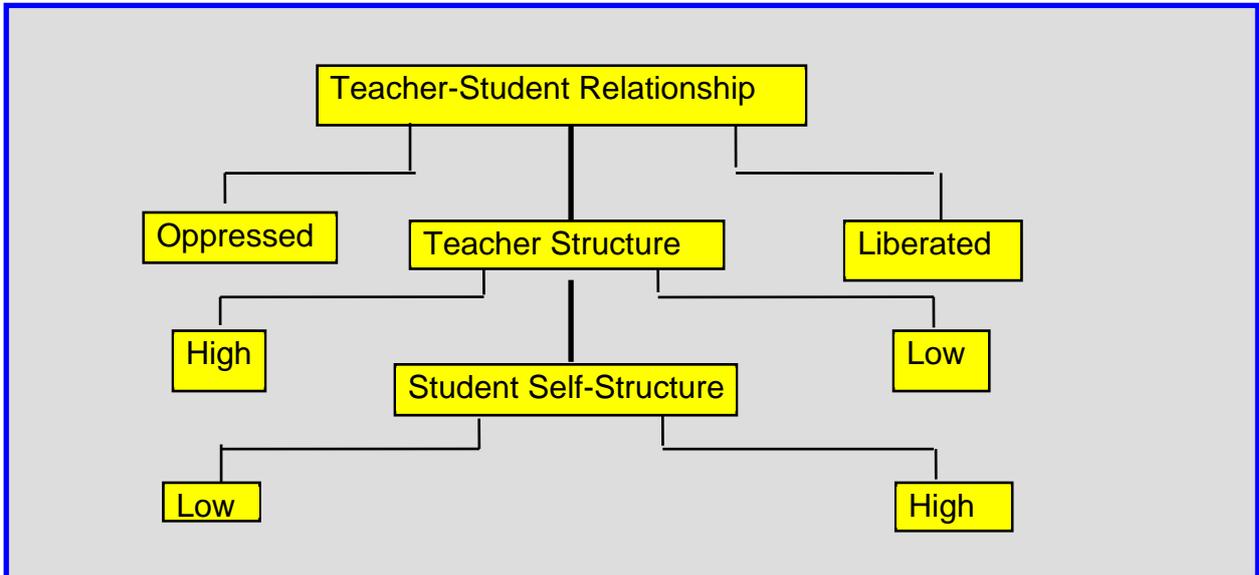
The child ego state has two variations namely the natural child and the adapted child. The natural child displays spontaneous, creative and free expressions of feelings similar to those of an actual child less than seven years of age (Louw & Edwards 1997:573). Some of the characteristics depicting the child ego state are giggling, charm, boisterousness, whining, want, me and mine. By adulthood, the natural child has adapted his behaviour to meet the demands and expectations of parents, society and the culture in which they live. Adaptive behaviour results in compliance, submissiveness and obedience with parents or other authority figures or rebellion, aggressiveness, stubbornness and refusal to follow orders (Louw & Edwards 1997:573; van Aarde & Watson 1997:205).

The adult ego state is characterised by the ability of an individual to objectively appraise reality and the capacity to process data. The adult is able to think rationally, make plans, accurately analyse complex realities, realistically manipulate concepts, communicates effectively using aspects such as I think, why, what, when, where and how (Louw & Edwards 1997:573).

The parent ego state incorporates the feelings and behaviour learned from parents or authority figures. The two types of a parent ego state are the nurturing parent and the critical parent. The nurturing parent cuddles, protects and cares for others. The critical parent makes rules and is punitive and critical towards those who break these rules, corrects and condemns, using terms such as "how many times have I told you" or "do it this way and now" (Louw & Edwards 1997:573).

Berne (in Louw & Edwards 1997:573; Wilson & Kneisl 1988:224-225) states that an individual may exhibit one of the three ego states and that shifts may occur from one ego state to another depending on the context of the situation. For example, when student nurses are confronted by unfamiliar, frightening situations, such as a patient having an epileptic fit, they might initially think that they cannot cope with the situation and revert to the child ego state

but then decide that it is acceptable to acknowledge that they do not know what to do and to ask the sister for help, that is, they revert to the adult ego state.



Adapted from Bevis & Watson 1989:83, 88, 97, 206)

**FIGURE 3.1: TEACHER-STUDENT RELATIONSHIP, TEACHER STRUCTURE AND STUDENT-SELF STRUCTURE**

In the immature positions, during the learning process, teacher structure is high and student self-structure low (Bevis & Watson 1989:88). In this situation, the student does not take responsibility for her own learning but expects all the input to come from the teacher. The teacher manipulates and controls the learning environment. The immature positions are typical of, and fostered by, the adoption of a behaviouristic curriculum paradigm (Bevis & Watson 1989:82). Moos and Moos (1978 in Zempel 1982:14) described a high risk setting as low in involvement and support, high in competition and task orientation and high in restrictive control.

### 3.5.1.3 Mature positions on the Learner Maturity Continuum

During the mature positions on the Learner Maturity Continuum, the relationship between the tutor and a mature student is one of liberation or freedom. The tutor respects and treats the student as another adult. A partnership exists where the tutor and student are co-learners. The tutor is the expert learner and the student the novice learner (Bevis 1989:(b)131). The student is actively involved in the learning process. The focus is on educative learning (Bevis & Watson 1989:86-88, 122).

In the mature positions, during the learning process, teacher structure is low and student-self-structure is high (see figure 3.1; see section 2.5.1.2). The latter implies that the student takes responsibility for her learning, is actively involved in the process and the teacher is a facilitator providing guidelines and support for the student (Bevis & Watson 1989:88). The mature positions are typical of, and fostered by, an educative learning environment as propagated by the Bevis and Watson model (Bevis & Watson 1987:81, 86-89).

The mature positions are indicative of Berne's transactional analysis theory and specifically, the adult stage, where he states that during relationships individuals are treated as adults. As an adult, the student is able to analyse complex realities, manipulate concepts realistically and communicate effectively (Louw & Edwards 1997:573; see section 2.5.1.2; van Aarde & Watson 1997:205; Wilson & Kneisl 1988:224)

### **3.5.2 Question two**

*“How can learning experiences be selected which are likely to be useful in attaining these objectives”?*

The second question focuses on the content to be learned (Tyler 1949:1). In this instance the curriculum is viewed as a scientific document in opposition to Bevis and Watson's (1989:5) view that curriculum is the interactions and transactions that occur between and among students and teachers, with the intent that learning occurs. Thus, although Tyler's second question emphasise the Bevis and Watson Teacher-Student Interactions conceptual continuum, it is also related to the Learner Maturity Continuum, the Typology of Learning and Learning Experiences.

Tyler considered it important that students obtain sufficient learning experiences in order to meet the objectives of the curriculum. The latter aspect is accomplished by ensuring that students are actively aware from commencement of these learning experiences of the objectives and behaviours expected of them, upon completion of these learning experiences and that they have to obtain ample opportunity to practise the desired behaviours (Marsh 1992:107). In the Typology of Learning in Bevis and Watson's paradigm, there is a change of alliance on the one hand *from* student, to content and teacher, to learning, and on the other hand *to* an alliance of teacher and student, to content, to learning (see section 2.4). The focus

is not only on content as in behaviourism, but again on teacher-student interactions with the intent that learning occurs. The student concentrates on how to learn, that is, the *process* and not what to learn (Bevis & Watson 1989:81; Marsh 1992:107; Rogers & Freiberg 1994:152; Rose 1992:7). Consequently, there is a shift in the humanistic-educative-caring curriculum paradigm.

Having made the previous statement, it is interesting to note an alternative to curriculum or content organisation, that is, *what to learn*, as suggested by Diekelmann (1989:36). She suggested that students organise their own curriculum by having a dialogue with all concerned parties, namely teachers and clinicians, in order to reach consensus on what should be learned.

Another alternative to *how to learn the what of reality* is demonstrated by an individualised, in-service programme developed by Hagland (1994:690-695). He incorporated experiential learning, reflective practice, self-directed learning and learning by contract into a programme for intensive care nurses. Experiential learning is defined as learning through and from experience. Reflective practice is a process where the student considers and changes her actions to suit the situation, thus enabling the student to learn in the practical situation by questioning and reflecting (Jarvis 1993:178). Questioning and reflection are criteria contained in the Bevis and Watson Typology of Learning (see appendix G).

### **3.5.2.1 Learning by contract**

Learning by contract is an individual approach which allows learning to occur independently at a pace, depth and breadth determined by the learner in agreement with the teacher (Quinn 2000:59-60). A contract is a document negotiated between the student and the teacher. The aim is to identify what the student will learn, how this will be achieved, for how long and how learning will be evaluated (Quinn 2000:59-60; Rogers & Freiberg 1994:190-194). Slevin and Lavery (1991 in Hagland 1994:694) described the Teacher-student relationship in this situation as one where the student decides and the teacher, who acts as a facilitator, responds. In conclusion, Hagland (1994:695) states that this combination of experiential learning, reflective practice, self-directed learning and learning by contract, encouraged the participants to assume greater responsibility for their own learning and increased their motivation to learn.

The preceding statement is in line with, and supported by the Bevis and Watson approach. The applicable concepts from Hagland have been added to educative Teacher-Student Interactions (see appendix G).

In support of Hagland, Knowles (1990:139-140) states that learning by contract is without doubt the most potent invention he has discovered to facilitate learning and solve problems.

Knowles states that it solves the problem of:

- the wide range of backgrounds, education, experience, interest, motivation and abilities that characterise most adult groups by providing a way for individuals to tailor-make their own learning plans
- getting the learner to have a sense of ownership of the objectives she will pursue
- identifying a wide variety of resources so that different learners can go to different resources for learning the same things
- providing each learner with a visible structure for systemising her learning
- providing a systematic procedure for involving the learner responsibly in evaluating the learning outcomes.

In essence, the very act of participating in the process of diagnosing her own learning needs, formulating objectives or aims, identifying resources, choosing strategies and evaluating her accomplishments, enables the learner to develop a sense of ownership of, and commitment to, the learning contract (Knowles et al 1998:212; Quinn 2000:59-60).

Conversely, in behaviourism, learning activity is structured and controlled by the teacher. The teacher is the authority figure with the power impact. Therefore, the learner is told what objectives to attain, what resources to use, how and when to use these resources and how her accomplishment of the objectives will be evaluated (Knowles et al 1998:212).

Learning by contract is further supported by findings from a study by Gettly (1997:13, 19).

Gettly reported that the implementation of a learning contract:

- facilitates the learning process
- implies the creation of a relaxing atmosphere within which dialogue between the teacher and the student is established
- permits the student, in partnership with the teacher, to manage the learning process

- allows the student, in co-operation with the teacher, to formulate the content, objectives, teaching methods and learning strategies
- permits the student to be self-directing
- permits the student to apply self-evaluation.

The learning contract contains concepts such as facilitator of learning, dialogue, partnership in the learning process, active participation, independent and self-directed learning. All these latter stated concepts are pertinent to the Bevis and Watson Paradigm (see appendix G).

The learning contract embraces the idea of Carl Rogers (Rogers & Freiberg 1994:151) who states that “*teaching is a relatively unimportant and vastly overvalued activity*”. According to Rogers people cannot be taught anything. Instead, the proper setting and available resources can only facilitate the process of individual learning (Quinn 2000:54; Rose 1992:7). Climate setting, that is, creating a climate conducive to learning, is a concept contained in the Bevis and Watson Paradigm. The student is encouraged to be an active learner and to take responsibility for her own learning. The teacher provides the means through which the student is able to learn independently (see appendix G).

### **3.5.3 Question three**

*“How can learning experiences be organised for effective instruction”?*

In Tyler’s model, question three relates to the teaching and learning methods which may be utilised to ensure that the stated pre-selected behavioural objectives and scientifically validated content are learned (Tyler 1949:1). The tutor is the authority figure and manipulates the learning environment to promote the attainment of learning objectives. Tyler considered it important that major concepts, skills and values be identified and incorporated by means of vertical and horizontal organisation, that is, repeated incorporation of these three criteria in one subject and across different subjects. Tyler’s question three is related to all six conceptual continuums. In Bevis and Watson’s paradigm during Teacher-Student Interactions, the student is viewed as a colleague; the teacher is the facilitator, the expert learner and the student the novice learner. Both teacher and student decide together what type of teaching interactions will best suit the student’s type of learning. The student is an active participant and not passive, as in behaviourism (Bevis & Watson 1989:7; Marsh 1992:109).

### 3.5.4 Question four

*“How can effectiveness of learning experiences be evaluated”?*

Question four relates to the behaviouristic evaluation of the student’s performance, in the theoretical and clinical situation, according to pre-selected, observable behavioural objectives and scientifically validated content (Tyler 1949:1). In contrast, evaluation using Bevis and Watson’s paradigm, takes into consideration where the student is placed on the Learner Maturity Continuum, the Type of Learning employed by the student, the Teacher-Student Interactions and the Learning Experiences. The focus here is on Teacher-Student Interactions and Learning Experiences where an interpretive-criticism approach is applied.

#### 3.5.4.1 An interpretive-criticism approach

An interpretive-criticism approach is an activity used to evaluate the educative learning process and depends on the maturity of the student, teacher-student relationships and interactions. The educative learning process is an activity where teachers perceive themselves as expert co-learners with the novice learner (the student) and where active learning is the primary mode of teaching and learning (Bevis 1989(b):131; Durgahee 1998:12). As co-learners, the teacher and the student explore ways to learn, to interpret and criticise what has been learned. During this participatory-criticism process, students are helped by the tutor to learn to use knowledge and experience to make comparisons and be critics of learning. Criticism and criticising then become teaching and learning experiences, as the very act of criticising enables students to grow towards meeting standards and improving their expertise. The process of criticism replaces the behaviouristic evaluation for grades, as the purpose of criticism is to support improvements and not for marking.

A successful interpretive-criticism approach demands a trusting relationship between the teacher and the student and power sharing, something which behaviourism often lacks and which a humanistic-caring-educative approach has in store. It is a continuous process centred around the process of learning and not around behavioural objectives. The interpretive-criticism approach applies words like understanding, appreciation, insight and feelings instead of observable, measurable, active verbs (Bevis & Watson 1989:87, 267, 269, 271, 276, 280-281, 298). According to proponents of the Bevis and Watson approach, certain aspects in the nursing curriculum are not evaluatable in the conventional or traditional behaviourist terms. In support of this statement Benner (in Darbyshire et al 1990:4) states that the *“most important*

*outcomes of clinical nursing expertise cannot be guaranteed or legislated*". Hume (1981:2111-2112) also states that important behaviours like empathy are not easy to state as behavioural objectives.

By applying the interpretive-criticism approach, *students* are helped to interpret, criticise and judge nursing care, their own reasoning, scholarship and growth, and to initiate improvements if required. If a behaviouristic approach is implemented, *teachers* evaluate or judge the nursing care given by the students (Bevis & Watson 1989:270, 284).

The ultimate aim of the teacher implementing an interpretive-criticism approach is to enable students to be connoisseur critics. In order to do this, the teacher must be a connoisseur which means an expert, not only in nursing content but also in the processes of mind, that is, in learning. Additionally, the nurse connoisseur must be an expert nurse practitioner able to describe, interpret, compare and criticise nursing care (Bevis & Watson 1989:279, 283-284).

During critical dialogue, tutors and students endeavour to find ways that provide clues to learning such as:

- what meanings do students attribute to their experiences?
- what patterns do they see emerging in their nursing care?
- how do they *know* and what types of *knowing* do they experience.

(Bevis & Watson 1989:279).

Besides evaluating learning during application of the interpretive-criticism approach, tutors may discover deficits in learning such as lack of insight, compassion, ethical awareness, flexibility or the simple ability to perceive patterns of nursing care (Bevis & Watson 1989:281).

In essence, Bevis and Watson advocate applying a process model, as opposed to a product model as used in the behaviouristic approach. A product model emphasises the end result, outcome or worth of the learning experience (Knowles 1990:6; Marsh 1992:109; Richardson 1995:1044). In contrast, a process model emphasises the learning process, that is, how the student learns (Rogers & Freiberg 1994:152).

### **3.6 SUMMARY**

The literature review in this chapter revolved around the following aspects:

- clarification of terminology
- behaviouristic model or Tylerian rationale
- discussion of the Tyler rationale and the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm.

Related research studies were also discussed in order to obtain background knowledge and clarification about the problem under study. In the following chapter, literature supporting the humanistic- educative- caring curriculum paradigm is discussed.

## CHAPTER 4

### LITERATURE REVIEW

#### THE HUMANISTIC-EDUCATIVE-CARING CURRICULUM PARADIGM

##### 4.1 INTRODUCTION

In chapter 3, the behaviouristic paradigm was discussed under the following headings:

- clarification of terminology
- behaviouristic framework
- Tylerian rationale
- discussion of the Tyler rationale and the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm.

In this chapter, literature supporting the humanistic-educative-caring curriculum paradigm is discussed as follows:

- affective education
- humanistic education
- developmental education
- curriculum development in the post-modern era.

##### 4.2 HUMANISTIC-EDUCATIVE-CARING CURRICULUM PARADIGM

The Humanistic-Educative-Caring Curriculum Paradigm, in contrast to the Behaviouristic Curriculum Paradigm, only gained momentum during 1986, when the American Association of Colleges of Nursing published a report on essential values pertaining to an educated person and educated nurse. It focused national attention on the fact that a values dimension is essential to nursing education. Nursing educator conferences with curriculum revolution as theme were sponsored during 1987, 1988 and 1989 by the national league for nursing (Bevis 1989(a):4-5; Clayton & Murray 1989:43; Diekelmann 1990:300). Issues emanating from these conferences heralded possible significant mandatory changes in nursing education. All these conferences had as a common or recurrent theme, renewed emphasis on nursing's essential role, mission, commitment and function of human caring, a return to the human aspect of nursing and a moral-based educational perspective in individual settings (Bevis

1989(a):4-5).

The mandate was to shift from a focus on training to education, from technique to understanding, from strict control to critical, clinical decision making, from product line thinking to value-based human caring education for an educated person, as well as an educated values driven professional (Bevis & Watson 1989:39-40). In essence, this implies changing from an output model to a process model. In order to comply with this mandate it is imperative not only to propose a viable alternative to the behaviouristic model, but also to deinstitutionalise the behaviourist model. This will not prove an easy task as the behaviouristic model has, over the past 45 years, become entrenched not only in nursing education, but pervades our entire society from education in the schools to education in general, for example, in the mining and industrial areas (Bevis & Watson 1989:2; Slattery 1995:45).

In South Africa, for instance, one of the colleges<sup>3</sup> at which the present research was conducted evaluated their curriculum during 1994. Behaviouristic principles pervaded the curriculum, namely:

- content orientated and overloaded
- programme-, stage- and behavioural objectives serve as a common framework
- theory-practice correlation is not realised due to a fragmented curriculum and minimal subject integration
- the lecture method is the most frequently used teaching strategy
- written evaluation is based on Bloom's taxonomy
- written and clinical evaluation is based on grades.

In support of the latter findings, Boshoff (1997:26, 354) identified that nursing curricula were prescriptive, authoritative and founded on positivistic principles. As a result, the focus of nursing education was on the transmission of theory with the student as passive receiver of knowledge and a theory-practice gap.

<sup>3</sup>No reference is stated as this is an unpublished report and would reveal the identity of the college where the research was conducted. This would breach the confidentiality ethic.

Although an outcome based curriculum was introduced to South Africa in 1998, many of the above stated behavioural principles still pervade the curriculum, such as written evaluation based on grades and Bloom's taxonomy. The latter statement is corroborated by Waterson et al (2006(a):56, 59-60) who found that curriculum overload, lack of theory-practice integration, teaching and assessment methods that do not promote critical thinking and the use of lectures were some of the factors which hampered the academic performance of learners.

The following section entails a discussion of the caring, humane, humanistic, confluent (Francke & Erkens 1994:354), values oriented, affective education and andragogical, educative milieus. The latter aspects all relate to the humanistic-educative-caring curriculum paradigm.

#### **4.3 AFFECTIVE EDUCATION**

Confluent education is synonymous with affective education. Francke and Erkens (1994:354-355, 360), stated that confluent education is a way and a process of teaching and learning in which the affective domain and the cognitive domain flow together, like "two streams merging into one river; an integration of the learning of the head with the learning of the heart". According to Hawkins (1985:36) confluent education is an arrangement of time, materials and learning experiences to give recognition to the effect of different cognitive and affective traits on content mastery.

Regardless of the setting or educational level, affective education and the Bevis and Watson model, by their very nature advocate the education of the whole person. Affective education deals with the thoughts, emotions, feelings and behavioural processes of an individual (Cline, Necochea & Brown 2000:2). Therefore, it supports the view that the learning process is more than the cognitive consumption of facts and figures. Affective education does not so much teach morals and values, as helping the individual to understand her value and belief systems by making her aware of her own moral development (Hawkins 1985:14; van der Wal 1999(a):67). The latter aspects are contained in the Bevis and Watson paradigm (see appendix G). Affective education focuses on learners during the learning process namely their feelings, meanings and perceptions. Learning activities emphasise an experiential approach to learning (Amstutz 1999:24).

The learners reflect on their own feelings, meanings and perceptions about the experience as they relate cognitive information to their own experience. Components of affective learning are the learner's self-awareness, learning climates, interpersonal relationships in learning, recognition of learner needs and perceptions and competencies required for facilitating learning approaches (Thayer & Beeler 1976:1-2, 5). Tolbert (1982 in Hawkins 1985:7), views feelings of competency, acceptance and attitudes as components of affective education.

During affective education, the teacher is referred to as a facilitator who emphasises learning and student participation, facilitates personal growth in learners and provides stimulating learning climates. The nurse educator as a facilitator of learning is an important concept in the Bevis and Watson conceptual continuum: Teacher-Student Interactions. According to Rogers (1994 in Rogers & Freiberg:154, 156-157, 167), the most important attitudinal qualities that must exist in the personal relationship between the facilitator and the learner are realness/genuineness, prizing/acceptance/trust and empathic understanding (Quinn 2000:54; Thayer & Beeler 1976:2, 6).

Rogers (1994 in Rogers & Freiberg:154-156, 167), describes a transparent realness or genuineness in a facilitator as a "willingness to be a real person, to be and live the feelings and thoughts of the moment" during a direct, individual, personal and face-to-face encounter with a learner. Prizing entails caring for the learner, trusting and accepting her as an individual and as a person who has self-worth and her own feelings and opinions. According to Rogers (1994 in Rogers & Freiberg:157-158, 167), empathic understanding refers to viewing the world through the eyes of the student, standing in her shoes and listening sensitively, accurately and empathically to her point of view and simply understanding the student without judging or evaluating her (Rogers 1994 in Rogers & Freiberg:157-158, 167). The applicable criteria from Thayer and Beeler (1976) and Rogers (1994) have been added to the appropriate Bevis and Watson conceptual continuums (see appendix G).

According to Beane (1991:29), affect is an aspect of human thought and behaviour that consists of a number of elements or parts that constitute the affect as a whole. Dimensions such as emotion, preference, personal freedom, self-determination, choice and feeling are part of this whole (Cline et al 2000:2 Woolfolk 1995:493). These latter stated dimensions are based on beliefs, aspirations, attitudes and appreciations

regarding what is desired and desirable in personal development and social relationships. It is important to note that aspirations in the humanistic-educative-caring curriculum are important, as Tylerian behaviourism cannot in, and of itself, cultivate “aspirations”. Aspiration, like strive, is an innate human attribute. Personal development and social relationships are connected to thinking or cognition because they are informed by what has been learned from past experiences and they influence purposeful action in terms of self-perception, values, morals and ethics (Shechtman et al 1993:32). The nature of such influences may range from the barely conscious to the carefully reasoned, for example, the innate respect for life learned from your mother as a child might influence the value you place on human life as an adult. From a humanistic-educative-caring aspect, Koldjeski (1990:54) suggests that during nursing interventions and relationships, nurses should utilise the therapeutic self, body and environment. Nursing actions should reflect the integration of the scientific- and humanistic knowledge bases, constancy and intensity of expressions of compassion, love and hope; of maintaining integrity and actualisation of body, self and spirit.

Affect is connected to behaviour as both an antecedent and a consequence. Thus, affect is both an element or part, of the aspect of learning and an appropriate object of educational efforts. In other words, learning as a process is included in affect as a whole and is an important outcome of the educational process (Beane 1990:6). During teacher-student interactions, the Bevis and Watson paradigm aims to simultaneously integrate the functioning of affect and cognition. Integration is achieved by engaging students in activities that develop cognitive structures and positive affective responses (Mouton 1997:236).

Although the following aspects regarding affective education relate to children, all the concepts are contained in, and are relevant to, the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm. Regarding the latter paradigm, Wiggins and English (1979:1) state that the major concern of affective education is the healthy emergence and acceptance of a person’s feelings and needs. Emotional growth is vital as it enables each individual to develop self-esteem, accept and understand self and others and leads to control over personal learning behaviour as the student gains self-discipline (Shechtman et al 1993:32). Without emotional growth, the individual is crippled when

attempting the cognitive learning tasks presented in the educational environment (Wiggins & English 1979:1-2).

According to Wiggins & English (1979:2-3), during a one or two year affective education programme, specific objectives should focus on the feeling and the knowing sides of learning. Specific objectives may include the following three areas, namely:

- increased *awareness* and *understanding* of human feelings, needs and behaviour, for example, being better able to understand the feelings of self and others
- effective group and interpersonal *communication* skills, namely, a desire and ability to listen carefully to others
- effective group and interpersonal *interaction* skills, such as, becoming more accepting of individual differences and less willing to deny the feelings and needs of others (Shechtman et al 1993:31-32; Wiggins & English 1979:2-3).

Not only are the latter three areas applicable to nursing students, but they are also relevant and emphasised in the Bevis and Watson model.

Regarding humanistic-educative-caring, nursing education does not prepare students to adequately deal with the realities of patient care such as human feelings, emotions and effective communication skills, as incorrect aspects are emphasised in the curriculum (Clifford 1995:40-41). More emphasis is placed on the sciences and practical expertise to the detriment of the humanities; disease rather than illness; the professional world of the nurse to the neglect of the lived world of the patient and direct personal communication with the patient (Bauer 1990:256; Bevis 1989:(b)121; van der Wal 1999(a):67). In other words, in order to provide genuine caring nursing care, the curriculum must place more emphasis on the humanities, the experience of illness and communicating with patients concerning their lived world (Bishop 1990:69). Students need to connect their concern for caring to their everyday experiences with the patients (Johns 1996:1135-1136) and learning (van der Wal 1999(a):69).

According to Wiggins and English (1979:4-7), the way teachers interact with students is very important, as it is through the way that they approach, respond to and interact with students that messages are sent. These messages set the tone, feeling or climate of the

classroom and are directly related to learning, feelings of esteem, acceptance and behaviour. The classroom climate establishes critical growth conditions in the classroom. High or positive growth conditions facilitate the development of esteem and worth, while low or negative growth conditions minimise opportunities for this development (see table 4.1). In support of the latter findings, Brady (2005:13) states that the teacher should create a learning environment where the relationship between the teacher and the student is warm, supportive and where the teacher is approachable in every aspect of the learning process.

The preceding aspects are supported by a study undertaken by Zempel (1982) in the United States of America, entitled “The effects of affective education on classroom environment, self-esteem, grades and sociometric relationships”. Zempel (1982:1174-175) found that the classroom environment plays a crucial role in the functioning of the student and that the educators need to be aware that they have the power to create a classroom environment which increases student learning.

Table 4.1 exhibits a list characterising teacher strategies and behaviours that constitute high and low growth conditions. It is important to realise that even the most supportive, accepting and sensitive teacher does not evidence high growth conditions continuously (Wiggins & English 1979:5-6).

**TABLE 4.1: TEACHER STRATEGIES AND BEHAVIOURS: HIGH AND LOW GROWTH CONDITIONS**

<b>HIGH GROWTH CONDITIONS</b>	<b>LOW GROWTH CONDITIONS</b>
<b>HIGH ACCEPTANCE/RESPECT OF PUPIL'S IDEAS</b>	<b>LOW ACCEPTANCE/RESPECT OF PUPIL'S IDEAS</b>
1. Pupil ideas are frequently accepted. The teacher listens to and incorporates pupil ideas in discussion and other learning situations.	1. Pupil ideas are rarely encouraged or accepted. There is little opportunity for discussion. When discussion occurs, it is highly controlled and seeks recall of previously learned information. Pupil contributions are frequently criticised.
<b>HIGH ACCEPTANCE/RESPECT OF PUPIL'S AFFECT</b>	<b>LOW ACCEPTANCE/RESPECT OF PUPIL'S AFFECT</b>
2. Pupil feelings and emotions are accepted by the teacher as long as harm to others is avoided.	2. Pupil feelings are avoided or discouraged. The teacher is unwilling to recognise expressions and discussions of feelings.
<b>HIGH ENCOURAGEMENT/SUPPORT OF PUPILS</b>	<b>LOW ENCOURAGEMENT/ SUPPORT OF PUPILS</b>
2. Pupils are encouraged to explore and make suggestions. An atmosphere of "try it and tell us what happens" pervades the classroom.  3. The teacher is willing to "get off the subject" when an interesting event or question is raised. At times the question becomes the actual topic.	3. Pupils are discouraged to explore and make suggestions. The teacher has the one right way of doing things and only that way is accepted. Alternatives are not discussed or tested.  4. The teacher controls the subject at all times. Penetrating philosophical questions are discouraged. The principle aim is to teach the lesson and complete it.
<b>HIGH PUPIL INDIVIDUALISATION</b>	<b>LOW PUPIL INDIVIDUALISATION</b>
5. The teacher attempts to understand and respond to each child's psychological needs. The teacher recognises that some children may need more direction and control while others may need the opportunity to exercise greater choice. The teacher, therefore, encourages children to learn and explore in ways that each child is comfortable with.	5. The teacher denies individual differences and needs and demands conformity. The teacher who demands that every child participates in an "open" classroom may produce the same low growth conditions as the teacher who provides a "lock-step" classroom atmosphere. Both strategies are authoritarian and demand conformity at the possible expense of pupil feelings of esteem, control and connectedness.
<b>HIGH PUPIL INVOLVEMENT</b>	<b>LOW PUPIL INVOLVEMENT</b>
6. A continuing dialogue with pupils is maintained to involve children in making decisions about their learning, for example, individual and small group projects, work contracts and to help children further clarify what they are learning.	6. The teacher always tells pupils what and how they are to learn. Little room is left for pupil choice and expression.
<b>HIGH TEACHER GENUINENESS/REALNESS</b>	<b>LOW TEACHER GENUINENESS/REALNESS</b>
7. The teacher is genuine, willing to express ideas, feelings, experiences and be a real person rather than play a role. Where appropriate, the teacher allows students entry into his/her private world of feelings, ideas, needs and concerns.	7. The teacher plays a role and presents a facade that conceals feelings. The teacher acts in a confined, prescribed manner revealing little of own uniqueness and inner thoughts. A wide emotional gap is maintained between teacher and pupil and little of the common bonds, needs and feelings that the two may actually possess are explored.

(Wiggins & English 1979:5-6)

These growth conditions were modified and incorporated as affective criteria with regard to the appropriate Bevis and Watson conceptual continuums during the development of the measurement instrument used during the current research.

#### **4.3.1 Foundations of affect**

Beane (1990:52-53) views democracy, dignity and diversity as the foundations of affect. Democracy is not just a political ideology but also a way of life. Democracy offers individuals, through full participation, the right to relate their personal and social beliefs and interests to their lived experiences (Bevis 1989:(b)121) and to view all other individuals as having the right to self-governance. Although democracy recognises the dignity and diversity of individuals, the differences in human nature and in particular self-interest, has the potential to create conflict between these personal and social interests and beliefs of individuals and other individuals. The latter is referred to as sacrificing the common good for the good of a few. In order to overcome this conflict, Beane (1990:57) suggests that central values and moral principles be established that identify interactions that support these personal and social beliefs and interests. Central values and moral principles are viewed at different levels; human dignity being the central or primary level. With regard to human dignity, Reilly and Oermann (in Solombela & Ehlers 2002:57), view care as the moral core of nursing; the human dimension of nursing which serves to preserve the human dignity of each individual. Emanating from human dignity are the values and moral principles of freedom, caring and justice, equality and peace. Bevis and Watson 1989:96) list altruism, equality, aesthetics, freedom, human dignity, justice and truth as the seven values that are essential for a professional nurse. In the next section human dignity is discussed.

##### **4.3.1.1 Human dignity**

According to the Oxford English Dictionary (Soanes & Walker 2005:277), dignity may be defined as the “state of being worthy of respect, a calm or serious manner, a sense of self-worth”. Human dignity, postulates that all people are part of humanity and are, therefore, worthy and have the right to self-respect. However, in order to view themselves as personally and socially useful, individuals need to feel they have dignity and that other individuals view them as dignified human beings. Personal dignity is a

prerequisite for establishing self-esteem and ensuring that social relations are humane and democratic (Minnaar 2002:35). In support of human dignity, it is important that students are taught that their patients are human beings, that they understand them as human beings and their humanness and how to maintain quality interpersonal relationships (Solombela & Ehlers 2002:49). Further, in order to fully understand the concept human dignity, it is necessary to briefly discuss freedom, caring and justice, equality and peace (Beane 1990:60-61).

#### **4.3.1.1.1 Freedom**

Freedom implies that individuals have personal, social and political rights; they feel free to act within those rights, for example, pursuing self-determination and self-governance. Freedom from the shackles of tyranny or oppression gives individuals a sense of personal dignity and enables them to respect the dignity of others (Apple 1999:67; Beane 1990:61).

With reference to the maturity continuum of the Bevis and Watson paradigm, when the mature positions of reciprocating and generating are maintained during teacher-student relationships, a liberating educational environment is established where students' self-worth and personal dignity is maintained by allowing them freedom to express their own opinions. The immature positions of charming, anticipatory-compliant and resonating are indicative of an oppressed educational environment. Tylerian behaviourism is synonymous with the Bevis and Watson immature positions and leads to oppression. During this oppressive state individuals have no sense of self-dignity. Their only aim is personal gain, either to protect themselves or to maintain and extend their own position in relation to others. For example, in the immature charming position students compete for the teacher's attention; in the immature anticipatory-compliant position, students try to manipulate the teacher into telling them what is important to learn in order to gain good marks; the focus is thus on their own needs and not on learning (Bevis & Watson 1989:83-88).

#### 4.3.1.1.2 Caring and Justice

In order to understand what it means to be moral, individuals have to understand what it means to “care about” and “care with”. “Care about” relates to ourselves and other human beings and “care with”, to the development of objective, justice-based guidelines detailing how interactions with other individuals should be conducted (Beane 1990:61-62).

All individuals have their own unique personal history. Thus, each and every interaction involves unique personal behaviours, decisions, feelings, concerns, aspirations, lived experiences and a profound human need for a sense of self-worth and to be treated as a human being with dignity (Shechtman et al 1993:30-32). To “*care about*” individuals means that we are sensitive to all the latter aspects whether it be during daily interactions or conflict situations (van der Wal 1999:65). Additionally, to “care about” individuals means that “we attempt to see beyond what is desirable, in our terms, of particular feelings or aspirations and to understand how particular people came to want what they want, to be who they are and to behave as they do” (Beane 1990:61-62). If we care about others, we will also endeavour to maintain and improve their self-worth. “*Caring with*” individuals implies that we do not view them solely as objects on whose behalf we perform acts of care, but to care with them as mutual subjects in all human experiences. In support of “caring with” according to Rogers (1969) and Watson (1979), cited in Sheston (1990:111), the caring process consists of experiences of caring interactions and transactions in a shared existential, phenomenological field called nursing education. Carl Rogers (1951, 1957, 1961, 1965, 1969) cited in Sheston (1990:112), described education as a facilitative, growth producing process. This view is supported by Leininger (1984 in Miller, Haber & Byrne 1990:125), who stated that acts of caring are essential for human development, growth and survival.

Caring also involves caring about ourselves as dignified human beings and our own sense of self-worth (Bauer 1990:259). In our modern day and time, it is highly debatable whether we really care about, and with people, as we have become extremely self-centred, with an overemphasis on the “I”, our own pleasures and comforts. This uncaring attitude is confirmed by Minnaar (2000:37) who found that although nurse

managers were aware of caring practices, nurses did not experience caring in their work environment. From a humanistic-educative-caring perspective, the major implication is that nurses will not be able to render care if they do not experience it themselves. However, caring is a central concept in the Bevis and Watson paradigm.

Regarding the humanistic-educative-caring paradigm, caring is not only the hallmark of nursing but also a moral imperative or obligation (Bevis 1989:(b)125; van der Wal 2002:16-17). Therefore, it should be the primary focus of any interaction and transaction between the nurse and her client. Additionally, as indicated by Bevis and Watson (1989:39, 53, 55, 79, 102-103, 183-184) caring should be reflected in all spheres of nursing education and be applied as an educative instrument. Bevis and Watson (1989:88, 103) operationalise caring as growth in the educational setting. For instance, moving from oppression to liberty entails moving from limiting and handicapping the students, to allowing them to grow. Growth is the essence of caring (Bevis & Watson 1989:59; van der Wal 2002:17).

Leininger (in Symanski 1990:140) states that nurses need to know the different ways that individuals care and to have an extensive knowledge and understanding of care as a phenomenon. Tutors should strive to maintain a caring concern amongst their students by teaching, role modelling and using the therapeutic self to communicate caring (Nelms et al 1993:18, 21). A caring concern may be maintained by emphasising the following principles so that they become part of the tutor's and the student's lived world:

- being knowledgeable about care and caring
- valuing the other as a human presence
- being accountable for one's own action
- being open to and creative with new ideas
- connecting with others
- taking pride in oneself
- liking what one does
- recognising moments of joy
- recognising one's limitations

- resting and starting afresh: essential for maintaining personal boundaries and personal spirituality (van der Wal 1999(a):69-70).

## □ Justice

Justice implies that all human beings have rights which should be recognised and that they are entitled to be treated according to those rights. According to Pera and van Tonder (2005:31), justice is the unifying principle in health sciences. Plato (in Mautner 2000:288), views justice as a basic human virtue; the overarching human virtue. Justice is frequently defined as a legal concept in relation to a constitution of a country, the courts and the other legal authorities (South Africa 1996:1, 8). Justice as a legal concept infers that individuals have a contractual agreement and, thus, a legal obligation to adhere to and recognise it as a moral principle. However, individuals have human and civil rights that are only partly based on legal opinion. Two of these rights which emanate from human dignity and the concepts of justice, are equality and freedom. Equality and freedom have a greater impact than the economic ones most regulated by contractual law. Thus, justice contributes to human dignity by defining and mediating ways in which such rights may be preserved and extended during social interactions (Beane 1990:63).

Over the years, justice has played a major role in the definition of the concept morality, while caring has played a minor role. One reason for this domination is the fact that when justice-based guidelines are formulated, it is easier to explain human thought and behaviour in abstract terms than it is to explain caring by applying subjectivity and sensitivity. The second reason is that it has mainly been women who, in a society dominated by males, have articulated the concept of caring. Historically, women have been a marginalised group, whose voice on any subject, including morality, has been dismissed as unimportant; a fact viewed as “male chauvinistic domination in a society where interactions are identified by patriarchal values” (Johns 1996:1135).

The important issue is that if human dignity is to be extended and supported, the need for a genuine ethic of caring, including justice, has to be acknowledged (Apple 1999:67; Beane 1990:63-64). With regard to a humanistic-educative-caring paradigm and in support of a

caring ethic, Leininger (in Leininger & Watson 1990:1; 185), states that the central focus and essence of the discipline of nursing should be care. Greene (1990:30) refers to caring as a passion but adds that achieving caring will require political fortitude, thoughtfulness, courage and a deliberate desire and actions by the nursing profession.

#### **4.3.1.1.3 Equality**

According to the Oxford English Dictionary, equality may be defined as the “state of being equal” and equal is defined as being the “same in quantity, size, degree, value or status and evenly and fairly balanced” (Soanes & Hawker 2005:335). Therefore, equality implies that it is the human right of all individuals to be treated in the same manner, in every facet of life; be it social, psychological, physical or spiritual, regardless of what differences may exist among them. From a humanistic-educative-caring view, patients should receive equal treatment regardless of their race, language or religion (South Africa 1996:3, 8). Although equality may be a right and legislated as such, it is viewed, globally and in South Africa, that very little equality really exists, for example, gender equality. Men still dominate all spheres of society and in particular, politics, economics; the business and financial world (Johns 1996:1135).

#### **4.3.1.1.4 Peace**

Conflict situations impinge on human dignity as they pose numerous actual or potential threats to human life (Geyer 2006:48). Although not all the potential threats to human life may be defined, violent intrusions can be classified. Individuals experience loss of self-esteem and social usefulness when disagreements progress to physical or verbal violence or when acts of “symbolic” violence, such as labelling, stereotyping and sorting people, infringe their dignity. Watson (1988 in Symanski 1990:138) stated that care, as a value, is a moral commitment to preserve human dignity. From a humanistic-educative perspective, nurses have to adopt a zero tolerance policy towards any form of violence and have the right to be protected from abusive behaviour by patients (Geyer 2006:48-49).

### **4.3.2 History of affect in the curriculum**

Table 4.2 summarises the historical development of affect in the curriculum.

#### **4.3.2.1 Religious-based moral education**

In America, in 1649 the Commonwealth of Massachusetts passed a law that established religious-based moral education in schools. It became the dominant version of affect in the curriculum until the 20th Century in America and remains popular in many schools (Beane 1990:17). However, by the early 20th Century, religious-based moral instruction in public schools had seriously diminished (Beane 1990:19). In South Africa, religious-based moral education was also prominent in government schools until the early nineteen-nineties and to date in private schools. The South African Bill of Rights guarantees freedom of religion (South Africa 1996:3). However, acknowledgement of all religions in South Africa makes it difficult to implement moral based education relating to a specific religion. At this point it is important to remember that morality is but a part of the affect and is not always a “positive” or “pleasurable” affect. In fact it can be extremely restrictive and forceful.

#### **4.3.2.2 Classical humanism**

During the late 1800s, educationally, classical humanism rose to prominence. Classical humanism included mainly academic disciplines such as language, literature and cultural themes such as art. Mathematics and science were also part of the curriculum but were not as important as the humanities (Beane 1990:19; Symanski 1990:138).

#### **4.3.2.3 Child-centred movements**

The main opposition to the rigid academic interests of classical humanism was the child-centred movement; a part of the progressive education movement. The child-centred movement emanated from the research on child and adolescent development by G. Stanley Hall (Beane 1990:21). The main focus of the child-centred movement is a concern for the natural development of children and youngsters. The child study method and its application to curriculum can be traced throughout the largely affective child-centred movement across the first half of the century. Later versions, like the activity movement, the open classroom and numerous aspects of the humanistic approach to personal development have their conceptual roots largely in the child-centred approach (Beane 1990:21; Woolfolk 1995:494).

**TABLE 4.2: HISTORY OF AFFECT IN THE CURRICULUM**

No	History of affect	Centuries			
		17 <sup>th</sup>	18 <sup>th</sup>	19 <sup>th</sup>	20 <sup>th</sup>
1	Religious-based moral education	1649			
2	Classical humanism			1800s	
3	Child-centered movements			1800s	
4	Character education			1899	
5	Social efficiency movement				1920s
6	Life adjustment education				1944
7	Decline of affect/rise of behaviourism				1950s 1960s
8	Humanistic psychology				1950s
9	Values education / values clarification				1966
10	Cognitive moral developmental education				1970s

#### 4.3.2.4 Character education

By the end of the 19th century, moral instruction had superseded religious instruction in the curricula of public schools. The focus of education shifted from moral instruction to character education. Character educators concentrated on the actual conduct of children and adolescents (Beane 1990:23-24). During the 1920s character education became an accepted approach to educators (Beane 1990:28). However, the report by Hartshorne and May (1928, 1929, 1930 in Beane 1991:27) heralded the end of character education. The report stated that character education had little effect on the moral views of the student as they have little in common with real life situations (Beane 1990:29; Beane 1991:27).

#### 4.3.2.5 Social efficiency movement

During the 1920s, adherents of the social efficiency movement used the factory as a metaphor for the school in order to explain their version of education. The school, as the factory, was the social instrument for shaping the characteristics of young people, as desired or required, for that particular society. Production was akin to education and the raw material was the learners who would eventually become the educated products.

Learners had to attain certain prescribed standards just as the finished product in industry had to conform to certain standards. Prescribed standards were set for teachers just as they were set for production workers. Individuals were trained and given skills to enable them to do the type of work they were destined for, such as being a mechanic (Beane 1990:26-27; Apple 1999:96, 179-180). In South Africa, today, the aim of OBE is to ensure that the learners leave the school and place of learning equipped with a skill or competency that will enable them to gain employment (Potenza 2000:1).

The social efficiency movement is similar to Tylerian behaviourism, the behavioural-objectives model, the stimulus-response method or the output model where the learner is viewed as a product with certain observable skills that are a result of attaining preset behavioural objectives (Quinn 2000:117, 120). The social efficiency movement is seen as being in direct contrast to the humanistic-educative-caring curriculum paradigm where the learner is viewed as a caring, educated, individual human being able to think critically, reflectively, creatively and problem solve. Learners do not only acquire a skill but are educated to become lifelong learners.

#### **4.3.2.5.1 Social reconstructionism and engineering of consent**

Two different conceptions of the relation between democracy and education led to the concepts social reconstructionism and engineering of consent. According to George Counts (1932 in Beane 1990:33) and Harold Rugg (1939, 1947 in Beane 1990:34), social reconstructionism has viewed the school as a primary force for promoting more democratic conditions by teaching individuals to solve the numerous social problems that had arisen in society during the industrial age. The school would become a political institution and teachers would be used as the critical agents in the reforming or reconstructing of society (Apple 1999:54, 58; Beane 1990:33-34).

Engineering of consent relates to the use of democratic means within the school. In his definition of democracy in the curriculum, William Graebner 1988 (in Beane 1998:34-35), refers to engineering of consent when he states “those whose attitudes were to be changed, or whose behaviour was to be modified, had to be part of the process, to participate or be made to *feel* that they had participated”. Thus, engineering of consent

is the “process by which people are led to believe that they are genuinely involved in making decisions when, in fact, their participation is only an illusion of involvement, aimed at leading them towards a preconceived decision or, at least, a general consensus within which specific preconceived decisions would nicely fit” (Beane 1990:34-35). In South Africa, if one analyses the present educational system and nursing in particular, it appears that “engineering of consent” is applicable in society. Numerous inputs to documents are requested but no heed is paid to the input as the documents are only presented (“dished up”) in another version containing the same content as proposed by the original authors. (The latter views are the personal observations of the researcher).

#### **4.3.2.6 Life adjustment education**

Life adjustment education was shaped by the publication in 1944 of “Education for all American Youth”, by the Educational Policies Commission. Prominent characteristics of life adjustment education emphasises individual differences, the use of the areas-of-living approach, which means adapting young people to the existing conditions in society and the preferential use of progressive and democratic methods (Beane 1990:37-38).

In the United States of America, Combs 1979 (in White 1983:30), stated that preparing students to live and work in a complex, co-operative society requires goals such as autonomy, responsibility, willingness to pull one’s fair share of the load, concern and tolerance for others, appreciation of human values, commitment to human welfare, commitment to democratic principles, respect for dignity (Minnaar 2002:35) and integrity of every human being and the necessary skills and understandings to participate effectively in personal and group interactions. In South Africa today, the latter aspects are enshrined in the constitution and are vital to students as they ultimately become the future citizens of the country (South Africa 1996:1-4).

Thus, affect in the curriculum was tied to the prevailing social, economic and political conditions of the time. For example, with the launching of Sputnik in 1957, affect related to the fact that the interests, needs, values and aspirations of the youth should be

centred on scientific and mathematical competition with the Russians (Apple 1999:58, 67; Beane 1990:39).

As in South Africa today, the emphasis is on the marketplace, commerce and technology, especially the computer. The latter aspects are vital to citizens and thus to students in South Africa. With regard to technology, de Villiers (2001:31) stated that as the global economy is driven by information and technology, these aspects should be reflected in the curriculum. The way educational technology will be used to educate students must also be reflected in the curriculum. Problem-based, media-based, cooperative and reflective learning are some of the methods that should be implemented to ensure that students are technologically literate and possess the skills to seek, access, select, interpret and apply information in a health context (de Villiers 2001:31-32). In support of the use of technology Le Grange, Greyling and Kok (2006:84), recommended that various ways of learning should be utilised such as self-directed learning, e-learning that is web-based and includes computer-based training and computer-assisted learning and problem-orientated approaches to learning such as action learning, structured reading and formal and informal learning.

#### **4.3.2.7 Decline of the concept affect**

During the 1950s and the 1960s, affect in the schools was perceived as mechanical, routine and relegated to the lowest levels of behavioural shaping; this was a direct result of the rise of behaviourism. The main principle of behaviourism is the stimulus-response (S-R) concept where behaviour is perceived as the response (R) and behavioural objectives as the stimulus (S). Thus, it is believed that identification of the correct stimulus would enable educators to shape students toward desired behaviours (Louw & Edwards 1997:227-228, 240).

The publication of Bloom's Taxonomy of Educational Objectives, Handbook 1: Cognitive Domain (1956) and Taxonomy of Educational Objectives, Handbook 11: Affective Domain (1964), further entrenched behaviourism. However, formulation of the taxonomies contributed to serious thoughts about the affective domain namely:

- defining affect in terms of interests, attitudes, appreciations, values and emotional

sets or biases, located it beyond the more common view of simple representations of inner feeling and tone

- arguments for connecting affect and cognition in both theory and practice are as compelling today as they were then, correctly arguing that schools are responsible for individual development at least as much as for socialisation and reflecting this logic in the emphasis on internalisation of values across the taxonomy, as well as the need for autonomous thought about affective issues rather than compliant behaviour
- the fallacy of reductionist arguments for the school as an exclusively passive-academic-intellectual agency were revealed
- the idea of affect was brought to the attention of educators and suggested that the enthusiasm for the cognitive domain ought to be applied to this domain as well (Beane 1990:41-42).

The eight years difference between the publications of the two taxonomies was a major contributing factor to the separation of the affective and cognitive domains. The first book, published during 1956, was widely read and discussed in numerous workshops. In contrast, the second book, published during 1964, digressed from the intellectual perspective of schooling at that time and as a result it was neither widely read nor understood. The connection between the domains was clearly explained in the second book but the eight years separating the books greatly influenced the acceptance of the second book (Beane 1990:42-43). As a result, a clear distinction was made amongst the cognitive, affective and psycho-motor domains. In contrast, the Humanistic- Educative-Caring Curriculum Paradigm views these three domains as interrelated during the educational process.

#### **4.4 HUMANISTIC EDUCATION**

##### **4.4.1 Humanistic psychology**

Humanistic psychology is a person centred approach. It emerged during the 1950s in opposition to behaviourism. The humanistic psychological theory stated that individuals constructed versions of their experience through personal perceptions (Woolfolk 1995:493). These personal perceptions influenced their views of the world and their

actions within it. Therefore, the crucial aspect of a fulfilling life was viewed as the development of a clear self-concept, positive self-esteem, personal freedom, choice, self-determination and a striving for personal growth. The latter aspects led to the creation of many self-esteem programmes in society (Woolfolk 1995:493).

#### **4.4.1.1 Values education**

During his numerous publications, John Dewey repeatedly emphasised the connection between the affect and cognition thus setting a precedent for the values education movement (Beane 1990:31; Shechtman et al 1993:31-32).

#### **4.4.1.2 Values clarification**

Two other aspects of affect in the curriculum were ushered in by the publication of “Values and teaching” by Rath, Harmin and Simon, during 1966 and the work of Lawrence Kohlberg during 1972. Louis Rath had begun to frame a theory of values development, based on Dewey’s concepts of valuing and thinking. It later came to be known as values clarification (Davis 1981:1589; Rath et al 1966:28-30; Shechtman et al 1993:31-32).

#### **4.4.1.3 Cognitive-moral developmental education**

Kohlberg’s cognitive developmental approach to moral education regarded moral reasoning as a set of predictive stages that were related to age, stages of cognitive development and to increasingly complex concepts of justice (Budhal 1998:40-41).

In contrast, Hume (in Fagermoen 1999:139), stated “morality rests ultimately on sentiment, on a special motivating feeling, our capacity for sympathy with others’ feelings, a reflective sentiment, self-corrected self-interest and corrected sympathy”. In other words, morality rests on maintaining a balance between sympathy for the individual and self-interest. Hume’s thoughts on morality are especially relevant today in view of the increased emphasis on relational ethics and the ethics of caring. Watson states that caring is a moral ideal of nursing “where the end is protection, enhancement and preservation of human dignity” (Fagermoen 1999:149; Minnaar 2002:35).

Like values clarification, Kohlberg's approach was based on reasoning. However, he added another dimension namely content, by explaining the types of reasoning and their applicable criteria at each stage (Davis 1981:1591). Additionally, he suggested ways that teachers might elevate moral reasoning through the use of moral dilemmas and described their relation to school structure in what was called a "just community" approach (Budhal 1998:40-41; King 1984:4-10). Carol Gilligan (in Beane 1990:45-46), a research colleague of Kohlberg, criticised him for defining moral reasoning from a distinctly male perspective which disregarded the fact that women tended to use caring instead of justice in such reasoning. The latter assumption formed a powerful basis for work on feminist moral theory. It is hypothesised that if schools should ever take the idea of caring seriously, affect in the curriculum would be profoundly influenced (Beane 1990:45-46). The same sentiment can be expressed about the humanistic-educative-caring curriculum in nursing. If caring could become the focal point of nursing, it would revolutionise the way nursing care is delivered and taught.

Erickson and Weaver (1978 in King 1984:10) suggested that less than a third of all adults appear to develop post conventional forms of moral reasoning, that is, stages 5 and 6. Similarly, Kohlberg (1975 in King 1984:10) contends that most individuals, regardless of age, fail to advance to the highest levels of moral reasoning. The majority of adults are assumed to be at stages 3 and 4 with fewer than 10 percent of them reaching stage 5 and 6. Kohlberg stated that consistent stage 6 moral reasoning is rare (King 1984:10). Erickson and Weaver (1977-1978 in King 1984:10) state that it is possible to promote change in moral judgment through specific instructional methods. Crisham (1981 in King 1984:10) found that formal, moral education had an impact on nurses' ethical decision making in actual clinical practice.

Kohlberg's theory of moral development is humanistic, placing humans at the centre of the universe, encouraging free thought and scientific inquiry and offering no absolute standards of ethics. Individuals are challenged to analyse issues based on the concept that decisions are influenced through the use of reason. Every moral law is abstract in relation to unique and totally concrete situations. The cognitive skills of moral analysis can be gained through cognitive moral education (Budhal 1998:40-41; King 1984:10).

#### **4.4.2 Humanism as a philosophy of education**

Learn (1990:236) defines humanism as an idea and philosophical perspective. Martin Buber (1958 in Learn 1990:236-237) emphasised the I-thou dialogue that requires mutual respect, dignity and appreciation of the rich uniqueness of every individual.

McKernan (2000:5) states that effective teaching requires an “I-thou” relationship between the teacher and the student. The Deweyian concept stated that education must include the personal and psychological development of each pupil (Hawkins 1985:12).

In the next section, humanism as a philosophy of education is discussed, according to the five aspects as propagated by Dewey namely beliefs about education, the school or university, the learner, the nature of method and social progress (Learn 1990:237).

##### **4.4.2.1 Beliefs about education**

Humanists view education as a self-actualisation process where values, beliefs and attitudes about the self are emphasised (Amstutz 1999:22). The emphasis is on the whole person who is encouraged to grow intellectually, emotionally and socially so that they are able to deal effectively with their present and future lives (Amstutz 1999:19).

Colley (1983 in Hawkins 1985:13) stated that educational programmes should facilitate the development of learners who are knowledgeable, thoughtful, sensitive, creative, emotionally alive and morally responsible, only then can it be said that the whole person has been addressed, the body, soul, mind, character, sense and reason. These latter concepts are contained in the Bevis and Watson definition of educative learning (see section 2.3).

##### **4.4.2.2 The university**

The university and nursing college should be a place where the student nurse will develop an appreciation for the many dimensions of human experience and learn to be a competent, professional practitioner. These dimensions include the values, practitioner skills and attitudes that are essential for the caring profession of nursing (Kok & Chabeli 2002:37; Chabeli 2001:21).

#### **4.4.2.3 The learner**

The learner is valued as a human being who is viewed as more than and greater than just the sum of his/her parts (Cline et al 2002:2; Woolfolk 1995:493). During the learning process, the learner searches for personal meaning in existence and this leads to self-actualisation (Amstutz 1999:22). The major focus is on the learner as a unique individual and the belief that all people are capable of growth and have the desire to grow (Chabeli 2001:21). Bevis and Watson also view the learner as a unique individual who is empowered by and grows during the learning process (see section 2.3).

#### **4.4.2.4 The nature of method**

A humanistic, caring, educational environment requires teaching and learning strategies/methods that ensure a holistic integration of knowledge, skills, values and attitudes which are derived from many disciplines other than nursing such as the humanities (Symanski 1990:138). In order to gain a broader knowledge base, the classical liberal arts, such as art and philosophy, need to be incorporated in the nursing curriculum. Authors who support the inclusion of the humanities in the curricula are Bauer (1990:256), Bishop (1990:69) and van der Wal (1999(a):67). Examples of specific teaching and learning strategies/methods that could be included are problem-posing, problem-solving, discovery learning, self-initiated projects and reflective thinking (Chabeli 2001:23; Chabeli 2006:79, 83).

The role of the teacher in this humanistic, caring, educational environment is one of facilitator of learning. The facilitator must create a supportive learning environment that is characterised by trust, spontaneity and reward. The facilitator has to assist the learner to apply what she has learned, so that it has meaning for her in her own life. The ultimate aim is to assist the learner to become a fully functioning individual. Therefore, the learner is required to actively participate in the learning process (Quinn 2000:52). The facilitators are expert learners and resources and the students are novice learners (see section 2.4). For example, both the facilitator and learner jointly pose problems and seek solutions to the problems. The latter situation is in sharp contrast to the traditional way where the teacher is the giver or transmitter and the learner the receiver or receptacle, of information. The giving of information leads to an oppressive educational

environment while the facilitation of learning can be liberating, academically and politically (Learn 1990:239-240). Bevis and Watson view the teacher as a facilitator of learning, the expert learner and the student as the novice learner (see section 2.5.1.2). In South Africa, Lekalakala-Mokgele and du Rand (2005:25) found that a facilitator must have certain qualities such as empathy, sensitivity and self-awareness; perform multiple roles such as creating a climate conducive to learning and act as a role model and must have certain skills such as communication, tolerance of silence, questioning skills and being a subject expert.

#### **4.4.2.5 Social progress**

Humanism based on existentialism is an individual and not a social philosophy. Therefore, the emphasis is on the individual and not on social progress. Sartre (1974 in Learn 1990:240) stated that existence precedes essence and we are free to construct meaning in any way we see fit. If we believe the latter, then we are totally responsible for what is or will be, in other words, for what is happening and will happen to us. Thus, oppression in the learning environment and in our lives can be eliminated if we ourselves become perceptive and encourage our students to become attentive to all possibilities (Learn 1990:240; Waterson, Harms, Qupe, Maritz, Manning, Makobe & Chabeli 2006(b):67). In addition to the preceding five aspects, humanism and human care, nursing education and the moral dimension are also discussed.

#### **4.4.3 Humanism and human care nursing education**

A humanistic philosophy of education has much to offer a nursing education system that is set in a human caring, practice-oriented educational context. It will also challenge many of our beliefs about education, the university and nursing college, the student, the method and human progress. As previously stated, the greatest challenge will be in the area of the nature of method, for example the use of the lecture method (Waterson et al 2006(a):58) where behaviourism is still deeply entrenched in nursing education. Behaviourism is incompatible with the concepts applicable to human caring and a humanistic philosophy of education (Amstutz 1999:22).

#### **4.4.3.1 The moral dimension**

Moral refers to good or bad. Consequently, the latter implies that tutors have to consider the strengths, weaknesses and the depth and breadth of the implications of applying a humanistic philosophy to nursing education. One concern is student evaluation. Evaluation requires special attention, as traditional evaluation methods are incompatible with humanistic philosophy. Brady (2005:9-10) advocates that assessment be formative, that is, continuous and preferably performed on a daily basis where smaller assessments may be done so that immediate and more effective feedback is given to students. In addition to tests and examinations, assessment should include a variety of strategies such as self-assessment by using reflective journals (Chabeli 2002:27; Durgahee 1998:160; Kok & Chabeli 2002:35, 3742; Wong et al 1995:48), portfolios (Chabeli 2002:5, 9) and contracts and peer group assessment (Chabeli 2001:26). Nurse educators are perceived by society as caring and competent. Society, therefore, trusts that nurse educators will only admit competent, caring, safe practitioners into the nursing profession. Additionally, society and nurse educators also have the right to expect students to acknowledge that they work in an environment where self-knowledge, mutual trust and human freedom are predominant characteristics. Consequently, the students must take responsibility and be prepared to admit when they are not sufficiently prepared or have not grown sufficiently for independent practice at any given time (Learn 1990:242-243).

In support of assessment methods that are compatible with the humanistic-educative-caring paradigm, Chabeli (2001:18-28) recommended that alternative methods be used for clinical nursing assessment and evaluation. These methods are portfolios, self-assessment, reflective tutorials, authentic scenarios/problem solving tasks, simulation such as role play and educational games, peer group assessment, reflective journal writing, critical incident analysis technique and ward round evaluation. Additionally, Kok and Chabeli (2002:35, 42) indicated that reflective journal writing promoted reflective thinking skills in clinical nursing education. Chabeli (2002:5, 9) concluded that portfolio assessment and evaluation developed learners' competency and thinking skills.

#### **4.4.4 Student centred learning theories**

Student centred learning theories are *humanistic* in nature as they emphasise self and self-beliefs, values, attitudes, personal and individual growth, self-directedness, internal motivation related to an internal locus of control and self-actualisation (Amstutz 1999:22-23; Barker 1998 2; Malan & Rothman 2002:2, 5).

##### **4.4.4.1 Self-directed learning**

Levin (1980:146) states that Carl Rogers believes that “man is free and that freedom is an existential concept which goes beyond the ability of man to choose between outward alternatives. It is a subjective freedom which enables man to live his potentialities and contribute to society” (Amstutz 1999:23-24). Malcolm Knowles (Knowles et al 1998:1) introduced the term andragogy to describe a form of education for the adult. Pedagogy states that the learner is shaped and moulded by the teacher while andragogy states that the learner is the one who has the potential for self-growth and self-direction (Jinks 1997:18). Quinn (2000:60-61) states that both pedagogy and andragogy have disadvantages when applied to adult student nurses. Pedagogy may result in a passive, teacher dependent learner who is demotivated, resentful and hostile. Andragogy is dependent on the prior knowledge of the student and the key role of the facilitator.

Table 4.3 is a comparison of Knowles’s assumptions and processes of teacher-directed (pedagogical) learning and self-directed (andragogical) learning. The assumptions and processes were incorporated in the appropriate Bevis and Watson conceptual continuums during development of the instrument (see appendix G).

**TABLE 4.3: A COMPARISON OF ASSUMPTIONS AND PROCESSES OF TEACHER-DIRECTED (PEDAGOGICAL) LEARNING AND SELF-DIRECTED (ANDRAGOGICAL) LEARNING**

<b>CONCEPTS</b>	<b>ASSUMPTIONS</b>	
	<b>TEACHER-DIRECTED LEARNING</b>	<b>SELF-DIRECTED LEARNING</b>
<b>Concept of the learner</b>	Dependent personality	Increasingly self-directed organism
<b>Role of learner's experiences</b>	To be built on more than is used	A rich resource for learning
<b>Readiness to learn</b>	Varies with levels of maturation	Develops from life tasks and problems
<b>Orientation to learning</b>	Subject-centred	Task- or problem centred
<b>Motivation</b>	External rewards and punishments	Internal incentives, curiosity
	<b>PROCESS ELEMENTS</b>	
<b>ELEMENTS</b>	<b>TEACHER-DIRECTED LEARNING</b>	<b>SELF-DIRECTED LEARNING</b>
<b>Climate</b>	Formal Authority-oriented Competitive Judgmental	Informal Mutually respectful Consensual Collaborative Supportive
<b>Planning</b>	Primarily by teacher	By participative decision making
<b>Diagnosis of needs</b>	Primarily by teacher	By mutual assessment
<b>Setting goals</b>	Primarily by teacher	By mutual negotiation
<b>Designing a learning plan</b>	Content units Course syllabus Logical sequence	Learning projects Learning contracts Sequenced in terms of student's readiness
<b>Learning activities</b>	Transmittal techniques, for example, lecture, assigned readings	Inquiry projects Independent study Experiential techniques
<b>Evaluation</b>	Primarily by teacher	By mutual assessment

(Adapted from Levin 1980:148; Knowles 1975:60)

Rogers believes that the ability to learn is inherent in the individual and not in the educator or any controlling system. He bases his approach to teaching on the following ten principles of self-directed learning (student centred approach to learning):

- Human beings have a natural potential to learning.
- Significant learning takes place when the subject matter is perceived by the student as having relevance for his own purposes.
- Learning which involves a change in self-organisation, in the perception of oneself, is threatening and tends to be resisted.
- Elements of learning that are threatening to the self are more easily perceived and assimilated when external threats are at a minimum.
- When threat to the self is minimised, the individual makes use of opportunities to learn in order to enhance himself.
- Much significant learning is acquired through doing.
- Learning is facilitated when the student participates responsibly in the learning process.
- Self-initiated learning which involves the whole person of the learner, feelings as well as intellect, is the most lasting and pervasive.
- Independence, creativity and self-reliance are all facilitated when self-criticism and self-evaluation are basic and evaluation by others is of secondary importance.
- The most socially useful learning in the modern world is the learning of the process of learning, a continuing openness to experience and incorporation into oneself the process of change (Levin 1980:146; Quinn 2000:54).

Rogers' (Quinn 2000:53) principles of learning indicate that the concepts relevance, student participation and involvement, self-evaluation and the absence of threat in the classroom are important. The teacher, as a helper and facilitator of learning, not only provides learning resources but she herself becomes a learning resource for the learner; someone who shares her feelings and knowledge with the students. To Rogers (Quinn 2000:54) the relationship that exists between the facilitator and learner is of paramount importance and requires that the qualities of genuineness, trust, acceptance and empathetic understanding from the teacher. According to Rogers (Quinn 2000:53)

learning is a continuum with meaningless material at one pole and significant or experiential learning at the other pole. Unfortunately, students view many curricula as containing meaningless information. In contrast, experiential learning is meaningful as it contains pertinent concepts such as personal involvement, self-initiation, pervasiveness and self-evaluation.

Rogers's principles of self-directed learning are all relevant to and contained in the Bevis and Watson model that underlies this study.

#### **4.4.4.2 Individualised learning**

According to Leddy (1980:137), the profile of students in nursing programmes has become increasingly diverse. This diversity has led to individual differences in students, abilities, readiness to learn, educational backgrounds, learning styles and motivation. Masitsa (2006:486, 494) found that students were not motivated to learn. As the traditional approach to teaching is geared toward average students and encourages conforming behaviour, educationalists have been compelled to renew their interest in educational designs and technology, in order to provide for the unique needs of individual students. The use of education technology in teaching is supported by de Villiers (2001:31). The goal of a system of individualised education is to develop students who have the initiative, creativity, independence and ability to lead in our constantly changing contemporary society. Some of the specific outcomes of individualisation are the optimal development of the individual, increased interest in learning and development of lifelong learners, increased relevance of learning and greater flexibility of learning time (Brady 2005:7, 11; Leddy 1980 137-138).

The role of the educator in individualised teaching is that of diagnostician, prescriber, motivator and facilitator of learning (Lekalakala-Mokgele & du Rand 2005:23, 25). During teacher-student interactions the individualised learning package may be used as a teaching-learning strategy to facilitate learning (Leddy 1980:138-139; see sections 2.4, 2.5.1.2). The role of the student is that of an independent person capable of making decisions, accepting responsibility for her own education and getting along with others

(Lekalakala-Mokgele & du Rand 2005:23). The latter concepts are contained in the Bevis and Watson model which underlies this study.

Learning is a process that involves the whole person. During learning, the student engages in a process of experiencing, of changing and of growing more diverse and complex. Prevailing instructional strategies such as the lecture, programmed instruction and the use of self-determined learning outcomes are inconsistent with learning which involves the whole person (Levin 1980:145; Nkosi & Uys 2005:8). Therefore, teaching strategies, such as the individualised learning package, enhance the learning process as the student actively participates in self-directed learning.

Consequently, by allowing the student to learn, the educator displays caring as she allows the student to grow. Growth, development and caring are concepts pertinent to the humanistic-educative-caring curriculum paradigm.

#### **4.5 DEVELOPMENTAL EDUCATION**

Developmental education addresses issues of human rights, dignity, self-reliance and social justice in developed and developing countries. It is concerned with the causes of underdevelopment, the promotion of an understanding of what is involved in development, how different countries go about undertaking development and the reasons for, and ways of, achieving a new international economic and social order (Osler 1994:1; Starkey 1994:26). Leach (1994:135) states that developmental education is about an approach to learning and teaching which is based on individual rights, active participation, evaluating change and empowering people to be actively involved in their own futures.

The developmental approach allows us to see the psychological version of democracy and dignity and the possibility for integrating self-and social interests toward freedom, autonomy, caring, justice and equality (Amstutz 1999:22-23; Beane 1990:73-74). In a humanistic-educative-caring curriculum paradigm, an endeavour is made to ensure that the educational environment is free, just, equal and that the student is allowed autonomy to practise caring nursing care.

Therefore, as in the humanistic-educative-caring curriculum, in developmental education and teaching, the challenge is to place teachers at the centre of curriculum development and students at the centre of the learning experience. Teachers should facilitate skills, such as thinking, valuing and decision-making in learners through student-centred experiential methods (Lekalakala-Mokgele & du Rand 2005:23, 25). In British schools, research studies support the view that textbooks are a key point of reference, when teaching geography on a global level (Hopkin 1994:76). In South Africa, an OBE review committee found that textbooks were one of the main curriculum support materials in the teaching and learning processes and that teachers should be trained in the use of textbooks and other support materials (Potenza 2000:1; Pretorius 2000(a):6).

Ingrid-Abrahams-Lyncook (1994:176), while describing development education in the United Kingdom stated that a learning framework facilitates successful student-centred learning. It is the teacher's responsibility to facilitate the planning, development and management of a learning framework. It is preferable that the framework be negotiated through dialogue with the students (Munby 1989 in Abrahams-Lyncook 1994:177). Teaching strategies implemented included team teaching, collaborative teaching and pupil centred activities (Abrahams-Lyncook 1994:175). The latter aspects are all concepts related to the Bevis and Watson paradigm and are applicable to the student nurse (see appendix G).

Fionnuala Brennan (1994:193) described a development education project in Irish primary schools. She stated that skills, which are all applicable to the Bevis and Watson paradigm, such as group interaction and co-operation, media analysis, independent research, listening creatively, sharing information and skills, communication, debate, synthesis, and self-awareness, were facilitated by developmental education (Brennan 1994:201). Additionally, there was a renewal in the area of active learning approaches and child-centred learning (Brennan 1994:204).

South Africa is a developing country and all the issues contained in the latter definition of developmental education are propagated by educationalists in South Africa. However, the moral fibre of society has degenerated to such an extent that the government felt compelled to establish the Moral Regeneration Movement (MRM) during 2002. South African society has

degenerated into an uncaring, unethical, lawless society manifested by a lack of respect for human dignity, life, the rule of law, other people and their property and unprecedented physical, psychological and sexual abuse of women, children and infants (see sections 5.2.5, 5.2.6). In the Bevis and Watson paradigm, during teacher-student interactions, the teacher provides a climate that communicates a valuing of caring and concern as the moral imperative of nursing (Mouton 1997:235).

The developmental approach in education, as reflected in a humanistic-educative-caring approach, is closely aligned to the concepts of democracy and dignity for the following reasons:

- it recognises and prizes diversity, a fundamental condition of human dignity
- it acknowledges the continuous struggle to seek meaning and direction from lived experiences rather than external authority
- it recognises and accommodates the variety of lived experiences
- it values the contributions that varied experiences and perception may make to the possibility of discourse about alternatives (Beane 1990:73).

#### **4.6 CURRICULUM DEVELOPMENT IN THE POST-MODERN ERA**

The focal point in a post-modern curriculum is meaning. This is in line with the central dictum of post-modernism, namely “away with grand narratives” as indicated by Higgs and Smith (2002:138). There is no truth and the most one can aspire for is meaning. Slattery (1995:xi) states that when curriculum development is viewed as a human question, it becomes a process of meaning making and restoration of meaning. Hermeneutics, a process of interpretation, is the strategy implemented to search for this meaning. A post-modern curriculum should produce students who are capable of interpreting and understanding their lived experience and the self in relation to other individuals. Students must become reflective practitioners who promote learning from, in, and through experience (Evans 2000:133; Quinn 2000:568-570; Schon in Slattery 1995:xvi). With reference to the humanistic-educative-caring curriculum, during syntactical and inquiry learning, the teacher assists students to develop their own meaningful ways of knowing and thinking processes, by means of reflection (Durgahee 1996:419, 426; Mouton 1997:238). Additionally, during syntactical learning, the

student delves deeper into learning and finds or seeks meaning (Bevis & Watson 1989: 93-94, 294; see section 2.5.2.2.5).

In order to understand and provide deeper meaning to curriculum issues, Slattery (1995:xi) as a post-modern eclecticist, applies various aspects from phenomenology, existentialism, pragmatism, deconstruction, chaos theory, multiculturalism, post structuralism, feminism, theology, hermeneutics and critical theory. Curriculum in the post-modern era includes a more eclectic and subjective understanding of hermeneutic interpretation and critical thinking (Slattery 1995:39). Similarly, during the implementation of the humanistic-educative-caring curriculum, in order to derive meaning, the student is required to use a variety of theoretical frameworks from which to view issues or problems and to engage in intellectual or higher thinking modes such as critical thinking, analysing, evaluating assumptions and searching for patterns (Mouton 1997:241; see appendix G).

Slattery (1995:67-68, 96, 251), further states that a post-modern curriculum must restore spirituality and morality, be reflective, inclusive, cooperative, just, holistic, caring and culturally relevant. Chabeli and Muller (2004:43) also state that reflective thinking is an interactive constructing process which is influenced by higher order cognitive and affective thinking skills such as analysis, synthesis, values and organisational skills.

Teachers must create stimulating environments where they are facilitators of learning who promote deeper meaning of the curriculum, present knowledge, skills and values in a familiar context and introduce innovative aspects such as replacing rows of desks with chairs arranged in circles and acting as mentors for the students (Slattery 1995:48; 97). The latter aspects are all included in the Bevis and Watson paradigm that requires the teacher to provide a climate that communicates a valuing of caring and concern as the moral imperative of nursing (Mouton 1997:235; see appendix G).

Freire (in Slattery 1995:199) states that learners must participate in a problem posing and problem solving educational experience, as this leads to a liberating education where learning is achieved by means of acts of cognition. The latter is different from the

Tylerian concept of the banking or transferring of information by means of the lecture method, during the learning process (Slattery 1995:199). However, a liberating education is in line with the Bevis and Watson paradigm where the teacher-student interactions establish a liberating environment and the student is allowed to and feels free to, learn by engaging in educative types of learning such as problem solving (Mouton 1997:228; 232; see appendix G).

Important concepts reflected in a post modern curriculum and the humanistic–educative–caring curriculum are aesthetics (Slattery 1995:209), praxis (Slattery 1995:218), lived experience (Slattery 1995:220) and reflectiveness (Slattery 1995:221). According to Slattery (1995:223), teachers should inspire students to critical questioning, to nurture aesthetic experience or to connect learning to creative thinking. Learning should be a process of discovery and self-understanding. Qualitative, aesthetic experiences involve critical reflection; a kind of knowing called praxis. In the humanistic-educative-caring paradigm, praxis, in nursing education, is the welding together of theory and practice. Further, praxis is defined as enabling theory and practice to inform and shape each other and as the precise symbiosis between reflective action and critical theorising (Bevis & Watson 1989:56, 223, 236; Ford & Profetto-McGrath 1994:342; Galbraith 1992:11; see appendix G).

#### **4.7 SUMMARY**

Theories are like a circle, each theory comes and goes. As one ascends the other descends in importance; they are closely related to times in society, societal needs and occurrences at the time of prevailing social phenomena.

During the past ages and at different times, emphasis has been placed on different types of education (see table 4.2), for example, during the 17th century the focus was on religious based moral education; during the 1800s on classical humanism; during the 19th century on character education; during the 20th century on social efficiency and life adjustment education; during the 1960s and 1970s, affect, based on humanistic psychology, values clarification and moral reasoning became the primary focus in the

curriculum. During the 21st century the caring concept has come to the fore and other curricula such as the postmodern curriculum (Apple 1999:171, 179).

The literature reviewed in this chapter revolved around the humanistic-educative-caring curriculum paradigm and in particular, affective-, humanistic- and developmental education and curriculum development in the post-modern era.

Related research studies were also discussed in order to obtain background knowledge and clarification about the problem under study. In the following chapter, recent trends and issues in South Africa are discussed.

## **CHAPTER 5**

### **LITERATURE REVIEW**

#### **RECENT TRENDS AND ISSUES IN SOUTH AFRICA**

##### **5.1 INTRODUCTION**

In chapter 4, literature supporting the humanistic-educative-caring curriculum paradigm, was discussed according to:

- affective education
- humanistic education
- developmental education
- curriculum development in the post-modern era.

In this chapter, recent trends and issues in South Africa are discussed as follows:

- the application of behaviouristic principles
- the changes in the educational system
- the South African Nursing Council (SANC)
- the National Health Plan
- the Reconstruction and Development Programme (RDP)
- the White Paper on the transformation of the health system
- the Moral Regeneration Movement (MRM) in South Africa
- the emerging social scene
- the factors in nursing and nursing education that are erosive to the caring ethic.

##### **5.2 RECENT TRENDS AND ISSUES IN SOUTH AFRICA**

Since 1994 South Africa has undergone tremendous change. Transformation has occurred in every sphere of life be it political, social, cultural, spiritual or economic (Le Grange et al 2006:71). Nursing education has also been affected in many different ways. Transformation in nursing education had its beginning in the transformation of the general educational system (Khanyile 2000:71; South Africa 1997(d):2) which introduced an outcome based approach to education (OBE), the South African Qualification Authority (SAQA) and the National

Qualification Framework (NQF). Consequently, all the latter aspects necessitated a change in nursing education (Khanyile 2005:50). In the following section recent trends and issues in South Africa are discussed.

### **5.2.1 Application of behaviouristic principles**

The use of behavioural objectives has influenced nursing education throughout the world, for instance, in the United States of America and Britain (Becker et al 2003:57; see sections 1.2.1, 1.2.2, 3.4.2). In South Africa, de Villiers (1996:15-16, 19-20) found that not only was the use of behavioural objectives wide spread in nursing colleges in the Gauteng Province, but that numerous other behaviouristic principles also featured prominently in their curricula (see section 1.2.1, 1.2.2.). The findings of de Villiers are discussed accordingly:

#### **5.2.1.1 Curriculum content: curriculum organisation and subject content**

Two of the nursing colleges investigated based their curriculum on the behavioural-objectives approach with the concomitant overloading of curriculum with content (de Villiers 1996:14-15).

#### **5.2.1.2 Teaching strategies and learning climate**

At one of the nursing colleges investigated, the main focus of classroom teaching was the transmission of knowledge by means of the lecture method (Gravett 1994:1-2). Students were passive absorbers of knowledge. Clinical teaching concentrated on practising clinical skills under the guidance of the tutor (de Villiers 1996:16). At a different nursing college investigated, the lecture is the most frequently used teaching strategy, students tend to learn by rote and to compartmentalise knowledge (de Villiers 1996:17; see section 1.2.2). According to Leinster (2002 in Friedrich-Nel, de Jager & Nel 2005:881), instructional methods and learning activities are still centred on the lecturer.

#### **5.2.1.3 Evaluation of learning**

At one of the nursing colleges investigated, evaluation of learning was done within a framework of the programme objectives as stipulated by the South African Nursing Council and behavioural objectives set by the tutor. At a different nursing college investigated, evaluation of learning was objective orientated (de Villiers 1996:19). Currently, in South

Africa, traditional assessment methods, such as written examinations which are applicable to content based education and training, are applied in most higher education institutions. Additionally, hybrid assessment, that is, a combination of the principles of Outcome Based Education and Training (OBET) and the principles of the traditional approach in assessment, are implemented (Friedrich-Nel et al 2005:881, 885).

At this stage, it is important to state that despite the preceding findings of behaviouristic practices in nursing education, from grassroots level up to national level, there is a move to effect change in general education (Fourie 1996:12; Herbst 1996:3; Kotzé 1997:51; Pretorius 2000(b):1; SAQA 2002(a):2; SAQA 2002(b)1-2; South Africa 1997(c):157; Uys 1997:40-41). Credence is given to this statement regarding change by perusal of various newspaper articles, books and documents from working groups and policy documents for example, the White Paper on Higher Education (South Africa 1997(a):9). Another document namely Curriculum 2005, contains many educative principles that relate not only to attaining a body of knowledge but also to other principles such as the importance of how to learn (Pretorius 2000(a):6). If correctly implemented, Curriculum 2005 could provide the impetus for producing students who are not only trained but also educated, caring individuals. These educated, caring individuals with the necessary values, attitudes and skills could by actively participating in, and taking responsibility for their learning, impact on tertiary education and in particular, nursing education. The latter situation is possible as the educative principles already entrenched in the school could then be used as a foundation upon which to build caring, educated nurses.

### **5.2.2 Changes in the educational system in South Africa**

Due to the changes in the general educational system in South Africa (South Africa 1997(d):2), a new curriculum was implemented during January 1998 for the colleges of nursing in the Gauteng Province. The new programme is a comprehensive, four-year diploma course leading to registration as a nurse (general, psychiatric and community) and midwife (South Africa 1985:1-4).

During 2002, the 1998 nursing curriculum was revised to comply with requirements as set out in the Higher Education Act 101 of 1997, the SAQA Act 58 of 1995, the National

Qualifications Framework (NQF), Recognition of Prior Learning (RPL), multiple entry and exits levels and numerous other policies and again the caring elements have been stressed (Khanyile 2005:50; SAQA 2002(a): 1-3; SAQA 2002(b):2-3). Unfortunately, the caring elements did not materialise in nursing education, as evidenced by the increase in uncaring actions. The latter situation is evidenced by reports in public newspapers (Kearns 2005:47; Nevhutalu 2004:30-31) and from the South African Nursing Council of gross negligence of duty. DENOSA has also reported an increase in the number of indemnity cases referred to it (Geyer 2005/2006:50-52). The media reported the death of a neonate after succumbing to burn wounds from being bathed in hot water. Additionally, national television, broadcasted the shocking videotape recordings of the maltreatment of the elderly in a state old aged home and women undergoing legalised abortions in state hospitals (O'Donoghue et al 2004:80, 83). The SANC (Geyer 2005/2006:50-52; Seshoka 2005:32) has indicated an increase in the numerous types of disciplinary cases reported such as poor basic nursing care and the use of abusive language and assault.

Unfortunately, until the dominant worldview is manifested by a moral paradigm in which caring values are the focal issue, nursing will continue to teach and deliver health care services and students, in an uncaring, behaviouristic educational environment.

#### **5.2.2.1 Curriculum 2005**

Curriculum 2005 refers to the concepts of education and training and emphasises that these two concepts should be integrated (DOE 1997:1, 4-5, 14). Therefore, Curriculum 2005 supports a confluence of education and training. Curriculum 2005 is the new OBE system, that is, it is an approach to learning that aims to prepare students in general education to meet the challenges of the 21st century (Chabeli 2006:78-79; Pretorius 2000(b):1; see section 3.4.1). OBE is linked to the NQF (Bellis 1997:33; Bruce 1996:48; Smit 1997:46; South Africa 1994:29; South Africa 1997(b):54).

The NQF has been designed to enable diverse individuals, regardless of age, circumstances, gender and level of education and training, ready access to learning opportunities and quality education and training. The NQF proposes to achieve the latter stated goal by integrating

education and training, improving the relevance and quality of existing provision, ensuring that credits for learning can be accumulated and transferred from one part of the delivery system to another, linking learning progression to career paths, recognising and assessing RPL and broadening the provision of education and training (DOE & DOL 2003:1, 34; Khanyile 2000:72; 74; SANC(a)1999:4, 17-20; SAQA 2002(a):1-3; SAQA 2002(b):13; SAQA 2003:8) The National Qualifications Authority (NQA) will have to be made aware that besides ensuring the integration of education and training, it will have to register nursing curricula, on the NQF, that are relevant and produce educated, caring nurses who view the patients as human beings who must be treated with dignity and respect.

In Britain during 1986, a system similar to RPL, named Credit Accumulation and Transfer Schemes (CATS) was launched (Mountford & Rogers 1996:1127). It incorporated two structures namely Accreditation of Prior Learning (APL) and Accreditation of Prior Experiential Learning (APEL). Accreditation of Prior Learning (APL) is defined as the transfer of credits gained from previous qualifications from one institution to another institution. Accreditation of Prior Experiential Learning (APEL) refers to credits which may be gained for day-to-day experience of professional practice or life in general. Presently, all educational institutions design their educational programmes within the CATS framework (Quinn 2000:162-163, 229-230, 541). The RPL system has also been implemented in the United States of America, Australia, New Zealand and Canada (Khanyile 200:72). From a humanistic-educative-caring perspective, RPL is important as it affords the nurse the opportunity to use the experience she has gained in her “lived” world, to further her growth and development.

The NQF will reflect the achievement of learning outcomes in terms of acceptable standards (Khanyile 2005:55; Strydom & Lategan 1995:1). Additionally, the NQF allows learners to learn on an on-going basis. This learning is referred to as lifelong learning and is central to the NQF. OBE is an approach that aims not only to increase the general knowledge of the learners, but also to develop their skills, critical thinking, attitudes and understanding (DOE 1997:4, 8). The focus of education is changed from content to outcomes and the processes required to meet the outcomes (Bellis 1997:33; DOE 1997:9; SAQA 2002(a):2; SAQA 2002(b):1-5; Smit 1997:46). The NQF will complement the humanistic-educative-caring

concept of lifelong- and continuous learning; as the very act of ensuring that she remains updated is a sign that the nurse cares about her patient.

Curriculum 2005 has been built around concepts such as critical outcomes that emphasise abilities such as communicating effectively, using creative thinking to solve problems and organising and managing oneself responsibly (Pretorius 2000(a):6). The teacher's role is one of a facilitator who guides activity-based learning and in the process, assists learners to achieve the outcomes specified. The focus of assessment will also change from summative evaluation to a system of continuous evaluation implemented throughout the year. Videbeck (1997(b):27) refers to continuous evaluation as formative evaluation where data is gathered throughout the educational process. Assessment becomes a team effort where both the teacher and student use a variety of methods to assess the progress of learning towards the specified outcomes (DOE 1997:16).

Critical outcomes are also referred to as critical cross-field outcomes or essential outcomes. The Gauteng Curriculum Committee adopted the phrase essential outcomes and adapted and added to the essential outcomes as proposed by "Curriculum 2005" (DOE 1997:16). For instance, an essential adapted outcome is to "communicate effectively using verbal and non-verbal skills in the modes of oral and/or written presentation". An example of an additional essential outcome is to "work effectively with the individual, family and community members". All of the afore-mentioned concepts are built into the standardised (common) nursing curriculum and are also concepts contained in the Bevis and Watson model. For example, interactions may be verbal, written or oral (Bevis & Watson 1989:195).

A humanistic-educative-caring curriculum paradigm may assist the student nurse to attain essential outcomes. For example, the essential outcome "communicate effectively using verbal and non-verbal skills in the modes of oral and/or written presentation" may be attained by ensuring that communication with the patient is open, reciprocal, that she listens attentively to what the patient is saying in a caring manner; ensures that all written communication with regards to patient care is clear, precise and that all care is communicated to the patient.

Lehoko (1997:2) reporting in the Sunday Times, stated that the new system, Curriculum 2005, has other relevant aspects such as:

- students are actively involved in finding and interpreting information for themselves
- pupils learn to think critically, to reason, reflect and then act
- emphasis is placed on integrating the different types of knowledge relevant to the pupils
- teachers act as facilitators for small groups or teams of pupils, with the emphasis on pupils finding out information
- syllabus is seen as a guide with teachers having to adopt innovative and creative ways of helping their pupils to learn
- pupils take responsibility for their own learning, but are motivated by feedback and praise from teachers
- emphasis is on what the pupils understand
- comments and suggestions from parents and the public are encouraged (DOE 1997:6-7).

The aforementioned aspects are included in the standardised nursing curriculum and are also issues central to the Bevis and Watson model. For example, at the generating position, a mature student is actively involved in the learning process (Bevis & Watson 1989:86-87).

According to Muller (cited in Anstey 1997(a):2) *“the curriculum puts the spotlight on the learner rather than on content”*. Bevis and Watson (1989:87-88) support this view by emphasising that interactions revolve around the teacher and student and not around the teacher and content.

In addition, a course in teacher training in the new Curriculum 2005 has been piloted in the Gauteng Province by Emilia Potenza, a curriculum specialist (Anstey 1997(b):2). One of the participants reports that implementation of Curriculum 2005 has made students aware that textbooks are not the only source of information and has helped to stimulate analytical and creative thinking. Anstey (1997(c):2) personally participated in a lesson based on Curriculum 2005. She stated that her attention had been kept all the time as she had been actively involved in the learning process and the experience had been fun. These aspects are also relevant to the Bevis and Watson model. For example, during educative learning experiences the student is required to use a variety of sources and rationales as evidence from which to draw conclusions (Bevis & Watson 1987:102-103).

In summary, the ultimate aim of Curriculum 2005 is to produce thinking and caring learners (DOE 1997:29).

#### **5.2.2.1.1 Concerns regarding Curriculum 2005**

Although all the afore-mentioned aspects regarding Curriculum 2005 are educative principles, the following concerns are raised:

##### **❑ Specificity of outcomes**

It is debatable whether outcomes are not just another word substituted for behavioural objectives. Jacobs, Gave and Vakalisa (2002:30) treat objectives and outcomes as synonyms. Strydom and Lategan (1995:8) state that although outcomes can prioritise measurable behaviours, it is important to note that analytical techniques that break learning into smaller pieces may have the following effects:

- neglect of broader qualities of the subject, discipline or profession
- concepts of mastery and absolute standards can mean that assessment places an artificial ceiling on learning
- learning outcomes which are too narrowly defined can lead to over specialisation and to trivialisation of learning and work against the transfer of knowledge and skill between contexts
- creativity in learning can be lost or assigned peripheral status
- the learning event can become sterile, predictable and too linked to tasks
- the tendency for teaching to be sequenced according to the outcomes or standards has been seen to be unnatural and based on erroneous notions that learning necessarily proceeds in a linear sense from the simple to the more complex (Strydom & Lategan 1995:8; see section 3.4.2.2)

##### **❑ Experiential learning**

Experiential learning is one of the key concepts of the NQF and a variant of the competency-based modular education and training model (CBMET). Experiential learning has its origins in behavioural psychology and recently, in global industrial training schemes. This CBMET system makes use of the more traditional norm-referenced system of assessment and is similar to methods currently employed in South African tertiary institutions. Norm-referenced assessment involves comparisons between the abilities of the individual and those of some

other population on which the test has been standardised. Competency models place all learning activities into compartments in separate units that can then be learnt consecutively.

This leads to fragmentation of knowledge that in turn may exclude key cognitive capabilities such as understanding the intrinsic rules of academic disciplines, the ability to critique and to think logically, imagination, creativity, innovation, effective communication and leadership. These cognitive capabilities are central concepts of an effective, general, tertiary or higher educational system. However, these qualities cannot be easily measured in discrete and quantifiable units (Strydom & Lategan 1995:8).

#### ❑ **Unit standards**

Additionally, Strydom and Lategan (1995:8) state that another important characteristic of tertiary or higher education is progressive development of conceptual skills. The NQF is based on the principle of competency. They, therefore, question whether the implementation of the unit standard methodology makes sufficient allowance for the progressive development of conceptual skills.

#### ❑ **Implementation**

Various problem areas such as design features were identified regarding the implementation of Curriculum 2005. Consequently, during February 2000, the minister of education Kader Ashmal appointed an 11 member independent review committee, under the chairmanship of Professor L. Chisholm (Pretorius 2000(a) 6). OBE was not under review but the particular form that Curriculum 2005 had taken during its implementation phase. Some of the important recommendations made by the review committee are as follows:

- the principles of OBE such as learner participation, relevance, flexibility, anti-bias, holistic development, critical thinking and integration should be retained
- a revised and streamlined outcomes based curriculum - Curriculum 21 (C21) should replace C2005 – a curriculum for the 21st century
- a new national curriculum statement should be developed and contain only four key design features namely critical outcomes, learning area statements, learning outcomes and assessment standards (Potenza 2000:1; Pretorius 2000(a):6).

As a result of the 2000 curriculum review as stated in the preceding paragraph, the National Curriculum Statement (NCS) for Grades R–9 become official government policy during May 2002. The NCS is not a new curriculum, but a streamlined and strengthened version of Curriculum 2005 (DOE (Sa):2, 6).

Regarding grades 10 to 12, a National Curriculum Statement was published during 2005 which details the new school curriculum for grade 10-12 learners (Pandor 2005:12). From 2006 all learners entering grade 10 will be required to take seven subjects. Four subjects are compulsory namely two languages, mathematics or mathematical literacy and life orientation. The remaining three subjects must be chosen from the list of 29 approved subjects. The present Senior Certificate (standard 10) will be known as the National Senior Certificate. The aim, of making mathematics or mathematical literacy compulsory, is to ensure that learners are adequately prepared to meet the challenges of a technological, numerical and data driven 21st century. Life orientation will lay the foundation for learners to become responsible citizens by assisting them to understand personal, community and environmental issues and thus, meet the challenges of their world. To successfully complete their subjects, learners will be required to read and write extensively, think carefully and become critical and curious learners. Additionally, they must be able to conceptualise and apply knowledge and be conversant with the social, moral, economic and ethical issues in South Africa and globally. From a humanistic-educative-caring perspective, if the latter stated aspects are ingrained in the knowledge, skills and values that learners will have after completion of grade 12, then nursing programmes will have a solid foundation on which to build a caring, educated, responsible, compassionate and competent nurse.

### **5.2.3 The South African Nursing Council (SANC)**

#### **5.2.3.1 Documentation**

A discussion document entitled: “A unified nursing education system for South Africa”, was disseminated by the then South African Interim Nursing Council during 1996. In the glossary to this document (SAINC 1996:11), reference is made to value frameworks in the definition of capabilities. Capability is defined as “a basic enabling component of performance which involves generic abilities acting in relation to defined content areas, contexts and value frameworks”. In the definition of performance, reference is again made to values and in

addition, the word *holistic*, is added. Performance is defined as holistic or integrated demonstrations of mental, affective and manual activities. All the latter concepts are found in the Bevis and Watson model that is used as the conceptual frame of reference underlying the present study (see figure 1.1; appendix E). For example, during reciprocal interactions the tutor provides a climate that communicates a valuing of caring and concern as the moral imperative of nursing (see appendix G). Additionally, performances also express particular values. Demonstration of performance for assessment requires completion of specified tasks, as well as an explanation of the rationale for doing tasks in particular ways. This latter aspect is a definite move away from behavioural objectives and just observing a change in the behaviour of the student.

Regarding the concepts education and training, although the word training is not specifically stated, the document does refer to education and skills and specific reference is made to *educated* and *competent*. In the term *generic*, reference is made to the dichotomy of qualifications for learning to learn as opposed to learning to do.

In institutions that adhere to liberal and general teaching, their graduates are regarded as educated. Other institutions concentrate on special or vocational teaching and refer to their graduates as competent. The South African Interim Nursing Council (SAINC) stated that regardless of the balance that is desired between the *liberal* and *vocational teaching* components of undergraduate education, there are generic or transferable attributes that are applicable in a diverse range of settings or contexts. For example, generic skills in nursing are those skills that are basic to nursing in all situations including preventive, promotive, curative and rehabilitative. An example of such a skill may be the physical assessment of a patient (SAINC 1996:13).

Bellis (1997:32) stated that skill is more than the performance or execution of a manual skill and suggests that a skill be viewed as *a generalised performed capability in any domain of human learning and endeavour*. Additionally, he states that competence is more than *merely the correct performance of a task*. Learning, when viewed within the context of the NQF, is described as an outcome. This outcome is a statement of learning capability and is viewed as integration of the ability to *perform* and *understand* a task. At this point, it is important to

indicate that “*task*” by virtue of the word “*understand*” appears to incorporate cognitive tasks but no affective tasks. This is contradictory to the Bevis and Watson paradigm (1989:52-53). The latter paradigm views the affective dimension, including attitudes, self-esteem, interests, feelings, emotions, caring and values, as a very prominent and important aspect that must be incorporated in the curriculum (Beane 1990:3, 62, 126; Beane 1991:29; Bevis & Watson 1989:39, 42, 47, 52-53, 102; Gable 1986:3-4; Taber 1989:33; Montalvo 1989(a):43; Ward 1989:53).

According to the Bevis and Watson paradigm (1989:93-94, 265) a nurse should render holistic nursing care for which she has to be a knowledgeable and skilled practitioner. Skilled practitioner implies that at certain times and under certain conditions, she will have to perform skills such as pressure care. Therefore, when she is taught a skill, types of learning that lead to training, namely item and directive learning, will be employed. However, it is important that the student does not only perform the skill but that she also understands the underlying reason for its implementation and performs it with a caring attitude (Bevis & Watson 1989:80-81, 91; see section 2.3).

The World Health Organization (WHO) (2000 cited in Fraser, Killen & Nieman 2005:231) defines the competence of nurses as “broad composite statement(s) derived from nursing and midwifery practice, which describe a framework of skills reflecting knowledge, attitudes and psycho-motor elements”. The latter definition is in line with the concepts envisaged by Bevis and Watson (1989:93-94, 265).

#### **5.2.3.2 The Nursing Act 2005 (Act no 33 of 2005)**

The inception of a new, democratic government during 1994, led to transformation in all spheres of South African life. The South African Nursing Council (SANC), is a statutory council falling under the jurisdiction of the Department of National Health. The current law indicates that statutory councils are there to protect the interests of the profession rather than those of the general public. Consequently, the minister of health established a task team to investigate the transformation of all statutory councils and the level of protection afforded the public (South Africa 2005(c):31).

The aim of the Nursing Act 33 of 2005 is to transform the SANC in order to afford greater protection of public interests and to promote increased accountability by council members and the registrar. During the execution of the Nursing Act 33 of 2005, which still has to be promulgated, cognizance has to be taken of the requirements of the National Health Act 61 of 2003 and other relevant legislation (SANC 2006:1; South Africa 2005(a):5, 32). For example, to meet some of the requirements of the National Health Act 61 of 2003, SANC has to ensure that nurses are produced who treat patients with dignity, see to their physical and psychological safety and maintain confidentiality and privacy (Geyer 2006:48; Kearns 2005:47; South Africa 2003:9-10, 12).

In line with the South African Qualifications Act 58 of 1995, the Nursing Act 33 of 2005 refers to the following:

- learner nurse instead of student nurse
  - nursing education programmes instead of nursing courses
  - education and training quality assurer (ETQA) and by implication OBE and NQF
  - Recognition of Prior Learning (RPL)
- (South Africa 1995:6, 18; South Africa 2005(a):5, 7-8, 30).

To date the SANC has not produced an official RPL policy. However, the Gauteng RPL committee has formulated a standardised RPL policy which was implemented during 2006 by three Gauteng nursing colleges (GDOH 2003(b):1-13; SANC 1999(a):4, 17-20); South Africa 2005(a):4-6, 18).

#### **5.2.4 The National Health Plan**

The 1994 African National Congress's (ANC) National Health Plan (NHP) was based on a primary health care approach. The NHP was linked to the Reconstruction and Development Plan (RDP) which involved all sectors of society. Health was viewed as an integral part of the socio-economic development plan of South Africa (ANC 1994(a):7-8). The National Health Plan (ANC 1994(a):9-11, 19, 90) stipulated the following principles that were applicable to nursing education:

- nursing education should be community based and problem orientated
- the health worker should be an adaptable practitioner.

In line with the National Health Plan, problem orientation is implied in the Bevis and Watson conceptual continuum Typology of Learning. One of the types of learning, namely inquiry learning, contains concepts that help the student to learn how to identify, clarify and categorise problems encountered in nursing. The Typology also contains ways or approaches to solving these problems, for example, investigating, theorising, researching, questioning and analysing (Bevis & Watson 1989:92, 94).

The current national health priorities are outlined in the ten-point plan and the following points are applicable to nursing education:

- improved quality of care
- improving human resource development and management (GDOH 2003 (a):8)
- the GDOH state in the 2003–2006 strategic plans, that the national health priorities are endorsed by the department. Part of the mission statement of the GDOH indicates that the department will provide quality health services by ensuring a caring climate for service users and providing excellent training for health workers. One of their value statements indicate that the health services should be of high quality; combining sound treatment with a caring and supportive environment (GDOH 2003(a):8-9).

#### **5.2.4.1 Human resource development**

In support of national health priorities, the government's human resource development strategy is closely linked to what nursing students learn. South Africa requires an adaptable workforce. Therefore, South Africa can no longer afford to educate learners for employment, that is, education to perform a specific job, but must educate the learner of the 21st century for employability, that is, education to adapt acquired skills to new working environments (Masitsa 2002:497; SAQA 2002(b):2). Consequently, tertiary educational programmes have a social responsibility to ensure that students completing programmes are equipped to transfer their knowledge and skills to any work situation. In an ideal situation this would imply that a student, on completion of a course, would easily find employment. However, many factors such as poor economic growth lead to high unemployment (Pretorius 2003:16). From a humanistic-educative-caring viewpoint, this implies that student nurses should be educated to render care to patients in any clinical facility or situation after completion of their training. Additionally, they should develop a work ethic that guarantees that they will be available at all times for the patient who they will treat humanely and with dignity and respect.

#### **5.2.4.2 The Reconstruction and Development Programme (RDP)**

The Reconstruction and Development Programme (RDP) provided an integrated, coherent, socio-economic policy framework with the central objective of improving the quality of life of all South Africans (ANC 1994(b):1, 15). The RDP also stipulated that, a single, national ministry responsible for education and training had to be developed. One of the responsibilities of the Ministry was to manage higher education and training (ANC 1994(b):61).

Although the RDP ministry was abolished in 1996, many of its concepts and principles are still pertinent to a humanistic-educative-caring curriculum paradigm (ANC 1994(b):43-48; Munusamy 2002:1).

The following principles were formulated:

- management practices that support effective and caring health care
- respect for human rights
- accountability
- community involvement and empowerment
- cost-effective health care delivery
- co-operation with traditional healers
- implementation of the National Health Plan with a primary health care approach within the context of comprehensive health care delivery.

The Bevis and Watson model (Bevis and Watson 1989:xi, 29, 39, 42, 92, 94, 183-184) also advocates concepts such as caring, accountability and respect for human rights.

#### **5.2.4.3 Batho Pele Principles and Patients' Rights Charter**

In addition to the educated, caring nurses, Gumbi (SANC 2001:4) states that South African nurses in the 21st century must be critical thinkers and competent practitioners in order to provide holistic health care to the multicultural society. The SANC views the provision of quality health care, based on the Department of Health's ten point plan for 1999-2004, as one of its key challenges. Additionally, caring as the essence of nursing must once again receive

pre-eminence in nursing. Therefore, the SANC will undertake a caring campaign to promote caring within nursing and restore the caring ethos. During the campaign, the emphasis will be on the professional values of nursing within the framework of the Batho Pele Principles and the Patients' Rights Charter as formulated by the Department of Health (DOH 2003:1-3).

The Batho Pele Principles are consultation, service standards, access, courtesy, information, openness, redress and value for money (DPSA 2003:1-2). The Patients' Rights Charter encompasses a healthy and safe environment, participation in decision-making, access to health care, knowledge of one's health insurance/medical aid scheme, choice of health services, be treated by a named health care provider, confidentiality and privacy, informed consent, refusal of treatment, be referred for a second opinion, continuity of care and the right to complain about health services (DOH 2003:1-3; GDOH 2003(a):8, 39-40; Mzolo 2004; 29; SANC 2001:5, 10). Adherence to these principles will ensure the humanistic-educative-caring principle of a caring ethos which is evidenced by a caring, safe, healthy environment, open communication and joint decision making by the patient and the student nurse regarding the health care the patient will receive.

#### **5.2.4.4 The White Paper on the transformation of the health system**

The contents of the White Paper on the transformation of the health system in South Africa lean towards the education pole of the Training-Education Continuum of the conceptual framework underlying this study (see figure 1.1). The White Paper on the transformation of the health system in South Africa (South Africa 1997(c):15, 36, 60, 64-65) stated the following principles which are pertinent to nursing education:

- education and training programmes should be aimed at recruiting and developing personnel who are competent to respond appropriately to the health needs of the people they serve
- particular emphasis should be placed on training personnel for the provision of effective primary health care
- curricula for nurses should be revised and upgraded to include primary health care approaches
- the experience of people using the health system should be one of caring and compassion. A *culture of caring* has to be created throughout the health services. Credit

for displaying compassion and caring must be given during clinical examinations for health sciences students.

All the aforementioned principles, with special references to the last principle, are also contained in the Bevis and Watson model (see appendix G).

It must also be borne in mind that many countries, especially the United States of America, have laboured under an accreditation system where behaviourist or Tylerian prescriptiveness was indispensable for course accreditation and validation (Bevis & Watson 1989:128-129; Donley 1989:6; Martin 1989:109). In South Africa, one only has to refer to the various regulations and documents published by the South African Nursing Council, for example, programme objectives (South Africa 1985:2-3) and stage objectives (South Africa. 1985:2-3; SARV 1994:5, 7) for evidence of Tylerian prescriptiveness.

#### **5.2.4.5 The National Health Act 2003 (Act no 61 of 2003)**

The National Health Act 61 of 2003 aims to establish a framework to provide a uniform health system to all citizens. Additionally, rights imposed by the constitution are also included namely the right to access health care, emergency medical treatment, dignity, equality, life, bodily and psychological integrity, privacy, freedom of conscience, religion, thought, belief and opinion and the right to choose a trade, occupation or profession freely (Geyer 2006:48; Kearns 2005:47; South Africa 2003:9-10, 12). The Act also imposes responsibilities on the patient, for example, acceptance of the rules of the health care facility, provision of accurate health information and the signing of a discharge certificate if they refuse recommended treatment (South Africa 2003:9-10, 12).

Health workers also have rights such as the right to be protected against abuse by health care users (patients). According to Geyer and Zondagh (2004:31) they may, therefore, refuse treatment to verbally and psychologically abusive patients.

#### **5.2.5 The Moral Regeneration Movement in South Africa (MRM)**

Analysis of the present South African environment indicates a moral decay that cuts through the entire spectrum of society. We live in an uncaring, unethical, unjust society that has no

regard for human dignity, morality, the sanctity of human life and no respect for the law, other people and their property. The lack of moral values, coupled with escalating violence, corruption, abuse of women, children, infants and the elderly, has led to the launching of the Moral Regeneration Movement (MRM) by the South African government. Linking a humanistic-educative-caring paradigm to the MRM would lead to a more caring and value orientated society. The previously stated concepts are relevant to the Bevis and Watson model (ANC Today 2002:1-2; Bevis & Watson 1989:5, 41, 93-94, 142, 145; see section 1.3.3; Zuma 2002(a):1-4).

The quest by South Africa for a caring, humane society with ethical and socially responsible citizens had its beginnings during 1998 (ANC Today 2002:1). Leaders of political parties and religious communities met at a moral summit in Johannesburg in 1998 under the leadership of former President Mandela and committed themselves to a “Code of conduct for persons in positions of responsibility”. The former president and former deputy President, Jacob Zuma, initiated a series of workshops on moral regeneration, which resulted in the production of the booklet “Freedom and obligation” and planned the establishment of a national MRM.

In 2001 a Working Committee was appointed to promote the establishment of the MRM (Zuma 2002(a):2). A MRM summit was held at Pretoria, South Africa, on the 18th of April 2002. The purpose of the summit was to discuss the regeneration of the moral fibre of society by building on the values enshrined in the constitution. According to the Bill of Rights contained in chapter 2 of the constitution (South Africa 1997:2), the government is required to promote the democratic values of human dignity, equality, life, freedom and security of the people in a manner that serves the general good and the public interest. The aim of the summit was to formulate a national programme detailing how the moral regeneration of the South African nation would be attained (ANC Today 2002:2; MRM 2002(b):1; Zuma 2002(d) 1, 3).

Nursing education programmes should be aligned to the MRM launched by the government during 2002 via a humanistic-educative-caring curriculum. The purpose of the MRM is to regenerate the moral fibre of society by promoting values such as honesty, integrity, accountability, responsibility, human dignity and respect for life. If these values were internalised, South Africa would become a caring, humane, ethical society (ANC Today

2002:1-2; see sections 2.3, 2.5.3, 2.5.4; Zuma 2002(a):1-2); Zuma (2002(c):2); Zuma (2002(e):3).

## **5.2.6 The emerging social scene in South Africa**

### **5.2.6.1 Democracy**

The demise of apartheid and the dawning of democracy changed the entire landscape of South African society. In the new democratic South Africa, transformation has emphasised the principles of democracy, dignity, equality, caring and justice by enshrining them in the constitution (South Africa 1996:2, 8) and supported them by specific legislation such as the Human Rights Commission Act 54 of 1994 (Geyer & Zondagh 2004:31). However, the people may have attained freedom but with freedom comes responsibility. A humanistic-educative-caring paradigm is about responsibility and in line with democracy. In contrast, a behaviouristic paradigm leads to oppression.

### **5.2.6.2 Gender issues**

In South Africa, democracy has led to the emancipation and empowerment of women, especially the black women (South Africa 1996:2, 8). Economically, there has been a tremendous growth in the number of women who have entered the ranks of the employed work force. However, the majority of females still occupy low-status and low-paying positions and thus are the first ones to be retrenched or paid off when the economic situation worsens. Additionally, access to the paid workplace has enabled an increasing number of women to enter higher educational programmes and this has led to a need for child care services, the campaigning of women for political, commercial and legal rights such as actions to protect women against discrimination. Numerous acts, such as the Skills Development Act 97 of 1998 (Kearns 2005:47) and organisations such as People against the Abuse of Women (POWA), provide protection for women. With regard to a humanistic-educative-caring perspective, motherhood and femininity are associated with caring. Consequently, feminists might view caring and this paradigm as another attempt to keep them at a lower socio-economic level. However, this paradigm may also lead to women viewing caring as empowerment.

### **5.2.6.3 Family structure**

The family structure not only includes the nuclear and extended family but various other forms such as single parent homes, families where divorce has occurred, families in which both parents work, mixed families consisting of natural parents and stepparents, cohabitant families where the parents are unmarried and homosexual families and child-headed households (van Staden and du Toit 1998:160-166). All the latter referred to family structures have had a detrimental effect on family life.

The transformed family has to cope with situations such as interpersonal problems, the rejection of sex-role stereotypes, the mother having to work out of economic necessity and stress and violence due to women-, child-, alcohol- and drug abuse (van Staden and du Toit 1998:160-166). From a humanistic-educative-caring paradigm, nurses will have to be educated to provide nursing care in community settings at times that suit mothers, fathers and children and also in the homes of the community.

In addition to democracy, gender issues and family structure, numerous factors impact on and erode the caring ethic in nursing. In the next section politics, economics, AIDS and moral degeneration will be discussed, from a South African perspective.

## **5.2.7 Factors in nursing and nursing education that are erosive to the caring ethic**

Numerous factors impact on and erode the caring ethic in nursing. In the next section politics, economics, AIDS and moral degeneration will be discussed, from a South African perspective.

### **5.2.7.1 Politics**

One such factor eroding the caring ethic in nursing is the new political and social dispensation in South Africa. This dispensation resulted in the instant integration of cultures in both the educational and clinical nursing environment. Lack of knowledge of each individual's cultural practices led to cross-cultural and racial tensions and an uncaring environment. Language, both written and verbal, proved a major obstacle as many well-intentioned actions and interactions were misunderstood and misinterpreted with resulting conflict. Establishing and

maintaining genuine, caring relationships are extremely time consuming and physically and psychologically exhausting. All the cultural issues were compounded by the task-, time-, money- and objective driven and thus uncaring, nursing environment (van der Wal 1999(b):196).

In support of the uncaring environment, Minnaar (2003:37, 39) found that nurses did not experience caring or feel valued in the workplace. This finding is important, for in order to care an individual must experience care. Therefore, it may be assumed that these nurses cannot demonstrate caring and are not caring role models for students who require exposure to a humanistic, caring, educative learning environment. Consequently, the patients are deprived of a caring environment in which to receive quality care which is their constitutional right (South Africa 1996:6; South Africa 2003:9). A caring environment is important, as according to Minnaar (2002:35), the creation of a caring culture in health care facilities is a prerequisite for quality patient care.

#### **5.2.7.2 Economics**

Due to economic factors, posts have been cut with the resultant work overload of nurse educators (Minnaar 2003:39). Many nurses have become stressed and suffer from burnout syndrome. Apple (1999:101) refers to the negative working conditions of educators as intensification. For nurse educators, intensification presents numerous trivial and complex symptoms. These symptoms are manifested in a feeling of time urgency such as having no time to have a cup of coffee to having a total absence of time for social and interpersonal relationships and more importantly, caring teacher-student interactions. Contact with students becomes minimal and is confined mainly to the classroom and structured clinical guidance sessions. At these sessions, the nurse educator is concerned with getting through the content the student has to know and has no time to care and thus allow the student to learn from her as a caring role model. As the workload escalates, intensification makes the nurse educator feel frustrated, helpless, disempowered and unable to care for herself and the students. In this chronic, intensified work milieu, the nurse educator is powerless and finds it very difficult, if not impossible, to implement the principles of a humanistic-educative-caring curriculum paradigm, such as caring. The student suffers as she is now exposed to an environment

of behaviouristic principles such as uncaring, impersonal teacher-student interactions (Apple 1999:101).

### **5.2.7.3 AIDS**

Tutors are confronted with the ever-present and increasing phenomenon of having to deal with students suffering from AIDS in the classroom and in the clinical areas. Similarly, students have to cope with their peers, tutors, clinical staff and dying patients (Minnaar 2003:419). Coping with a terminal illness, suffering and dying on a daily basis and being compounded by intensification of work, drains the nurse educator psychologically and physically. The latter situation is not conducive to maintaining a caring attitude or environment. As stated in the previous paragraph, the situation is detrimental to the education of the student who needs to be exposed to caring for peers with AIDS and to feel cared for, if she has AIDS.

### **5.2.7.4 Moral degeneration**

Another factor that has eroded the caring ethic in nursing is the moral degeneration of the South African society. A general feeling of self-centredness and not caring about other people pervades society. Nursing is no more a calling; a service to mankind, but a job to earn money, as due to the high unemployment rate, work is scarce. Due to the changing nature of the family, lack of parental control and disrespect for authority, values such as goodness, honour, respect, honesty, tolerance, integrity, responsibility, accountability, respect for human dignity, the law and the sanctity of life are no longer taught in the home or the school. All these values are important for nursing and consequently, many individuals applying for nursing posts, lack these values. This lack of moral fibre spills over into the educational situation where the uncaring, “everything is my right” attitude leads to lack of commitment for taking responsibility for their own learning with a lack of knowledge and high failure rates and in the clinical situation, poor quality nursing care being provided to patients. This lack of moral fibre is yet another indication of the dire need for the implementation of a humanistic-educative-caring curriculum paradigm to ensure that a caring and ethical service is delivered to the patient. The moral degeneration of society led the government to establish the Moral Regeneration Movement (MRM) during 2002 (ANC Today 2002:1-2; Zuma 2002(a)).

### **5.3 SUMMARY**

Since 1994 South Africa has been a changing and evolving society. The new National Health Plan and changes to the general education system have necessitated changes in the nursing education programme. The moral degeneration of the South African society has reached such alarming proportions that the government has been compelled to institute a Moral Regeneration Movement (MRM) in an attempt to stem the tide of moral decay.

The literature review in this chapter revolved around recent trends and issues in South Africa. Related research studies were also discussed in order to obtain background knowledge and clarification regarding the problem under study.

In chapter 6, the quantitative research paradigm underlying this study is discussed. The research design, technique and instruments, sampling design, pretest study and reliability and validity, during and after data collection and analysis, are described.

## **CHAPTER 6**

### **RESEARCH METHODOLOGY**

#### **6.1 INTRODUCTION**

The foundation of the research has been set in the preceding chapters 2, 3, 4 and 5. Chapter 2 contains the conceptualisation of the conceptual framework on which the study is founded (the Bevis and Watson Humanistic-Educative-Caring Paradigm); in chapter 3 the Behaviouristic Paradigm is discussed; chapter 4 contains literature supporting the Humanistic-Educative-Caring Curriculum Paradigm; and in chapter 5, recent trends and issues relating to South Africa are discussed.

In this chapter, the quantitative research design underlying the study is discussed. The design is founded on the conceptual framework underlying the research as explained in chapter 2 and contains hypotheses deduced from the conceptual framework, the development and refinement of the research instrument, that is, the self-designed questionnaire and the quantitative design intended to test the stated hypotheses and to describe the behaviourist and educative, caring educational environment at two nursing colleges in the Gauteng Province. Consequently, this chapter also deals with aspects relating to the sampling design, pretest study, validity and reliability issues.

#### **6.2 THE CONCEPTUAL FRAMEWORK AND HYPOTHESES**

The reader is referred to the conceptual framework (see figure 1.1.), relating to the Behaviouristic/Tylerian rationale versus the Humanistic-Educative-Caring Paradigm, as proposed by Bevis and Watson (1989) on which this research is founded (see chapters 2, 3 and 4). The folder insert (see appendix E) can also be used for easy reference.

### **6.3 RESEARCH METHODOLOGY FOR THE DEVELOPMENT AND TESTING OF THE INSTRUMENT**

The study consisted of a developmental and testing phase. This design was chosen as it facilitates the development, validation and evaluation of research instruments and techniques (LoBiondo-Wood & Haber 2002:222, 229-231; Polit & Beck 2004:245, 263, 268; Wilson 1993:135, 335). For the developmental phase, a qualitative approach was used to develop the items for the instrument and within the quantitative approach, a non-experimental research design was undertaken to test the measuring instrument (questionnaire). These two phases are discussed in the remainder of the chapter.

### **6.4 DEVELOPMENTAL PHASE**

At this point, please note that with regard to the developmental testing of the instrument, all the detail pertaining to the “problems” encountered are indicated in this thesis to serve, in addition to a source of scientific knowledge, as a source of research “know how” and education and training for future students. Burns and Grove (2003:303) state that it is important to indicate the problems encountered, but it is even more vital to indicate how the problems were resolved.

The items for the questionnaire(s) were developed from the original criteria obtained during a previous study by the researcher. During the current research, the items were substantiated and expanded on by means of a literature review.

Table 6.4 indicates examples of items from each conceptual continuum. The items indicate the student preference from a humanistic and behaviouristic orientation. The reader is referred to appendix H for a detailed description of all the items developed for the instrument, from both the preference of the student and the perception that the student has of the tutor and the college.

#### **6.4.1 Data collection and refinement**

During the developmental phase, empirical referents (Chinn & Cramer 2004:146; Walker & Avant 1995:46) were formulated using the original criteria obtained in a previous study by Mouton (1997). The criteria in the Bevis and Watson model were substantiated and expanded

on by means of a literature study which involved national and international literature such as books, articles and research studies (Bless & Higson-Smith 1995:106-108, 111, 114; LoBiondo-Wood & Haber 2002:55, 78-83, 101, 103; Polit & Beck 2004:48, 56, 89, 96, 111).

The developmental phase involved the refinement and adaptation of all the concepts contained in the conceptual framework namely the:

- Curriculum Focus
- Criteria (empirical referents) for the six conceptual continuums namely the Learner Maturity Continuum, Teacher-student relationship, Teacher-student structure, Typology of Learning, Criteria for Teacher-Student Interactions and Criteria for Selecting and Devising Learning Experiences
- Training-Education Continuum
- Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm and
- Stimulus-Response (Behaviourist) Curriculum Paradigm (see sections 2.2, 2.4).

Additionally, a scale and instructions for respondents was developed.

#### **6.4.2 Validation of data during the developmental phase**

In an attempt to ensure the validation of data all the following were implemented: focusing on the concepts contained in the conceptual framework, implementing different scales, refining instructions for the respondents and reviewing relevant research articles and studies.

#### **6.4.3 Data analysis**

During the developmental phase, data were analysed by means of descriptive techniques such as bracketing, intuiting, reflection and content analysis according to Polit & Beck (2004:263, 571, 578-580, 595, 714; Polit & Hungler 1987:362-366) namely the:

- selection of the unit of content to be analysed.
- development of a category system for classifying the units of content.

##### **6.4.3.1 Content analysis**

The *process of content analysis* according to Polit & Hungler (1987:362-366; Polit & Beck 2004:263, 595, 714) involved the following:

- *Selection of the unit of content to be analysed*

The units of analysis applied during this study were words and themes. A theme is defined as a phrase, sentence or paragraph embodying ideas or making an assertion about some topic (Polit & Hungler 1987:364; Polit & Beck (2004:263, 571, 580).

- *Development of a category system for classifying the units of content*  
Categories derived from the conceptual framework were developed through a literature review. The categories comprised six conceptual continuums namely the Learner Maturity Continuum, the Teacher-student relationship, the Teacher-student structure, the Typology of Learning, the Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences (see folder insert: appendix E; see sections 2.2, 2.4).

Each category was also divided into a sub-category for example Learner Maturity Continuum into mature and immature positions (see figure 1.1). A coding system was then developed for each category and sub-category. Each category, sub-category and the coding system were based on the conceptual framework underlying this study and guidelines as stated by Miles and Huberman (1984:57).

The reader is reminded that for the present study, the researcher added the two conceptual continuums Teacher-student relationship and Teacher-student structure to the four Bevis and Watson mini-models. The Teacher structure and the Student self-structure were combined to form the Teacher-student structure. Therefore, throughout this study the six concepts depicted in the conceptual framework are referred to as conceptual continuums.

#### **6.4.4 Developmental testing phase: pretesting of the instrument**

The instrument was tested to detect any problems that may be encountered during the research study. The instrument was tested for clarity of instructions, relevancy, usability and completion time, to refine and introduce modifications where required and to ascertain validity and reliability (LoBiondo-Wood & Haber 2002:189-190, 301; Trece & Trece 1986:379, 382).

At this point, it is pertinent to note that some of the problems encountered during the testing of the instruments might have been due to the existing power differential that existed between the researcher and respondents. If the instruments had been tested at another college, the testing phase might have revealed different problems. The respondents participating in the pretesting of the instrument were not included in the main study.

The instrument was presented to two experts for their comments and recommendations prior to, during and after the pretest study. The two experts have Master's degrees and experience in quantitative research. Face validity of the questionnaire was confirmed by these experts after having evaluated the content, the technical presentation, instrument design namely the layout, quality and colour of paper, method of reproduction, typographic quality, clarity of instructions, relevancy, ease of completion and completion time. It is important to note that the establishment of face validity of the instrument has a long history as it commenced during the previous study by Mouton (1997), as mentioned earlier in section 1.2.1 and has repeatedly, at different points during the development of the instrument, been confirmed.

In the next section, the testing of different instruments during the developmental phase is discussed within the following framework:

- description of the instrument
- sampling design
- sampling method and size
- administration of the instrument, post-pretest questionnaire and the 10-minute discussion
- results of the testing of the instrument according to the analysis of the instrument, post-pretest questionnaire and the 10-minute discussion.

#### **6.4.4.1 Testing the items using the Visual Analogue Scale (VAS)**

##### **6.4.4.1.1 Description of the VAS instrument**

The first questionnaire format in which the items were contained consisted of Visual Analogue Scales and a number of items which respondents had to rank in order of preference, using a 1 to 4 or 1 to 7 scale. The analogue and ranking scales provide for

finer measuring and were implemented to enhance the validity and reliability of the questionnaire as both scales are easy to construct, administer and to score (Quilter, Band & Miller 1999:2; Visual Analogue Scales 2003:1). Biographical data obtained included the year group of respondents and the name of the nursing college.

The dichotomous nature of the conceptual model, that is, differentiation between a behaviouristic versus a humanistic-educative-caring orientation within the nursing colleges, in different domains (see the six conceptual continuums) required questionnaire items that would reflect this dichotomous nature of the conceptual model. A visual analogue scale (VAS), at that point in time, appeared to be a logical choice.

A visual analogue scale consists of a 100-millimeter horizontal line dividing two extreme descriptive ends of conduct being studied (Burns & Grove 2003:280-281; Polit & Beck 2004:354, 356, 735). Respondents are requested to indicate, by drawing a vertical line across the horizontal line, the level to which the construct, emotion, behaviour, or whatever else is represented by the VAS, is being experienced. To score or measure the construct, the marked off line is measured. As is the case with other measuring scales, the VAS also has direction and caution needs to be taken in which direction measurements are made. For example, respondents might be requested to indicate their orientation towards making mistakes in the clinical area on the following scale:

I feel free to make mistakes \_\_\_\_\_|\_\_\_\_\_ I am afraid to make mistakes

In the preceding example, the statement on the left represents a more humanistic-caring-educative orientation compared to the more behaviourist and Tylerian rationale orientation on the right. In real dimensions, the “|” might be situated 28mm from the left and 72mm from the right end of the horizontal line. From a humanistic-educative-caring point of view, the respondent’s orientation is thus 72 towards the humanistic-educative-caring end and 28 towards the behaviouristic and Tylerian end.

A visual analogue scale is easy to construct, to administer and to score. During the first testing of the instruments, the visual analogue scale, using horizontal lines, was implemented. The lines were computer generated and measured exactly 100mm (Quilter et al 1999:2; Visual Analogue Scales 2003:1).

#### **6.4.4.1.2 Sampling design used for the VAS instrument**

A probability sampling design was chosen to enhance representativeness, validity and reliability (LoBiondo-Wood & Haber 2002:247; Polit & Beck 2004:291, 295).

#### **6.4.4.1.3 Sampling method and size used for the VAS instrument**

The sampling method used was a simple, random sample. The sampling frame consisted of a consecutively numbered name list of the respondents from the second level of training (Polit & Beck 2004:295-296) from a nursing college in Gauteng. All the numbers, corresponding to the name list, were placed in a container and eleven respondents, who met the stated sample eligibility criteria, were selected (see section 6.5.2.2).

#### **6.4.4.1.4 Administration of the VAS instrument**

An appointment was made with the selected respondents. All the principles of good questionnaire administration were adhered to during the pretest study. A climate, conducive to the successful administration of a questionnaire, was created by ensuring a safe, physical and psychological environment (see section 6.5.3.5).

All questionnaires were administered on a pre-arranged date to all eleven respondents simultaneously in a classroom. After completion of the VAS instrument, the post-pretest questionnaire was completed by respondents and a 10-minute discussion was held.

#### **6.4.4.1.5 Results of the testing of the VAS instrument**

Although the researcher initially explained the study and the completion of the questionnaire in great detail, the researcher observed that during the administration of the instrument, the respondents were having difficulty with completing the questionnaire. The respondents indicated that they did not understand the instructions. The researcher again explained in great detail how to complete the questionnaire but the respondents still had difficulty in completing

the questionnaire. The respondents took one hour and fifteen minutes to complete the questionnaire. The questionnaire consisted of 166 items using the Visual Analogue Scale plus 2 questions requiring ranking with a choice of 7 items and 3 questions, requiring ranking with a choice of 4 items.

#### **6.4.4.1.6 Outcome of the VAS pretest**

The analysis of the VAS questionnaire indicated the following:

- Respondents found it difficult to decipher exactly where they placed themselves on the analogue scale (line). Consequently, they tended to: mark either extreme points on the scale; marked down the middle of the line; encircled words at point 10 end; placed two marks on the scale; placed a cross at one pole and a line at the other pole, thus invalidating the findings and results of the questionnaire.
- Some respondents just used a cross and marked either number 1 or 10 and on some pages it looked as if they had just alternated with marking crosses, that is, question number one was marked at 1 (1 cm) and question number 2 was marked with a 10 (10cm) and so forth.
- Some respondents omitted an entire page of items.
- When asked to rank items respondents used ticks instead of numerals, for example, 1, 2 or 3.
- It looked as if some respondents just marked all the items in one continuous straight line, in one direction, ignoring the reverse placement of polar ends and gave no thought to what was actually being asked.
- They found some of the questions confusing and had difficulty understanding exactly what was being asked, for example, in the following question:

50. Indicate the relative importance of each of the following aspects as these relate to patient care during your everyday nursing care:

50.1	Not at all	Physical	Absolutely
50.2	Not at all	Psychological	Absolutely
50.3	Not at all	Social	Absolutely
50.4	Not at all	Spiritual	Absolutely

- When instructed to rank items in order of preference, for example, in the following question, they merely ranked them in numerical order, for example, 1-7, without thinking about what was being asked:

145. Arrange the following seven (7) teaching strategies in the order in which *you prefer them* indicating your most preferred teaching strategy by 1 and the least preferred strategy by 7.

Lecture	1
Group discussions	2
Group assignments	3
Individual assignments	4
Library assignments	5
Experiential learning	6
Problem solving	7

#### 6.4.4.1.7 Results of the post-pretest questionnaire

Analysis of the post-pretest questionnaire (see appendix F(i)) using the VAS instrument indicated the following:

##### The research study

Respondents were satisfied with the way the research study was explained to them.

#### ❑ **The VAS questionnaire**

- **Explanation of the questionnaire**

Respondents were satisfied with the way the questionnaire was explained to them.

- **Technical presentation of the questionnaire**

Respondents were dissatisfied with the layout of the questionnaire. The VAS (the line) confused them.

- **Instructions for the ranking scale**

Respondents indicated that they understood the instructions for completing the ranking items within the questionnaire. However, the physical examination of the questionnaire revealed that the respondents may have understood the instructions but merely responded by marking the items strictly in numerical order of 1 to 4 without giving thought to their real preference of these items within the questionnaire.

- **Instructions for the visual analogue scale**

Some respondents did not understand the instructions for completing the questionnaire. The latter aspect is confirmed in section 6.4.4.1.5.

- **Time required for completion of the questionnaire**

Within the questionnaire, the items were too long and the scale was not easy to complete. As previously stated, it took one hour and 15 minutes for respondents to complete the VAS questionnaire.

- **Formulation of the questions.**

- Respondents stated that there appeared to be repetition of questions which confused them at times.
- Some respondents did not understand the questions.

#### ❑ **Additional comments by the respondents**

- The Likert scale would have been better, using numbers, for example 1-4.
- The Visual Analogue Scale confused the respondents.
- Respondents hoped that any information gathered from this research would be used at the college to help them to do better during the completion of their academic programme.

- Respondents believed that a numbered scale would have given them more options when indicating their preference or perception of the items asked.

#### **6.4.4.1.8 The 10-minute discussion**

After the respondents had completed the post-pretest questionnaire, the researcher held a 10-minute discussion with the respondents who verbalised the following aspects:

- They found the concept of the analogue scale difficult to interpret; they found it difficult to decide on which side of the scale they thought they were at and when they eventually decided, they found it difficult to decide where to place their mark on the scale (10cm line).
- They indicated that they would have preferred to have a scale, with numbers such as 1 to 4, which required them to only indicate their preferred choice.
- They indicated that they hoped that answers to the questions relating to the tutors would be noted and responded to as they wished that tutors, in the educational environment, would act according to the statements in the items that they had just completed.

#### **6.4.4.2 Consideration of a Likert Scale**

As a result of the preceding findings, the researcher reformulated all the items according to the Likert Scale. Items were grouped under the relevant conceptual continuums as proposed by Bevis and Watson (1989:81; see appendix E). However, this resulted in twice as many items to measure both the behaviouristic and the humanistic-educative-caring sides of the continuum, implied for each of the conceptual continuums contained in the conceptual framework.

In addition, items could not be placed in such a manner as to enable respondents to conceptually link items from both the behaviouristic and the humanistic-educative-caring sides of the continuum, in order to decide what exactly their preferences and perceptions are.

To the researcher it was of the utmost importance to maintain the dichotomous structure provided by the conceptual model as indicated previously. Consequently, the Two-Choice Comparative-Value-Statement Items, designed from the improved polar statements contained in the original visual analogue scale, was implemented. The exercise in developing the polar

end of the VAS, thus, proved to have been a truly worthwhile exercise as it forced the researcher to think laterally and to construct items that represent the same mental image in both the behaviouristic and the humanistic-educative-caring domains.

### 6.4.4.3 The administration of the second instrument using the Two-Choice Comparative-Value-Statement Items

#### 6.4.4.3.1 Description of the instrument

The second questionnaire consisted of questions constructed by using the Two-Choice Comparative-Value-Statement Items. This scale gives the respondent the opportunity to make a comparison between two value items and then choose either statement [a] or [b] or [1] or [2] (see figure 6.1). The two items indicated either a humanistic or behaviouristic educational focus as maintained by respondents. As indicated, the pairs of items are in line with the dual and comparative nature of the Bevis and Watson conceptual model on which the study is founded. In addition, these paired items create a frame of mind within which the respondent has to make a choice.

Item Numbers	ITEM	Indicate Choice a or b	For Office Use only
1	(a) I prefer lectures (b) I prefer self study	<input checked="" type="checkbox"/> b	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

**FIGURE 6.1: AN EXAMPLE OF A TWO-CHOICE COMPARATIVE-VALUE-STATEMENT ITEM**

The questionnaire consists of two sets of items (see appendix H). The first set of items was designed to test for respondent preference (student items) as an indication of their level regarding the different conceptual continuums. For example, in item pair 18, the student chooses between the statements “I prefer tutors to be role models” or “I prefer tutors to be co-learners”. In the second set of items (tutor items), the previous items were rephrased to test the perception respondents have of the tutor/college as indicated by the six conceptual continuums. For example, in item pair 100 (corresponding to item pair 18), the respondent chooses between the statements “Tutors are role models”

or “Tutors are co-learners”. The 181 items comprising the questionnaire were distributed amongst the six conceptual continuums (Bevis and Watson) as indicated in table 6.1.

**TABLE 6.1: DISTRIBUTION OF THE 181 ITEMS**

<b>CONCEPTUAL CONTINUUMS</b>	<b>STUDENT ITEMS</b>	<b>TUTOR ITEMS</b>
Learner Maturity Continuum	20	19
Teacher-student relationship	13	11
Teacher-student structure	11	10
Typology of Learning	16	14
Criteria for Teacher-Student Interactions	13	16
Criteria for Selecting and Devising Learning Experiences	17	21
<b>TOTAL</b>	<b>90</b>	<b>91</b>

In addition to the 181 items, questions on biographical detail were also included regarding the following: the year group of respondents; the name of the nursing college, the college block period attended during the research and the mother tongue of the respondents.

The advantages of implementing the Two-Choice Comparative-Value-Statement Items are that it is easy to construct, administer and to score and it frames the respondents' minds. The disadvantage is that low Cronbach alpha readings are usually obtained.

#### **6.4.4.3.2 Sampling design**

A probability sampling design was chosen to enhance representativeness, validity and reliability (LoBiondo-Wood & Haber 2002:247).

#### **6.4.4.3.3 Sampling method and size**

The sampling method utilised was a simple, random sample and the sample size consisted of nine (9) respondents (LoBiondo-Wood & Haber 2002:247).

It was decided to administer the Two-Choice Comparative-Value-Statement Items to nine (9) respondents, comprising four of the eleven respondents who had originally completed the first questionnaire using the Visual Analogue Scale and five new respondents.

These four original respondents were now in their third level of training, as the first testing of the instrument had been conducted during 2004 when they were in their second level of training. It was decided to use the 4 original respondents as they could compare the two scales and see if they preferred the Two-Choice Comparative-Value-Statement Items to the Visual Analogue Scale. The five new respondents were used, as their use of the instrument would not be *contaminated* by previous exposure to the instrument and thus enhance validity.

The sampling method used for the original four (4) respondents, who had originally completed the first questionnaire using the Visual Analogue Scale, was a simple, random method. The original eleven (11) names were placed in a container and four (4) names were selected. The sampling method used for the additional five (5) respondents was a simple random method. The sampling frame consisted of a consecutively numbered name list of the respondents from the third level of training (Polit & Beck 2004:295-296). All the numbers, corresponding to the name list, were placed in a container and five (5) respondents, who met the stated sample eligibility criteria, were selected as the sample (see section 6.5.2.2).

#### **6.4.4.3.4 Administration of the Two-Choice Comparative-Value-Statement Items**

The questionnaires were administered on a pre-arranged date and time to all four original respondents in the clinical department of the hospitals where the respondents were placed for their clinical practica. The latter aspects also counteracted the possible contamination and cross-influencing by respondents. The dates were the same but the times differed as the researcher had to travel to two hospitals where the respondents were working.

The questionnaire was also administered on a pre-arranged date and time to all five of the new respondents simultaneously in a classroom. All the principles of good questionnaire administration were adhered to during the pretest study. Ensuring a safe physical and psychological environment (see section 6.5.3.5) created a climate, conducive to the successful administration of the questionnaire.

After completion of the instrument using the Two-Choice Comparative-Value-Statement Items, the post-pretest questionnaire was completed and a 10-minute discussion was held.

#### **6.4.4.3.5 Results of the testing of the Two-Choice Comparative-Value-Statement Items**

The complete procedure for the administration of the instrument took one hour as detailed below:

- During the first 10 minutes the researcher gave a detailed explanation of the study and the instructions for the completion of the questionnaire.
- The respondents took 30 minutes to complete the questionnaire. Thus, the time to complete the questionnaire, decreased by 45 minutes, that is, from one hour 15 minutes to 30 minutes. The latter is indicated in the literature as decreasing respondent fatigue and adding to the reliability of measurements (see section 6.4.4.3.7; Polit & Beck 2004:417).
- The respondents took 10 minutes to complete the post-pretest questionnaire.
- A 10-minute discussion was held.

#### **6.4.4.3.6 Outcome of the Two-Choice Comparative-Value-Statement Items pretest**

Analysis of the questionnaire indicated the following:

- One respondent used a capital A and B instead of lower letters to indicate their preference when answering the questions.
- Two respondents crossed out their first answer and then chose another answer thus invalidating the findings and results of the questionnaire.
- During the analysis of the questionnaire the scoring took 10 minutes per questionnaire and data capturing on the computer took 10 minutes per questionnaire (see table 6.2).

The results, in table 6.2, indicate that the majority of respondents “preferred” to be in an educative learning environment. Conversely, they perceived tutors as maintaining a *training* learning environment. The purpose of analysing the responses of the respondents was to refine the items and the layout of the questionnaire. However, due to the limited number of respondents, the statistical findings cannot be used to test the hypotheses.

**TABLE 6.2: RESULTS OF ANALYSIS OF THE QUESTIONNAIRE AFTER THE PRETEST STUDY**

Item Number	Conceptual Continuums		A Score		B Score		C Score		D Score		E Score		F Score		G Score		H Score		I Score		Total Items
			H	B	H	B	H	B	H	B	H	B	H	B	H	B	H	B	H	B	
<b>1 – 20</b>	St L Mat Con Pos	Number	17	3	11	9	10	10	14	6	10	10	13	7	16	4	14	6	13	7	<b>20</b>
		Score	Educate		Educate		Equal		Educate		Equal		Educate		Educate		Educate		Educate		
<b>21 – 33</b>	St L Mat Con Pos T/st Relationship	Number	12	1	11	2	10	13	10	3	8	5	10	3	8	5	12	1	12	1	<b>13</b>
		Score	Educate		Educate		Train		Educate		Educate		Educate		Educate		Educate		Educate		
<b>34 – 44</b>	St L Mat Con Pos T/st Structure	Number	8	3	6	5	6	5	7	4	4	7	9	2	6	5	9	2	2	9	<b>11</b>
		Score	Educate		Educate		Educate		Educate		Train		Educate		Educate		Educate		Train		
<b>45 – 60</b>	St Type L	Number	9	7	11	5	12	4	11	5	7	9	10	6	9	7	15	1	12	4	<b>16</b>
		Score	Educate		Educate		Educate		Educate		Train		Educate		Educate		Educate		Educate		
<b>61 – 73</b>	St T/st Interactions	Number	9	4	10	3	6	7	12	1	6	7	8	5	8	5	9	4	8	5	<b>13</b>
		Score	Educate		Educate		Train		Educate		Train		Educate		Educate		Educate		Educate		
<b>74 – 90</b>	St Select Devise	Number	14	3	15	2	12	5	12	5	7	10	12	5	12	5	15	2	8	9	<b>17</b>
		Score	Educate		Educate		Educate		Educate		Train		Educate		Educate		Educate		Train		
	Total Student Number		<b>69</b>	21	<b>64</b>	26	<b>56</b>	34	<b>66</b>	25	42	<b>48</b>	<b>62</b>	28	<b>59</b>	31	<b>74</b>	16	<b>55</b>	35	<b>90</b>
	<b>Overall result</b>		<b>Educate</b>		<b>Educate</b>		<b>Educate</b>		<b>Educate</b>		<b>Train</b>		<b>Educate</b>		<b>Educate</b>		<b>Educate</b>		<b>Educate</b>		

Continued on next page

Table 6.2: Continued

Item Number	Conceptual Continuums		A Score		B Score		C Score		D Score		E Score		F Score		G Score		H Score		I Score		Total Items
			H	B	H	B	H	B	H	B	H	B	H	B	H	B	H	B	H	B	
<b>91 – 109</b>	Tutor L mat Con Pos	Number	16	3	11	8	10	9	12	7	10	9	15	4	10	9	14	5	7	12	<b>19</b>
		Score	Educate		Educate		Educate		Train												
<b>110 – 120</b>	Tutor L Mat Con Pos T/st Relationship	Number	9	2	7	4	9	2	7	4	7	4	10	1	4	7	10	1	3	8	<b>11</b>
		Score	Educate		Train		Educate		Train												
<b>121 – 130</b>	Tutor L Mat Con Pos T/st Structure	Number	4	6	3	7	3	7	5	5	6	4	3	7	4	6	4	6	4	6	<b>10</b>
		Score	Train		Train		Train		Equal		Educate		Train		Train		Train		Train		
<b>131 – 144</b>	Tutor Type L	Number	12	2	11	3	8	6	6	8	12	2	11	3	11	3	9	5	9	5	<b>14</b>
		Score	Educate		Educate		Educate		Train		Educate		Educate		Educate		Educate		Educate		
<b>145 – 160</b>	Tutor T/st Interactions	Number	14	2	13	3	12	4	8	8	10	6	13	3	7	9	14	2	11	5	<b>16</b>
		Score	Educate		Educate		Educate		Equal		Educate		Educate		Train		Educate		Educate		
<b>161 – 181</b>	Tutor Select Devise	Number	16	5	11	10	11	10	14	7	13	8	15	6	7	14	18	3	6	15	<b>21</b>
		Score	Educate		Train		Educate		Train												
	Total Student Number		<b>71</b>	20	<b>56</b>	35	<b>53</b>	38	<b>52</b>	37	<b>58</b>	33	<b>67</b>	24	43	<b>48</b>	<b>69</b>	21	40	<b>51</b>	<b>91</b>
	<b>Overall result</b>		<b>Educate</b>		<b>Educate</b>		<b>Educate</b>		<b>Educate</b>		<b>Educate</b>		<b>Educate</b>		<b>Train</b>		<b>Educate</b>		<b>Train</b>		

#### **6.4.4.3.7 Results of the post-pretest questionnaire**

Analysis of the post-pretest questionnaire (see appendix F(ii)) using the Two-Choice Comparative-Value-Statement Items indicated the following:

##### **☐ The research study**

Respondents were satisfied with the way the research study was explained to them.

##### **☐ The Two-Choice Comparative-Value-Statement Items questionnaire**

###### **• Explanation of the questionnaire**

Respondents were satisfied with the way the questionnaire was explained.

###### **• Time required for completion of the questionnaire**

As stated in section 6.4.4.3.5, the time taken to complete the Two-Choice Comparative-Value-Statement Items was adequate and it was easy to complete. Additionally, the time taken to complete the questionnaire was reduced from one hour 15 minutes to 30 minutes. As previously stated, the latter is indicated in the literature as decreasing respondent fatigue and adding to the reliability of measurements (see section 6.4.4.3.5; Polit & Beck 2004:417).

###### **• Formulation of the items**

- Respondents stated that there appeared to be repetition of questions which confused them at times, for example, question 59(a) and (b).
- Some respondents did not understand the questions, for example, question 76(a) and (b) (see section 6.4.4.3.8).

##### **☐ Difference in scales**

Respondents stated that it was much easier to complete the Two-Choice Comparative-Value-Statement Items than the previous VAS.

##### **☐ Additional comments**

Respondents indicated that the items were relevant to their educational environment.

#### 6.4.4.3.8 The 10-minute discussion

After completion of the post-pretest questionnaire, the researcher held a 10-minute discussion with the respondents who verbalised the following aspects:

- All four of the respondents who had been involved in the original testing of the instrument using the Visual Analogue Scale, stated that it was much easier to complete and interpret the Two-Choice Comparative-Value-Statement Items than the Visual Analogue Scale.
- The five new respondents also indicated that they found it easy to complete and interpret the Two-Choice Comparative-Value-Statement Items.

The latter two aspects are important as, if respondents become annoyed or generally confused by the items and if there are too many items, they could become careless and this might impinge negatively on the reliability of data.

- All nine respondents indicated that some of the paired items sounded similar. The researcher explained the difference in the questions and the respondents agreed with the suggestion that the pairs should be separated by more paired items being placed in between, within each conceptual continuum. For example, item pair “13 (a) I communicate freely with tutors” and “(b) I am anxious when communicating with tutors” was exchanged with item pair “16 (a) I challenge the ideas of tutors” and “(b) I accept the ideas of the tutors”. The following pairs were also exchanged namely, 24 with 31; 56 with 60; 97 with 100; 98 with 103; 134 with 146 and 140 with 143.
- One of the respondents stated that the words “treat according to protocols” and “their individual needs” in question 59(a) and (b) were confusing as she did both of these aspects. After the researcher pointed out and emphasised the words, “strictly” and “prescribed” in the phrase, “strictly and according to prescribed protocols”, the respondent acknowledged that she now understood the difference between the items. The other eight respondents indicated that they understood item pair 59(a) and (b).
- All nine respondents indicated that in item pair 76(a) and (b) the words “and discussion” should be added to read as follows: “76(a) I experience critique and discussion as threatening” instead of “I experience critique as threatening” and “76(b) I experience critique and discussion as an opportunity to learn” instead of “I experience critique as an opportunity to learn”. The addition of the words “and discussion” made the item more understandable for the respondents.

- All nine respondents indicated that in item 141(a) they interpreted the word “set” to mean “the whole work” and suggested that it should be changed to “certain”. The word “specific” should also not be used as it meant “specific outcomes” to them as referred to in their study guides. Thus item 141(a) should read “Tutors compile test and examination questions according to certain outcomes for the work” instead of “Tutors compile test and examination questions according to set outcomes for the work”.

#### **6.4.5 Discussion of the pretested instrument prior to the empirical study**

The pretested instrument, using the Two-Choice Comparative-Value-Statement Items, was discussed with the promoter. He recommended the following changes and additions to the instrument to facilitate data capturing and analysis:

- All the a’s and b’s were changed to a 1 and 2 (counting 1 and 0). This was necessary to facilitate data capturing on the computer. This in effect reflects binary data.
- Numbers, commencing from C1, were added to the “For Office Use Only” column, indicating “columns” on the computer spread sheet.
- In addition to the year group of respondents, the name of the nursing college, the college block and mother tongue; the gender and age were also included in the biographical data requested from the respondents.

In the next section, the testing phase of the study is discussed.

### **6.5 TESTING PHASE**

As previously stated, a quantitative approach, using a non-experimental research design was undertaken to formulate and test the measuring instrument (questionnaire) designed during this study. The research technique employed in the study was questioning by means of a structured questionnaire comprising open- and closed-ended paired items. The open-ended questions were used to obtain biographical details of respondents and the paired items represented the conceptual framework on which the study is founded.

#### **6.5.1 The conceptual framework and hypotheses**

The reader is referred to the conceptual framework (see figure 1.1, appendix E: folder insert), relating to the Behaviouristic/Tylerian rationale versus the Humanistic-Educative-Caring

Paradigm, as proposed by Bevis and Watson (1989) on which this research is founded (see appendix G, chapters 2, 3 and 4).

From the conceptual framework and literature study, hypotheses, relating to the question and objectives of the study, were deduced for testing during this research. It was hypothesised that:

### **6.5.1.1 Hypotheses relating to the conceptual framework internally**

#### **6.5.1.1.1 Hypothesis 1**

There is a positive relationship amongst the conceptual continuums regarding respondents' preferences.

#### **Rationale**

According to the Bevis and Watson conceptual continuums, students who have a behaviouristic orientation will be located on the immature position (see sections 2.5.1.1, 3.5.1.2) of the Learner Maturity Continuum. Teacher-student relationship will be oppressed and the Teacher-student structure will be characterised by the tutor providing all the input during their interactions. According to the Typology of Learning conceptual continuum, students will learn by memorisation and repetition. During Teacher-Student Interactions, tutors will tell students what to learn, when to learn, how to learn and implement teaching strategies such as the lecture (Nkosi & Uys 2005:8). Tutors will dictate what learning experiences students will be involved in. It is, therefore expected that students who have a stimulus-response (behaviourist) curriculum focus will have a positive correlation in all six conceptual continuums.

The rationale is also empirically based as Mouton (1997), found that students were immature, dependent on the tutor, did not take responsibility for their own learning, learned rules and procedures by means of memorisation or rote learning, were taught by means of the lecture method and identified the tutor as an authority figure (Nkosi & Uys 2005:8; see section 1.2.1). Vaughan (1990:925, 929, 932-933), de Villiers (1996:17) and Videbeck (1997(b):26-27) found that the lecture was the most widely implemented method but the least preferred by students (see sections 4.2, 4.4.3).

In contrast to the behaviouristic orientation, the Bevis and Watson conceptual continuums indicate that students, who have a humanistic-educative-caring orientation, will be located on the mature position of the Learner Maturity Continuum (see sections 2.5.1.2; 3.5.1.3).

Teacher-student relationship will be liberated and the Teacher-student structure will be characterised by the students providing all the input during their interactions. According to the Typology of Learning conceptual continuum, students will learn by analysing and reflecting. During Teacher-Student Interactions, students will take responsibility for their own learning and will decide with the tutors what to learn, when to learn, how to learn and implement teaching strategies such as group discussions. The tutor and students will jointly decide what Learning Experiences they will be involved in and the tutor will facilitate the learning experiences. It is, therefore, expected that respondents who have an interactions and learning (humanistic-educative-caring) curriculum focus will have a positive correlation in all six of the conceptual continuums.

#### **6.5.1.1.2 Hypothesis 2**

There is a positive relationship amongst the conceptual continuums regarding the perceptions respondents have of the tutor/college.

#### **Rationale**

The rationale detailed in hypothesis 1, is also applicable to hypothesis 2.

#### **6.5.1.1.3 Hypothesis 3**

There is no relationship with regard to the conceptual continuums between the preferences of respondents and the perceptions they have of the tutor/college.

#### **Rationale**

Ideally, respondents' preference should correlate with their perception of the tutor/college with regard to all six conceptual continuums contained in the humanistic-educative-caring framework underlying this research.

A South African study by Waterson et al (2006(a):56, 59-60) found that, with regard to nursing education, students cited issues that hampered their performance such as curriculum

overload, lack of theory-practice integration, teaching and assessment methods that do not promote critical thinking, tutors' lack of skills and experience, inadequate preparation of tutors for lectures, insufficient knowledge of tutors regarding outcome based education and the approaches to teaching and learning, inadequate process of remedial teaching, discrepancies between tutors' marking, lack of clinical role models and the high expectations from the affiliated university regarding standards of nursing education in a nursing college.

In contrast, students wanted tutors to teach content that reflected reality in the clinical situation, to integrate the knowledge, skills, attitudes and values learned in theory in the practice area, to implement teaching methods such as debates, discussions and case studies, to be subject specialists, to come prepared to class, to structure remedial programmes and to be role models (Waterson et al 2006(a):59-64).

From the previous paragraph, it is therefore expected that there will be no relationship between respondents' preferences and their perceptions of tutors with regard to their curriculum focus pertaining to the six conceptual continuums. Or, that not all six conceptual continuums will cross-match in the same direction.

### **6.5.1.2 Alternative hypotheses relating to biographical data and the conceptual framework**

#### **6.5.1.2.1 Hypothesis 4**

There is no relationship between respondents' ages and their preferences regarding, and perceptions of the tutor/college in terms of, the conceptual continuums.

#### **Rationale**

Respondents who are older will display a more humanistic-educative-caring orientation as they have more knowledge, skills, values and life experience on which to base their responses. Younger respondents will be more behaviouristically orientated and less caring due to their inexperience and lack of knowledge, skills and values.

### **6.5.1.2.2 Hypothesis 5**

There is no significant difference between first, second, third and fourth year respondents with regard to their preferences regarding, and their perceptions of the tutor/college pertaining to, the conceptual continuums.

#### **Rationale**

In chapter 2, Bevis and Watson (see section 1.2.1, 2.5.1), maintain that an educational programme should enable students to grow and develop in terms of maturity, their level of learning and interactions with the teacher during learning experiences. First year students are new to the nursing educational environment and come from an educational milieu that is predominantly behaviouristically dominated (Friedrich-Nel et al 2005:881; le Grange et al 2006:73; Masitsa 2006:493-494). Therefore, it is expected that student preference would be behaviouristic in the first year and with maturity, progressively change so that by the fourth year students would have a humanistic-educative-caring curriculum focus.

In a research study by Mouton (1997), it was found that during the first year, students were being trained and during the second year they advanced to the transitional phase and were implementing educative principles. However, during the third and fourth years, the students adopted behaviouristic principles (see section 1.2.1).

With regards to the tutor, as student progress from one academic year to another, they should develop insight and understanding regarding their learning environment. Consequently, if first year students are exposed to a humanistic-educative-caring learning environment, by their fourth academic year they should perceive that the tutor is more educationally orientated.

In a research study by Mouton (1997), it was recommended that tutors should implement a humanistic-educative-caring curriculum from the first academic year of the student so that the concept education becomes the focal point of the curriculum (see section 1.2.1).

### **6.5.1.2.3 Hypothesis 6**

There is no significant difference between the college block periods respondents have attended and their preferences regarding, and their perceptions of the tutor/college in relation to, the different conceptual continuums.

#### **Rationale**

Students attending blocks 1A and 1D will find the blocks more challenging and stressful than those attending blocks 1B and 1C. In any year group, block 1A presents many challenges and frustrations such as orientation to new modules, new course work requirements and the stress of finding suitable accommodation and adapting to new tutors. Block 1D presents the challenge of coping with tests, assignments, finalisation of course work requirements and with preparation for the examinations. In contrast, Blocks 1B and 1C are relatively stress and challenge free as by this time, students have orientated themselves to the demands of the academic requirements and educational milieu and thus feel less stressed.

As a result of the different issues confronting students in the college blocks, it is expected that there will be a significant difference on the effect that attendance of the different blocks will have on the respondents.

### **6.5.1.2.4 Hypothesis 7**

There is no significant difference between the different language groups with regard to respondents' preferences, and their perceptions of the tutor/college relating to, the conceptual continuums.

#### **Rationale**

Generally, in South Africa, before and after 1994, white English and Afrikaans speaking students have had many advantages in terms of the level and quality of education they have received (Pienaar 1998:5, 142; see section 2.5.2.1). In contrast, the majority of black students have had a very poor education. Consequently, black students will have been taught in an environment with few books, inadequate classrooms, teachers who are not properly trained and a shortage of teachers. Therefore, it is expected that black student preference will be behaviouristic in nature and Afrikaans and English speaking students would have a more humanistic-educative-caring curriculum focus.

In South Africa, in a research study by Luthuli et al (1992:30, 32-33; see section 2.5.2.1), it was indicated that the cultural backgrounds of the black and white student nurses differ substantially. The restricted life world of the black student nurse has minimal or no access to televisions, books or radios. The language of instruction is regarded as foreign to them as it is not their mother tongue. Consequently, the black student enters a nursing environment where she has to adapt to and internalise the sub-culture of nursing and the professional role, use technical terms and operate foreign, technological gadgets and equipment.

With regards to the tutor, both the black student and tutor emanated from a behaviouristic school learning environment. However, the training of the tutor was also grounded in behaviouristic principles. Therefore, it may be expected that the perception that black students have of the tutor will be behaviouristic in nature. In comparison, both the white student and tutor have had a better level and quality of school education. Therefore, it may be expected that Afrikaans and English speaking students would have a more humanistic-educative-caring curriculum focus.

#### **6.5.1.2.5 Hypothesis 8**

There is no significant difference between the two colleges with regard to respondents' preferences, and their perceptions of the tutor/college, in relation to the conceptual continuums.

#### **Rationale**

The respondents are subjected to the same selection process, a standardised Gauteng curriculum for nursing colleges, standardised examination policy and minimum theoretical and clinical hours as set by the South African Nursing Council. Therefore, it is expected that the colleges will adhere to the latter stated aspects and thus have the same results with regards to all the hypotheses. That is, both colleges will be behaviouristically orientated or display a humanistic-educative-caring orientation to the same Bevis and Watson conceptual continuums.

#### **6.5.1.2.6 Hypothesis 9**

There is no significant difference between male and female respondents with regard to their preferences, and their perceptions of the tutor/college, pertaining to the conceptual continuums.

#### **Rationale**

Females are usually regarded as caring, compassionate and emotional. In contrast, males are regarded as less emotional, less compassionate and caring, or at least, less demonstrative in this regard. The female as an emotional being is confirmed by James 1989 (in Johns 1996:1135), who stated that nursing was a skilled but emotionally difficult task performed by women.

#### **6.5.1.2.7 Hypothesis 10**

There is no significant difference between external and internal students with regard to their preferences, and their perceptions of the tutor/college, with regard to the conceptual continuums.

#### **Rationale**

Students on study leave and employed by the Gauteng Department of Health, that is, internal students, are usually older than external students and although they have had very limited opportunity to study further and thus less exposure to new teaching- and learning strategies, they regard themselves as adult learners. They want to learn and take responsibility for their own learning. Therefore, it is expected that internal student preference will have a more humanistic-educative-caring curriculum focus.

External students, that is, those from the community will come from an educational milieu where they have been given lectures, notes and told exactly what content to learn. Therefore, it is expected that external student preference will be behaviouristically orientated.

With regards to the tutor, internal students, view themselves as adult learners. They expect the tutor to facilitate their learning and not to actually teach them. Therefore, it is

expected that the perception that internal students have of the tutor and college will be educatively orientated.

In contrast, external students from the community, expect the tutor to actually teach them. Therefore, it is expected that the perception the external students have of the tutor and college will be behaviouristically orientated.

### **6.5.2 Sampling design**

During the testing phase, a probability sampling design was utilised (see figure 6.2). The probability sampling design was chosen in order to maximise homogeneity, randomisation, representativeness, generalisation, validity, reliability, characteristics of an instrument and to make meaningful interpretation of the results (LoBiondo-Wood & Haber 2002:247; Mouton 1996:136; Polit & Beck 2004:291, 295; Wilson 1993:176).

The sampling method used for the respondents was a proportional, stratified, simple, random sample (de Vos 1998:195, 197). The sampling frame consisted of a consecutively numbered name list of the respondents from level one to four, from the two participating colleges (LoBiondo-Wood & Haber 2002:247, 249; Polit & Beck 2004:295, 297). The respondents were stratified at different levels (years) of advancement namely first, second, third and fourth year. After stratification a proportional, simple, random sample was selected. All the numbers, corresponding to the name list, were placed in a container and forty respondents, who met the stated sample eligibility criteria, were selected (see table 6.3).

#### **6.5.2.1 Population**

The population consisted of all the students at colleges of nursing in the Gauteng Province, registered for the four-year comprehensive diploma course according to Regulation R425, as amended. The latter regulation relates to the approval of and the minimum requirements for the education and training of a nurse (general, psychiatric and community) and midwife leading to registration.

The accessible population consisted of students registered at two state colleges for the four-year comprehensive diploma course, according to Regulation R425, at different levels (years) of advancement and who met the stated sample eligibility criteria (Bless & Higson-Smith

1995:85, 87-88; LoBiondo-Wood & Haber 2002:240-242, 247; Polit & Beck 2004:289-290; Wilson 1993:135, 335). Originally, the intention was to utilize students from three colleges but due to logistical, financial and time constraints, only students from two colleges were included in the sample.

### 6.5.2.2 Sample eligibility criteria

Respondents had to meet the following sample eligibility criteria:

- registered students at one of the two state colleges of nursing participating in the study.
- registered students for the four-year comprehensive diploma course according to Regulation R425 as amended.
- permanently employed, in a college post and placed at a state clinical facility such as a hospital or a community clinic for clinical learning experiences.
- all the state clinical facilities must be accredited by the South African Nursing Council (SANC).

### 6.5.2.3 Sample size

The sample size consisted of 40 respondents from each specific level of advancement, that is, year group, in each of the two colleges. In total, the sample size equated to 2 colleges x 4 years x 40 respondents = 320 respondents. However, only 19 respondents completed the questionnaire in the fourth level at one of the colleges. The total number of respondents was 299 (see table 6.3). Thus, a sample of 299 respondents represented a 93, 4% response rate.

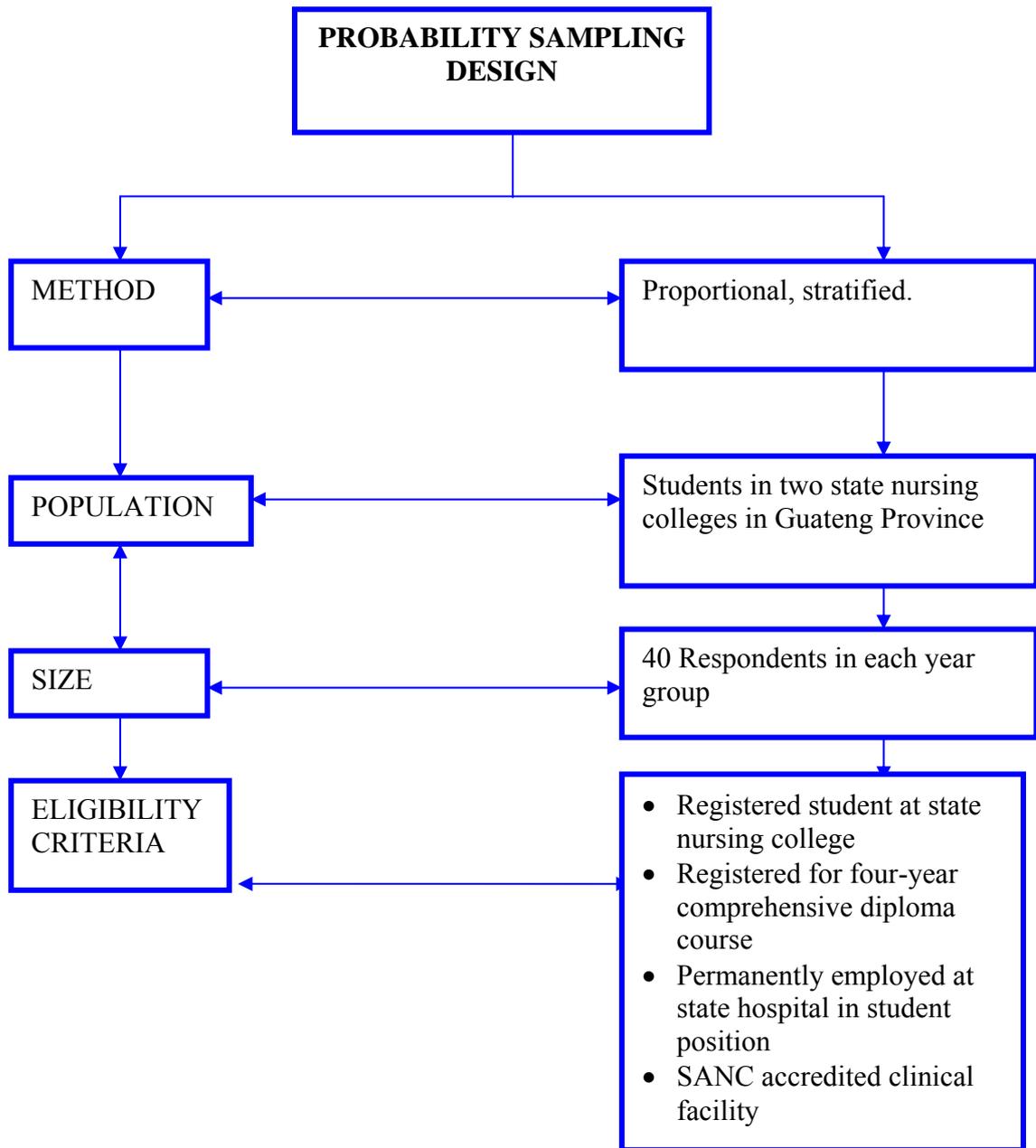
**TABLE 6.3: SAMPLE DISTRIBUTION ACCORDING TO COLLEGE AND ACADEMIC YEAR GROUPS**

Academic Year Group	College A	College B	Total
First	40	40	80
Second	40	40	80
Third	40	40	80
Fourth	40	19	59
<b>Totals</b>	<b>160</b>	<b>139</b>	<b>299</b>

#### **6.5.2.4 Sampling protocol**

The following sampling protocol was followed during the implementation of the proportional, stratified, simple, random sampling method:

- Obtained a list of all the students registered for the four-year comprehensive diploma course, from level one to four, from each of the two participating colleges.
- The sampling frame consisted of a consecutively numbered name list of the respondents from level one to four, from the two participating colleges (Polit & Beck 2004:296).
- The respondents were stratified at different levels (years) of advancement namely first, second, third and fourth year.
- After stratification a proportional, simple, random sample was selected by placing all the numbers, corresponding to the name list in a container and selecting the stipulated sample size from respondents who met the stated sample eligibility criteria (see section 6.5.2.2).



**FIGURE 6.2: SAMPLING DESIGN: TESTING PHASE**

### 6.5.3 THE INSTRUMENT (QUESTIONNAIRE)

The instrument took the form of a questionnaire. It consisted of 181 items, constructed by using the Two-Choice Comparative-Value-Statement Items (see section 6.4.4.3.1). The latter scale was chosen, as it was important to maintain the dichotomous nature of the items. It is structured to measure the preference of the student and the perception that the student has of the tutor and the college. The items are structured around the Bevis and Watson six conceptual continuums. Table 4.4 indicates examples of the conceptual continuums.

**TABLE 6.4: EXAMPLES OF ITEMS CONTAINED IN THE BEVIS AND WATSON CONCEPTUAL CONTINUUMS**

<b>Conceptual Continuum</b>	<b>Humanistic Item</b>	<b>Behaviouristic Item</b>
Learner Maturity Continuum	2 (2) Gaining practical knowledge is important to me	2 (1) Obtaining good grades is important to me
Teacher-student relationship	29 (1) I feel safe to ask questions	29 (2) I am afraid to ask Questions
Teacher-student structure	40 (1) I prefer self-study activities	40 (2) I prefer the lecture method
Typology of Learning	54 (1) I learn by clarifying the meaning of concepts	54 (2) I learn by memorizing facts
Criteria for Teacher-Student Interactions	64 (1) I find learning fun	64 (2) I find learning a serious business
Criteria for Selecting and Devising Learning Experiences	85 (2) I learn from my mistakes	85 (1) I learn by doing things correctly

#### 6.5.3.1 Composition of the instrument

Each of the 181 items contained in the questionnaire has a behaviouristic and humanistic pole indicated by either a (1) or (2). Thus, there are an equal number of items measuring both aspects of the Curriculum Focus. Items from 1 to 90 measure student preference. Items from 91 to 181 indicate the perception that the student has of the tutor and college.

Additionally, a specific number of items have been developed for each of the six conceptual continuums. Table 6.5 indicates the total number of items and the corresponding item numbers for the Bevis and Watson conceptual continuums, with regards to the student and tutor items.

**TABLE 6.5: TOTAL NUMBER OF ITEMS AND CORRESPONDING QUESTION NUMBERS FOR THE BEVIS AND WATSON CONCEPTUAL CONTINUUMS**

CONCEPTUAL CONTINUUMS	STUDENT DATA		TUTOR DATA	
	ITEMS TOTAL	QUESTION NUMBERS	ITEMS TOTAL	QUESTION NUMBERS
Learner Maturity Continuum	20	1–20	19	91–109
Teacher-student relationship	13	21–33	11	110–120
Teacher-student structure	11	34–44	10	121–130
Typology of Learning	16	45–60	14	131–144
Criteria for Teacher-Student Interactions	13	61–73	16	145–160
Criteria for Selecting and Devising Learning Experiences	17	74–90	21	161–181
<b>Total</b>	<b>90</b>		<b>91</b>	

### 6.5.3.2 Biographical data

Biographical data collected consisted of the year group, college block, mother tongue, gender, age and whether the respondent was on study leave, thus, an internal candidate or from the community and, therefore, an external candidate. Data, pertaining to the year groups, were collected to test hypotheses 4, 5, 6, 7, 9 and 10 with regard to the Curriculum Focus of the respondents.

### 6.5.3.3 Reliability of the instrument

*Reliability* is the consistency, constancy or dependability, accuracy and precision with which an instrument measures the attribute it is designed to measure (Burns & Grove 2003:494; LoBiondo-Wood & Haber 2002:319-327; Polit & Beck 2004:416; Wilson 1993:339). According to Quinn (2000:204), reliability means that the scores for a measurement are

internally consistent and stable over time, that is, the same results are obtained when administered on two or more separate occasions.

During both the developmental and testing phases, reliability of the instrument was enhanced by the following aspects:

- Items were formulated as simply and clearly as possible and refined during the pretest study, for example, by rephrasing questions. The latter aspects made it easier to complete the questionnaire.
- Different constructs of the conceptual continuums were substantiated and expanded on and then measured.
- Items were answered as binary data that gives objective, consistent interpretation. The Two-Choice Comparative-Value-Statement Items enabled either a humanistic-educative caring or behaviouristic response to be continuously stated.
- Approximately 20 items per conceptual continuums were developed to measure each construct (conceptual continuum); the latter should be sufficient as the number of items comprising an instrument is directly related to the reliability of an instrument (Bester 2003:196).
- In order to ensure that the appropriate descriptive and inferential techniques were applied during the study, a statistician was consulted prior to, during and after, data collection and analysis.
- During the pretest study, different instruments were tested. The respondents took 30 minutes to complete the final instrument with the Two-Choice Comparative-Value-Statement Items
- Creating a safe, physical and psychological environment by adhering to the process for the administration of the instrument (see section 6.5.3.5.1, 6.5.3.5.2).
- Errors in computer scoring of responses, such as missing data due to incompleting items, were minimised by the following aspects:
  - The researcher personally administered all the instruments to a group of respondents at the same time. The latter maximised the response rate and allowed the researcher to clarify any possible misunderstandings about the instrument.

- Explaining, in detail, the research study and giving clear, verbal and written instructions to the respondents regarding the completion of the instrument.
- Instructing the respondents, prior to the administration of the instruments, to complete all the questions.
- Instructing the respondents, again before they submitted the questionnaires to check that they had completed all the questions.
- Immediately upon submission of the questionnaires, checking with the respondents that they had completed every question and clarifying any unclear number 1 or 2 (Bless & Higson-Smith 1995:97; Burns & Grove 2003:295-296, 298; Gable 1986:136; Polit & Beck 2004:150-152, 291-292, 354, 356-357).

In chapter 7, the reliability of the instrument is discussed, based on the statistical evidence.

#### **6.5.3.4 Validity of the instrument**

*Validity* is the relevance of a measure. A valid instrument measures the concept or construct it claims to measure (Burns & Grove 2003:45; LoBiondo-Wood & Haber 2002:314-318; Polit & Beck 2004:422; Wilson 1993:343). The concept validity refers to the appropriateness, meaningfulness and usefulness of the specific inferences made from test scores. The types of validity tested were face, content, construct and criterion.

##### **6.5.3.4.1 Face validity**

Face validity refers to verification that the instrument measures the content desired (Burns & Grove 2003:483). Polit and Beck (2004) refer to face validity as “whether the instrument *looks* as though it is measuring the appropriate construct”.

Face validity was enhanced by the following:

- The instruments were presented to experts for their comments and recommendations prior to, during and after the pretest study. The experts evaluated the technical presentation, instrument design namely the layout, quality and colour of paper, method of reproduction, typographic quality, clarity of instructions, relevancy, ease of completion and completion time of the instrument.

- During the pretest study, ambiguity of questions was eliminated by the administration of a post-pretest questionnaire after the pretest study. Under formulation of the questions, respondents were requested to indicate whether the questions were understandable, clearly stated and relevant. Additionally, during a 10-minute post-pretest study discussion, confusing or unclear questions were discussed with the respondents. Subsequently, corrections were made to some questions which improved face validity (Quinn 2000; 519; see sections 6.4.4.3.7 and 6.4.4.3.8)
- Respondents indicated that they hoped that answers to the questions relating to the tutors would be noted and responded to as they wished that tutors, in the educational environment, would act according to the statements in the items that they had just completed. Additionally, respondents hoped that any information gathered from this research would be used at the college to help them to perform better during the completion of their academic programme (see section 6.4.4.1.8). The latter aspect is very important as it clearly indicates empirical and practical “appeal or response” of the items contained in the questionnaire.
- In addition, items, in the VAS instrument, could not be placed in such a manner as to enable respondents to conceptually link items from both the behaviouristic and the humanistic-educative-caring sides of the continuum, in order to decide what exactly their preferences and perceptions are. To the researcher it was of the utmost importance to maintain the dichotomous structure provided by the conceptual model as indicated previously. Consequently, the Two-Choice Comparative-Value-Statement Items, designed from the improved polar statements contained in the original visual analogue scale, were implemented. The exercise in developing the polar end of the VAS thus proved to have been a truly worthwhile exercise as it forced the researcher to think laterally and to construct items that represent the same mental image in both the behaviouristic and the humanistic-educative-caring domains (see section 6.4.4.2).

#### **6.5.3.4.2 Content validity**

According to Burns and Grove (2003:274, 482), content validity refers to the extent to which the method of measurement includes all the major elements relevant to the construct being measured. In other words, does the instrument contain an appropriate sample of items for the construct being measured (Polit & Beck 2004:423)?

Content validity was enhanced as follows:

- During the developmental phase of the current study, empirical referents (Chinn & Cramer 2004:146; Walker & Avant 1995:46), grounded in the six conceptual continuums, were formulated using the original criteria, obtained in a previous study by Mouton (1997).
- The original criteria in the Bevis and Watson model were substantiated and expanded on by means of a literature study as outlined in chapters 3 and 4. The literature study involved national and international literature such as books, articles, other relevant theories and research studies (Bester 2003:197; Burns & Grove 2003:274; Polit & Beck 2004:423).
- Additionally, the literature study involved the refinement and adaptation of all the concepts contained in the conceptual framework (see section 2.2).
- The instrument was given to experts to examine whether the items measure what they are supposed to measure, before, during and after the development and testing of the items (Bester 2003:197).
- During the pretest study, respondents gave written and verbal feedback regarding the content of the questions (Burns & Grove 2003:274).

#### **6.5.3.4.3 Construct validity**

Construct validity refers to the degree to which an instrument measures the construct under investigation. A construct is an abstraction or concept that is deliberately invented or constructed by researchers for a scientific purpose (Polit & Beck 2004:425, 714). As stated by Polit & Beck (2004:425), constructs are explained in terms of other concepts; researchers make predictions about the manner in which the target construct will function in relation to other constructs.

Construct validity was enhanced by the following:

- The construct validity of the measure is extremely dependent on the existence of appropriate operational definitions, which directly follow from the theoretically based conceptual definitions (Gable 1986:16). For example, the theoretically based conceptual definition of Typology of Learning refers to the way students learn and identifies six types of learning namely item, directive, rational, contextual,

syntactical and inquiry. The operational definition for item learning is stated as the way students deal with learning separate pieces of information, individual factors and simple relationships such as lists. Item learning helps acquire skills or tasks mechanically and ritualistically, for example how to bath a baby (Bevis & Watson 1989:91; see appendix G). Additionally, items were constructed for each type of learning. These items clearly indicate the operational definition of each type of learning, for example, an item defining item learning states: “I learn by doing fragmented tasks for my patients”.

- The instruments were presented to experts for their comments and recommendations prior to, during and after the pretest study to evaluate the constructs and the items formulated for the questionnaire.

In chapter 7, the construct validity of the instrument will be discussed, after it has been statistically determined.

#### **6.5.3.4.4 Criterion validity**

Criterion validity is defined as the degree to which scores on an instrument are correlated with some external criterion. A defining aspect is whether the instrument is a useful predictor of other behaviours, experiences and conditions (Burns & Grove 2003:275; LoBiondo-Wood & Haber 2002:315-316, 491; Polit & Beck 2004:424, 715). In the Bevis and Watson six conceptual continuums, it is assumed that if the scores of a respondent indicate a behaviouristic orientation on one conceptual continuum they will also indicate a behaviouristic orientation on all five other conceptual continuums.

#### **6.5.3.5 Procedure for the administration of the questionnaire**

The principles discussed in the following sections must be adhered to in order to create a climate conducive to the administration of the questionnaire.

##### **6.5.3.5.1 Physical safety**

Prior to the administration of the questionnaire a safe, physical climate was created as follows:

- The administration of the instrument was conducted either in classrooms at the colleges or in classrooms in the clinical areas.

- At each venue, physical comfort was maintained by ensuring that
  - the classroom was well lit and ventilated
  - glasses and jugs with water were available
  - sufficient seating, pens, questionnaires and contracts were available.
- An overhead projector was available and in good working condition. However, it was not utilised as the researcher decided it was important that the consent form be in writing. Consequently, the consent form was included at the back of each instrument (see appendix H). All respondents signed only one contract; the printed one was returned with the questionnaire without the name of the respondent on it. The latter aspect ensured the anonymity of the respondent.

#### **6.5.3.5.2 Psychological safety**

During the administration of the questionnaire, psychological safety was maintained as follows:

- During her private time, the researcher personally administered all the questionnaires simultaneously, to the respective groups of respondents.
- A “*do not disturb*” notice was hung on the door of the classroom.
- The researcher kept to the pre-arranged time and date.
- One hour was planned for each administration of the questionnaire so that the researcher would have sufficient time to explain the study and the instructions for completing the questionnaire.
- The researcher established rapport by introducing herself to the respondents, thus making them feel at ease and thereby providing a comfortable and non-threatening environment.
- A detailed, verbal and written, outline of the study was given, namely the aim, methodology, ethical considerations and the right to have access to the results.
- The completion of the questionnaire was explained in detail. It was emphasised that it was important to complete all the questions and that there are no right or wrong answers.
- Only the personal opinions of the respondents are required and the preference of items was to be indicated by either a 1 or 2. Thereafter, respondents were given the opportunity to ask questions to clarify any misunderstanding regarding the completion

of the instrument. Additionally, written instructions were clearly indicated on the instrument.

- The contract (see appendix H) was explained in detail to the respondents. Particular attention was paid to the point “I am free to terminate my participation in this research study at any time I feel like it”. This was necessary, as some of the respondents selected for the study, indicated that they did not want to participate in the research study. They were reassured that they had the right to take this option, would not be discriminated or retaliated against and were replaced by selecting respondents as stated under point 6.5.2.4 (Burns & Grove 2003:177-179).
- Respondents all signed one contract thereby signalling agreement between respondents and the researcher.
- An unsigned copy of the contract was submitted to the college principal.
- The researcher thanked the respondents for their willingness to participate in the study.
- Prior to submitting the completed questionnaire, the respondents were again requested to check that they had completed all the questions.
- Immediately upon submission of the questionnaires, the researcher checked with the respondents that they had completed every question and clarified any unclear number 1 or 2.
- Prior to submitting the questionnaires for data capturing and computer analysis, a final check was done to ensure that all the items had been completed and that all the number 1 or 2s were clearly distinguishable (Bester 2003:203).

## **6.6 DATA ANALYSIS**

Data was analysed by means of descriptive statistics such as tables, graphs, measures of central tendency and the standard deviation and inferential statistics such as the Cronbach alpha coefficient correlation, Oneway ANOVA, ANOVA, Pearson-Product Moment correlation, the F test, *t*-test and Scheffé test (LoBiondo-Wood & Haber 1994:386, 390, 397-398, 405, 418; Polit & Hungler 1999:439, 469; Wilson 1993:189, 192, 195-196, 200, 204, 332-334). The Social Sciences Statistical Package (SSSP) version 14 was utilised for data analysis.

## **6.7 ETHICAL CONSIDERATIONS**

Ethical issues pertinent to the testing phase are acceptability of the instrument, informed consent and guarantee of privacy. Guarantee of privacy entails the principles of anonymity and confidentiality. Ethical acceptability may enhance validity and reliability of the study.

### **6.7.1 Acceptability of the instrument**

Attaching a letter detailing the following aspects ensured ethical acceptability of the instrument:

- the aim of the study
- the nature of the instrument
- the advantages and disadvantages of completing the instrument
- guarantee of privacy by maintaining the principle of anonymity and confidentiality
- written, voluntary, informed participation at all times
- the right to written, informed, voluntary participation will be entrenched by the signing of a contract between the respondent and the researcher (Mouton 2001:244).

Additionally, written consent was obtained from the Gauteng Department of Health to undertake the pretest study and the testing phase of the research study.

### **6.7.2 Informed consent**

All respondents participating in a research study have the right to be fully informed regarding all the aspects pertaining to a study (SANC 1991:3-4). In order to stay within the ethical parameter the researcher obtained informed, written, voluntary consent from respondents by means of a formal contract (see appendix H). Informed consent involved explaining the aim of the study to the respondents, what their participation entails, the methodology, for example, the procedures to be used, the time involved and the potential risks and benefits (Mouton 2001:244) The researcher originally intended to personally explain the contents of the contract in detail to the respondents by means of transparencies and an overhead projector. However, the researcher decided that it was important for each respondent to have the consent form in writing and she, therefore, included the form in each instrument. All respondents signed one contract which was filed by the researcher. In order to ensure privacy, the researcher submitted an unsigned copy of the contract to the college principal for

perusal by students. (LoBiondo-Wood & Haber 2002:273-279; van der Wal 1992:133-135; Wilson 1993:257).

### **6.7.3 Guarantee of privacy**

Guarantee of privacy means that respondents are able to behave and think without interference or the possibility that private behaviour or thoughts may be used to embarrass or demean them at a later stage. Privacy was guaranteed by the application of the principles of anonymity and confidentiality (Polit & Beck 2004:149-150; SANC 1991:2-3; Wilson 1993:253).

#### **6.7.3.1 Anonymity**

Anonymity means that even the researcher cannot link respondents to the data reported (Mouton 2001:243; Wilson 1993:253; SANC 1991:2). Anonymity is an important ethical issue as respondents are more inclined to divulge information if they have the assurance that their names will not be linked to any data. Anonymity avoids biased responses from respondents (Bless & Higson-Smith 1995:103). To ensure anonymity during the testing phase, the names of the respondents did not appear on any instrument. During publication, anonymity was maintained by omitting identifiable data, such as names, from the appendices of all the participating institutions. Researcher integrity played an important part in ensuring that anonymity was maintained during the research study.

As previously stated, (see section 6.7.2) the researcher decided it was important that the consent form be in writing. Consequently, the consent form was included at the back of each instrument. Only one contract was signed by all respondents; the printed one was returned with the questionnaire without the name of the respondent on it. The latter aspect ensured the anonymity of the respondent.

#### **6.7.3.2 Confidentiality**

Confidentiality means that any data that respondents divulge will not be made public or available to other people (Mouton 2001:244; Wilson 1993:253; SANC 1991:2). As in anonymity, researcher integrity is also important in maintaining confidentiality. During the testing phase, access to all raw data was limited to the researcher to ensure confidentiality.

## **6.8 SUMMARY**

In this chapter, the qualitative and quantitative research paradigm underlying the study was discussed. The qualitative approach was used to develop the items for the measuring instrument (questionnaire) and within the quantitative approach, a non-experimental research design was undertaken to test the measuring instrument. The discussion is structured around the research design, techniques and instruments, sampling design, pretest study, validity and reliability before, during and after data collection. Ethical aspects were also discussed.

In chapter 7 the results of the study are outlined.

## **CHAPTER 7**

### **RESULTS OF THE STUDY**

#### **7.1 INTRODUCTION**

In chapter 6, the qualitative and quantitative research paradigms underlying the study are discussed. The aim of the study was twofold. Firstly, to initiate the development of a reliable and valid instrument in order to test whether students are being trained or educated. The empirical referents (items) contained in the questionnaire are based on the Bevis and Watson model and six conceptual continuums namely the Learner Maturity Continuum, Teacher-student relationship, Teacher-student structure, Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences. The qualitative approach was used to develop items for the measuring instrument (questionnaire). Secondly, the aim was to statistically test the hypotheses as formulated in chapter 6. Within the quantitative paradigm, non-experimental research was undertaken to test the measuring instrument, the results of which are reported on in this chapter as follows:

- analysis of the biographical data
- reliability and validity of the instrument
- statistics on items and the conceptual continuums.

It is interesting to note that the Two-Choice Comparative-Value-Statement Items were first implemented by Shostrom during 1962 in consultation with Maslow (Shostrom et al 1976:32). These items reflect value judgments based on the theoretical formulation of several writers in humanistic psychology, such as Maslow, Riesman, Rogers and Perls (Shostrom et al 1976:33). These items have been tested by numerous researchers since 1962 and are still used by researchers today.

#### **7.2 ANALYSIS OF THE BIOGRAPHICAL DATA**

In this section, the biographical information contained in the questionnaire are reported on under the headings “site details” and “respondent details”. Biographical data are important

because they provided additional information about the respondents which in turn assisted in the interpretation of the findings pertaining to the hypotheses.

### 7.2.1 Site details

This section discusses frequencies obtained relating to the two colleges involved in the current research.

#### 7.2.1.1 College representation

**TABLE 7.1: FREQUENCY DISTRIBUTION OF RESPONDENTS IN COLLEGES (N = 299)**

COLLEGE	FREQUENCY	PERCENT (%)
College A	160	53.5
College B	139	46.5
<b>Total</b>	<b>299</b>	<b>100.0</b>

Table 7.1 reflects that there is a 7% difference between college A and college B regarding the number of respondents. The latter is due to 21 respondents in college B, in the fourth level, who did not return their completed questionnaires.

#### 7.2.1.2 Internal- and external candidates

A discussion on internal- and external candidates is contained in section 7.4.5.7.

**TABLE 7.2: FREQUENCY DISTRIBUTION OF INTERNAL- AND EXTERNAL CANDIDATES (N = 299)**

CATEGORY	FREQUENCY	PERCENT
Internal	67	22.4
External	232	77.6
<b>Total</b>	<b>299</b>	<b>100.0</b>

Table 7.2 reflects that there is a 55.2% difference between the number of internal- and external respondents. The latter result is due to personnel shortages, lack of financial resources and the fact that on an annual basis, only a certain number of internal posts are allocated for study leave by the management of the clinical facilities. Although the number of internal students has increased, the majority of students selected are external candidates.

The latter statement is corroborated by reviewing the statistics of the Gauteng Central Selection Centre in tables 7.7(a) and 7.7(b). For example, in college A only 166 (20 %) internal candidates were selected from a total of 832 external- and internal candidates selected for the period 2004-2006 (GCSC 2004-2006; see table 7.7(a)).

In college B only 118 (18 %) internal candidates were selected from a total of 655 external- and internal candidates selected for the period 2004-2006, (GCSC 2004-2006; see table 7.7(b)).

### 7.2.1.3 Academic year group of respondents

Table 7.3 depicts the distribution of respondents according to their academic advancement.

**TABLE 7.3: FREQUENCY DISTRIBUTION OF YEAR GROUPS (N = 299)**

YEAR GROUP	FREQUENCY	PERCENT (%)
First Year	80	26.8
Second Year	80	26.8
Third Year	80	26.8
Fourth Year	59	19.6
<b>Total</b>	<b>299</b>	<b>100.0</b>

From table 7.3 it is deduced that year groups one to three were evenly distributed. The fourth year representation is slightly lower than those of the other years as a result of the fact that only 19, instead of an expected 40 respondents, completed the instrument at one of the colleges.

### 7.2.1.4 College block periods

Table 7.4 exhibits the frequency distribution of college block periods completed by respondents. College block periods are discussed in section 7.4.5.3.

**TABLE 7.4: FREQUENCY DISTRIBUTION OF COLLEGE BLOCK PERIODS (N = 299)**

COLLEGE BLOCKS	FREQUENCY	PERCENT (%)
1A	5	1.7
1B	4	1.3
1D	290	97.0
<b>Total</b>	<b>299</b>	<b>100.0</b>

From table 7.4 it can be deduced that 97% of all respondents completed the instrument during their last college block. However, the remainder of the respondents completed the questionnaire at the beginning of the following year. This indicates that the majority of respondents had completed their theory and clinical component at the time data were collected. Therefore, all of the respondents had similar learning experiences and clinical exposures. This contributed to the homogeneity of the sample.

## 7.2.2 Respondent details

This section discusses respondent details obtained during the current research.

### 7.2.2.1 Age

Data relating to age were collected at the ratio level. Table 7.5 exhibits these data as grouped interval data in a frequency table with five year intervals.

**TABLE 7.5: FREQUENCY DISTRIBUTION OF THE AGE OF RESPONDENTS  
(N = 299)**

AGE GROUPS	F	X <sup>1</sup>	Fx <sup>1</sup>	%
46 – 50	11	48	528	3.7
41 – 45	8	43	344	2.7
36 – 40	28	38	1064	9.4
31 – 35	52	33	1716	17.4
26 – 30	102	28	2856	34.1
21 – 25	88	23	2024	29.4
16 – 20	10	18	180	3.3
	N = 299		8712	100

Mean =  $\frac{\sum fx^1}{N} = \frac{8712}{299} = 29.1$  i.e. 29 years

Table 7.5 reflects that the largest number namely 102 (34.1%) of respondents fall within the 26-30 year age group. The average age of the respondents is 29 years which fall within the group 26-30. The respondents' ages ranged from 18 to 49. The majority of students fall in the higher age groups which is not in line with the national aim of creating jobs for younger school leavers.

### 7.2.2.2 Gender

Table 7.6 exhibits the frequency distribution of respondents according to gender.

**TABLE 7.6: FREQUENCY DISTRIBUTION OF GENDER (N = 299)**

GENDER	FREQUENCY	PERCENT
Male	31	10.4
Female	268	89.6
<b>Total</b>	<b>299</b>	<b>100.0</b>

Table 7.6 reflects that 79.2% more females were selected than males. The predominance of females is predictable as the nursing profession is female dominated. The latter aspect is supported by reviewing the statistics of the Gauteng Central Selection Centre in tables 7.7(a) and 7.7(b). Although an increase is reflected in the numbers of males selected for both college A and B, in college A only 112 (13.5 %) males were selected from a total of 832 external- and internal candidates for the period 2004-2006 (GCSC 2004-2006; see table 7.7(a)). In college B, for the period 2004-2006 only 95 (14.5 %) males were selected from a total of 655 external- and internal candidates (GCSC 2004-2006; see table 7.7(b)).

### 7.2.2.3 Language

In table 7.7 the frequency distribution according to respondents' language preference is depicted.

**TABLE 7.7: FREQUENCY DISTRIBUTION OF LANGUAGE GROUPS  
(N = 299)**

LANGUAGE GROUP	FREQUENCY	PERCENT (%)
African	221	73.9
English	11	3.7
Afrikaans	23	7.7
Other	44	14.7
<b>Total</b>	<b>299</b>	<b>100.0</b>

Table 7.7 reflects that an African language was the mother tongue of 73.9% of the respondents.

In support of the above results, statistics of the Gauteng Central Selection Centre indicate a

steady decline or a minimal increase in the selection of coloured and white candidates for the period 2004 to 2006 (see table 7.7(a)).

At college A, 17 coloureds and 5 whites were selected in 2004 and 12 coloureds and 4 whites in 2006. For the period 2004-2006 only 61 (7.3%) coloured- and white candidates were selected from a total of 832 external- and internal candidates selected. The majority of candidates selected were black, totalling 757 (91%) (GCSC 2004-2006). These figures pertain to candidates for the four-year comprehensive diploma course (SANC Regulation R425).

In comparison to college A, at college B, 3 coloureds and 2 whites were selected for 2004 and 6 coloureds and 18 whites for 2006 (see table 7.7(b)). For the period 2004-2006, only 41 (6.3%) coloured- and white candidates were selected from a total 655 external- and internal candidates. The majority of candidates selected were black; totalling 611 (93.3%) selected for the four-year comprehensive diploma programme (GCSC 2004-2006).

To further illuminate the findings relating to gender see section 7.2.2.2, tables 7.7(a) and (b). These tables summarise the frequency distributions of candidates selected at college A and B for the period 2004-2006 according to race (language) and gender (GCSC 2004-2006).

**TABLE 7.7(a): FREQUENCY DISTRIBUTION OF THE GENDER AND RACE OF INTERNAL- AND EXTERNAL CANDIDATES SELECTED AT COLLEGE A FOR THE PERIOD 2004-2006**

Type of Candidate	2004	Gender		Race			
		Female	Male	Black	Coloured	Asian	White
Internal	49	49	0	45	3	0	1
External	177	154	23	157	14	2	4
<b>Total</b>	<b>226</b>	<b>203</b>	<b>23</b>	<b>202</b>	<b>17</b>	<b>2</b>	<b>5</b>

Type of Candidate	2005	Gender		Race			
		Female	Male	Black	Coloured	Asian	White
Internal	42	42	0	41	1	0	0
External	198	167	31	174	13	2	9
<b>Total</b>	<b>240</b>	<b>209</b>	<b>31</b>	<b>215</b>	<b>14</b>	<b>2</b>	<b>9</b>

Type of Candidate	2006	Gender		Race			
		Female	Male	Black	Coloured	Asian	White
Internal	75	73	2	66	6	0	3
External	291	235	56	274	6	10	1
<b>Total</b>	<b>366</b>	<b>308</b>	<b>58</b>	<b>340</b>	<b>12</b>	<b>10</b>	<b>4</b>

<b>Grand Total for 2004 – 2006</b>	<b>832</b>	<b>720</b>	<b>112</b>	<b>757</b>	<b>43</b>	<b>14</b>	<b>18</b>
<b>% of Grand Total</b>		<b>86.5%</b>	<b>13.5%</b>	<b>91%</b>	<b>5.2%</b>	<b>1.7%</b>	<b>2.1%</b>

**TABLE 7.7(b): FREQUENCY DISTRIBUTION OF THE GENDER AND RACE OF INTERNAL- AND EXTERNAL CANDIDATES SELECTED AT COLLEGE B FOR THE PERIOD 2004-2006**

Type of Candidate	2004	Gender		Race			
		Female	Male	Black	Coloured	Asian	White
Internal	39	37	2	39	0	0	0
External	152	128	24	144	3	3	2
<b>Total</b>	<b>191</b>	<b>165</b>	<b>26</b>	<b>183</b>	<b>3</b>	<b>3</b>	<b>2</b>

Type of Candidate	2005	Gender		Race			
		Female	Male	Black	Coloured	Asian	White
Internal	46	46	0	46	0	0	0
External	160	138	22	148	3	0	9
<b>Total</b>	<b>206</b>	<b>184</b>	<b>22</b>	<b>194</b>	<b>3</b>	<b>0</b>	<b>9</b>

Type of Candidate	2006	Gender		Race			
		Female	Male	Black	Coloured	Asian	White
Internal	33	32	1	32	1	0	0
External	225	179	46	202	5	0	18
<b>Total</b>	<b>258</b>	<b>211</b>	<b>47</b>	<b>234</b>	<b>6</b>	<b>0</b>	<b>18</b>

<b>Grand Total for 2004-2006</b>	<b>655</b>	<b>560</b>	<b>95</b>	<b>611</b>	<b>12</b>	<b>3</b>	<b>29</b>
<b>% of Grand Total</b>		<b>85.5%</b>	<b>14.5%</b>	<b>93.3%</b>	<b>1.8%</b>	<b>0.5%</b>	<b>4.4%</b>

### 7.3 RELIABILITY AND VALIDITY OF THE INSTRUMENT

The reliability and validity of an instrument relate mainly to the items (questions) measuring the constructs (six conceptual continuums) under investigation. With regard to the current research, these constructs entail the educational focus of students at two nursing colleges.

### 7.3.1 Coding of responses

In order to combine the responses into a set of scores, all the questions were coded on the computer as follows:

- “1” was allocated to humanistic-educative-caring items and responses
- “0” was allocated to behaviouristic items and responses.

The numbers 0 and 1 are arbitrary. The only requirement was that all behaviouristic items and responses be coded consistently and that all humanistic items and responses be coded in the same way. Since “1” was allocated to humanistic-educative-caring items and responses, the discussion that follows is in terms of this paradigm, relative to the behaviourist paradigm.

In addition to the above, the reader is reminded that respondents were asked about *their preference* and *their perception* of the college at which they are registered and the tutors at those colleges. In presenting and discussing the data and findings, respondents’ preferences are indicated by “STUDENT” and respondents’ perceptions of the college or tutors by “TUTOR”.

### 7.3.2 Reliability

Reliability refers to the consistency and accuracy with which an instrument measures the variables being tested. When a construct is measured, the raw score obtained is referred to as the observed score. The observed score of the individual differs from the true score as a result of an error component. The relationship between the scores can be defined as follows: observed score = true score + error component (Polit & Beck 2004:415).

The Cronbach alpha correlation coefficient test was used to test the reliability of each of the six conceptual continuum constructs. The Cronbach alpha is a reliability index that estimates the internal consistency or homogeneity of a measure comprised of several items or subparts (Polit & Beck 2004:713). The calculated coefficients appear in table 7.8. Reliability as such is discussed in section 6.5.3.3. The Cronbach alpha was calculated in order to establish whether the respondents were on the whole consistent in their answers, for example, whether a respondent who is basically behaviouristic selected mostly behaviouristic responses and similarly for a person who is basically humanistic. The results appear in table 7.8.

**TABLE 7.8 ALPHA RELIABILITY COEFFICIENTS OF THE CONCEPTUAL CONTINUUMS FOR STUDENTS' PREFERENCES AND PERCEPTIONS OF TUTORS/COLLEGES**

<b>Bevis and Watson conceptual continuum</b>	<b>Question numbers</b>	<b>Number of items</b>	<b>Alpha reliability coefficient</b>
STUDENT: Learner Maturity Continuum	1 - 20	20	0.33
STUDENT: Teacher-student relationship	21 - 33	13	0.49
STUDENT: Teacher-student structure	34 - 44	11	0.54
STUDENT: Typology of Learning	45 - 60	16	0.62
STUDENT: Criteria for Teacher-Student Interactions	61 - 73	13	0.50
STUDENT: Criteria for Selecting and Devising Learning Experiences	74 - 90	17	0.58
TUTOR: Learner Maturity Continuum	91 - 109	19	0.74
TUTOR: Teacher-student relationship	110 - 120	11	0.67
TUTOR: Teacher-student structure	121 - 130	10	0.47
TUTOR: Typology of Learning	131 - 144	14	0.59
TUTOR: Criteria for Teacher-Student Interactions	145 - 160	16	0.80
TUTOR: Criteria for Selecting and Devising Learning Experiences	161 - 181	21	0.74

**p < 0.05 level**

With regard to table 7.8, the Cronbach alpha statistic should at least be above 0.6, preferably above 0.8. The latter result only occurred in the following sections namely the STUDENT: Typology of Learning; TUTOR: Learner Maturity Continuum; TUTOR: Teacher-student relationship; TUTOR: Criteria for Teacher-Student Interactions and TUTOR: Criteria for Selecting and Devising Learning Experiences. The remainder of the sections were all below 0.6 which indicated a low reliability. The relatively low reliability of the remainder of the

sections of the instrument could be due in part to the fact that the Cronbach alpha is sometimes lower when a binary response, that is, a response with only two possible answers, was selected. In support of the latter view, according to Polit and Beck (2004:422; Burns & Grove 1991:318), the reliability of measurement scales can be improved by defining categories with greater precision. This is a point that has been stressed throughout the construction of items for the present study.

Further, the low reliability may also be related to the homogeneity of the sample it is being administered to during a study. Polit and Beck (2004:422; Burns & Grove 1991:318) stated that the more homogenous the sample is, that is, the more similar their scores, the lower the reliability coefficient will be. Low reliability is due to the fact that the Cronbach alpha is designed to measure differences among those respondents who are being measured. Consequently, if the sample is homogenous, it is more difficult for both the instrument and the Cronbach alpha to discriminate reliably among those who possess varying degrees of the attribute being measured.

Another reason for the low reliability may be due to the fact that only two of the subsections of the instrument contained 20 or more items. According to Brink (1987:161) and Polit and Beck (2004:421-422; Burns & Grove 1991:318) the result of the alpha coefficient may be affected by the length of the test. The more items the instrument contains, the more accurate the alpha coefficient. The number of items in the questionnaire, however, had to be balanced with the length of the questionnaire. Nonetheless, it should be pointed out that due to the binary nature of the data these reliability coefficients are only relatively low. If a Likert scale, for instance, had been used, more discriminant power would have been allowed for and the scores might have been higher. In this instance, the original VAS that was proposed might have been the more successful scale to be used as it allows for finer discrimination, provided that the respondents answer items truthfully.

In addition, to ensure the reliability of responses, the answers termed “humanistic” and those termed “behaviouristic” were rechecked. For example:

Question 6:       (1) Behaviouristic:     I accept what tutors tell me as the truth  
                      (2) Humanistic:        I question what tutors tell me.

### **7.3.3 Validity**

Validity is the relevance of a measure. A valid instrument measures the concept or construct it claims to measure (Burns & Grove 2003:45; LoBiondo-Wood & Haber 2002:314-318; Polit & Beck 2004:422; Wilson 1993:343). The validity of the instrument is discussed in section 6.5.3.4.

The validity was substantiated in the following ways:

- the empirical referents/criteria formulated for a previous study (Mouton 1997) served as a scientific foundation as the criteria served as standards from which items were formulated for the present instrument
- the items were formulated within a conceptual framework of a Humanistic-Educative-Caring Curriculum Paradigm versus a Stimulus-Response Curriculum Paradigm
- content analysis was applied during the analysis of data collected during the developmental phase
- before, during and after the pretest study the instrument was evaluated by two experts for face and content validity (see section 6.4.4).

The validity of the instrument is discussed in detail in section 6.5.3.4.

It is evident that the validity of the instrument commenced during the previous study conducted by the researcher (Mouton 1997). During the present study, the face validity of the instrument has repeatedly been confirmed at different points during the development of the instrument.

Notwithstanding the low Cronbach coefficients, a factor analysis as indicated by Burns and Grove (2005:380) was conducted. The results of the factor analysis are discussed in the following section.

### **7.3.4 Results of the factor analysis**

The factor analysis did not group items according to the profile set by the conceptual framework discussed in chapter 2 (the six conceptual continuums). The findings of the factor analysis support the Cronbach alpha coefficients and the same reasons as those stated for the

low reliability coefficients are offered for the validity outcome according to the factor analysis. Nonetheless, the way in which respondents responded to items still provided useful information.

#### **7.4 STATISTICS ON ITEMS AND CONCEPTUAL CONTINUUMS**

The response to each question was coded as follows:

- “1” was allocated to humanistic-educative-caring responses
- “0” was allocated to behaviouristic responses.

Thus, the mean response per item is equal to the proportion of humanistic responses for that question.

The reader is again reminded that respondents were asked about *their preference* and *their perception* of the college at which they were registered and the tutors at those colleges. In presenting and discussing the data and findings, students’ preference is indicated by “STUDENT” and students’ perception of the college or tutors by “TUTOR”.

##### **7.4.1 Mean scores per individual item**

The scores of individual items are displayed in tables 7.9(a-1). The importance of noting these scores is that much of the literature support and discussion involves information directly relating to individual pairs of items. The reader is referred to appendix H: Instrument using the Two-Choice Comparative-Value-Statement Items, regarding the specific items which are discussed in the next section. The discussion that follows centres on the items with a low humanistic mean according to the six conceptual continuums. Where applicable, the preference of the respondent and the perception that the respondent has of the tutor/college are also discussed.

##### **7.4.1.1 Means for items 1–20: STUDENT: Learner Maturity Continuum**

Table 7.9(a) exhibits the means for items 1-20 on the STUDENT: Learner Maturity Continuum.

**TABLE 7.9(a): MEANS FOR ITEMS 1–20: STUDENT: LEARNER MATURITY CONTINUUM**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q1r	299	0.93
Q2r	299	0.79
Q3r	299	0.85
Q4r	299	0.64
Q5r	299	0.73
Q6r	299	0.60
Q7r	299	0.37
Q8r	299	0.95
Q9r	297	0.34
Q10r	299	0.98
Q11r	299	0.98
Q12r	299	0.78
Q13r	299	0.62
Q14r	299	0.94
Q15r	299	0.56
Q16r	299	0.49
Q17r	299	0.69
Q18r	299	0.30
Q19r	299	0.94
Q20r	299	0.56
Valid N (listwise)	297	

◇ **Question 7**

In the STUDENT: Learner Maturity Continuum conceptual continuum, (see table 7.9(a)) for item 7 the mean was 0.37 indicating a more behaviourist orientation. In this instance, only 37% of respondents preferred not to let the opinions that others have of them bother them; a humanistic-educative-caring perspective. In contrast, 63% of the respondents indicated that the opinions that others had of them was important to them; a behaviouristic orientation.

Based on the items included in this pair, in behaviourist fashion, the locus of control is located external to the learners (Malan & Rothmann 2002:2, 5; Wiener 1979:3, 6; see section 2.5.1.1).

◇ **Question 18**

In the STUDENT: Learner Maturity Continuum conceptual continuum, (see table 7.9(a)) for item 18 the mean was 0.30 indicating a more behaviourist orientation. In this instance, only

30% of the respondents preferred tutors to be co-learners; a humanistic-educative-caring perspective. In contrast, the remaining 70% of the respondents indicated that tutors should be role models; a behaviouristic orientation.

In the corresponding item, in the TUTOR: Learner Maturity Continuum conceptual continuum, (see table 7.9(g)) for question 100 the mean was 0.32 indicating a more behaviourist orientation. In this instance, only 32% of the respondents perceived the tutor as a co-learner; a humanistic-educative-caring perspective. In contrast, the remaining 68% of the respondents indicated that tutors were role models; a behaviouristic orientation.

Therefore, similar results were obtained for both pairs of items in the STUDENT preference and in the perception of the TUTOR; a behaviouristic orientation. This behaviouristic orientation has serious implications for the professional socialisation of the respondents who perceive the tutor as a role model who they identify as a figure to emulate, especially if this is not outgrown towards the end of training. This could be “dangerous” as role models could have a negative learning effect on respondents even though their primary professional image should be a positive one. This is supported by Chabeli (in Solombela & Ehlers 2002:50) who stated that once negative behaviour has been learned it is expensive, difficult and time consuming to reverse. Additionally, respondents may not take responsibility for their own learning and blame the tutor if they do not progress academically. As co-learners, respondents would have the freedom to discuss any negative factors they perceive in the educational environment with their tutor and together, decide what the appropriate solution is to their problems; a humanistic orientation.

With regard to role models, Waterson et al (2006(a):56) found that students identified a lack of role models in the clinical area as a cause for their poor academic performance. Similar results were reported by Carlson, Kotzé and van Rooyen (2005:65, 68, 70-71) during a study of the experiences of final, 4th year nursing students in their preparedness to become registered nurses. Students in this study stated that they experienced a lack of professional nurse role models in their professional socialisation. Thus, students appear to view a role model as the key to their success instead of relying on being co-learners with the tutor.

#### **7.4.1.2 Means for items 21–33: STUDENT: Teacher-student relationship**

Table 7.9(b) exhibits the means for items 21-33 on the STUDENT: Teacher-student relationship conceptual continuum.

##### **◇ Question 31**

In the STUDENT: Teacher-student relationship conceptual continuum, (see table 7.9(b)) for item 31 the mean was 0.28 indicating a more behaviourist orientation. In this instance, only 28% of the respondents preferred to view tutors as their equals; a humanistic-educative-caring perspective. In contrast, the remaining 72% of the respondents indicated that they idealised tutors; a behaviouristic orientation.

This behaviouristic orientation is indicative of the oppressed relationship that exists between the tutor and the student (see sections 2.5.1, 2.5.1.1, 4.3.1.1.1). In this oppressed educational environment a trained, skilled nurse is produced instead of the humanistic, educated, caring nurse. In order to create a helping, trusting relationship, Minnaar (222:37, 39) stated that aspects such as congruence, empathy, warmth, caring, open communication and listening should be developed between care-giver and care-receiver. These aspects should be utilised by the tutor to create a humanistic- educative- caring environment where the student is able to grow academically and personally.

**TABLE 7.9(b): MEANS FOR ITEMS 21–33: STUDENT: TEACHER-STUDENT RELATIONSHIP**

Descriptive Statistics

	<b>N</b>	<b>Mean</b>
Q21r	299	0.93
Q22r	299	0.66
Q23r	299	0.96
Q24r	299	0.91
Q25r	298	0.92
Q26r	299	0.96
Q27r	298	0.83
Q28r	299	0.80
Q29r	299	0.67
Q30r	299	0.90
Q31r	298	0.28
Q32r	299	0.74
Q33r	299	0.95
Valid N (listwise)	298	

**7.4.1.3 Means for items 34–44: STUDENT: Teacher-student structure**

Table 7.9(c) exhibits the means for items 34-44 on the STUDENT: Teacher-student structure conceptual continuum.

**◇ Question 40**

In the STUDENT: Teacher-student structure conceptual continuum, (see table 7.9(c)) for item 40 the mean was 0.43 indicating a more behaviourist orientation. In this instance, only 43% of the respondents preferred self-study activities; a humanistic-educative-caring perspective. In contrast, the remaining 57% of the respondents indicated that they preferred the lecture method; a behaviouristic orientation.

In the corresponding item, in the TUTOR: Teacher-student structure conceptual continuum (see table 7.9(i)) for item 127 the mean was 0.63 indicating a more humanistic perception. In this instance, 63% of the respondents perceived the tutor as implementing self-study activities

a humanistic-educative-caring perspective. In contrast, the remaining 37% of the respondents indicated that the tutor implemented the lecture method; a behaviouristic orientation. There is thus a slight discrepancy between respondents' preference (STUDENT) and their perception (TUTOR) in this item on the lecture versus self-study.

The finding that only 37% of tutors implemented the lecture method appears to be contradictory to research findings. For instance, in the study by Waterson et al (2006(a):56, 60, 64), it was found that the lecture still remains one of the main teaching strategies in one of the nursing colleges participating in this current study. In the Waterson et al (2006(a):56, 60, 64) study, learners stated that tutors do not prepare adequately for lectures, lack knowledge and as a result some tutors just read from books. Use of the lecture method is supported in research by Mouton 1997 (see section 1.2.1); de Villiers (1996:16; see section 5.2.1.2); Friedrich-Nel et al (2005:1881; see section 5.2.1.2); Nkosi & Uys (2005:8; see section 6.5.1.1.1); Thyr (1994:153); Vaughan (1990:925, 929, 932-933; see section 2.5.3) and Videbeck (1997(a):26-27; see section 2.5.3).

**TABLE 7.9(c): MEANS FOR ITEMS 34–44: STUDENT: TEACHER-STUDENT STRUCTURE**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q34r	299	0.65
Q35r	299	0.87
Q36r	299	0.84
Q37r	299	0.60
Q38r	299	0.56
Q39r	298	0.45
Q40r	299	0.43
Q41r	299	0.67
Q42r	299	0.78
Q43r	299	0.68
Q44r	299	0.61
Valid N (listwise)	298	

#### 7.4.1.4 Means for items 45–60: STUDENT: Typology of Learning

Table 7.9(d) exhibits the means for items 45-60 on the STUDENT: Typology of Learning conceptual continuum.

##### ◇ Question 47

In the STUDENT: Typology of Learning conceptual continuum, (see table 7.9(d)) for item 47 the mean was 0.41 indicating a more behaviourist orientation. In this instance, only 41% of the respondents preferred studying work as a whole; a humanistic-educative-caring perspective. In contrast, the remaining 59% of the respondents indicated that they studied according to stated outcomes; a behaviouristic orientation.

In the corresponding item, in the TUTOR: Typology of Learning conceptual continuum, (see table 7.9(j)) for item 139 the mean was 0.50 indicating an equal behaviouristic- and humanistic orientation. In this instance, 50% of the respondents perceived that tutors expected them to study their work as a whole; a humanistic-educative-caring perspective and 50% indicated that tutors expected them to study according to stated outcomes; a behaviouristic orientation.

Therefore, different results were obtained for both pairs of items in the STUDENT preference a behaviouristic orientation and in the TUTOR perception; an equal behaviouristic- and humanistic-educative-caring orientation. These results indicate that a holistic approach to learning is required by respondents.

In support of studying work as a whole, Becker et al (2003:58) stated that innovative, curriculum paradigm shifts indicated that learning by means of behaviourist objectives is being replaced by freedom in learning; the product of learning by the process of learning and the fragmented, divisional and discipline orientated view of education by the process of a holistic, philosophy of learning.

**TABLE 7.9(d): MEANS FOR ITEMS 45–60: STUDENT: TYPOLOGY OF LEARNING**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q45r	299	0.89
Q46r	298	0.87
Q47r	299	0.41
Q48r	299	0.81
Q49r	299	0.57
Q50r	299	0.66
Q51r	299	0.86
Q52r	299	0.59
Q53r	299	0.87
Q54r	299	0.78
Q55r	299	0.77
Q56r	299	0.56
Q57r	299	0.75
Q58r	299	0.76
Q59r	299	0.88
Q60r	299	0.95
Valid N (listwise)	298	

**7.4.1.5 Means for items 61–73: STUDENT: Criteria for Teacher-Student Interactions**

Table 7.9(e) exhibits the means for items 61-73 on the STUDENT: Criteria for Teacher-Student Interactions conceptual continuum.

◇ **Question 63**

In the STUDENT: Criteria for Teacher-Student Interactions conceptual continuum, (see table 7.9(e)) for item 63 the mean was 0.16 indicating a more behaviourist orientation. In this instance, only 16% of the respondents preferred not to mind the specific criteria set for assessment; a humanistic-educative-caring perspective. In contrast, the remaining 84% of the respondents indicated that they preferred to know the exact criteria to be used during assessment; a behaviouristic orientation.

The behaviourist orientation reflects that students are more occupied with knowing exactly what they are going to be assessed on, that is, what content they have to learn for the examination in order to pass. This finding is supported by Waterson et al (2006(a):61) who

reported that students were preoccupied with the inconsistency of tutors' marking during theoretical- and clinical assessment and blamed this for their poor academic performance (see sections 1.2.2, 4.2, 4.4.3, 6.5.1.1.3).

This behaviourist orientation regarding examinations and assessment is corroborated by Masitsa (2006:493-494) who reported that 26.4 per cent of grade 12 learners adopted a surface study approach. These students were not motivated to learn; they just wanted to know the bare essentials in order to pass the examination with minimum effort and consequently reproduced what they had learnt through rote learning. A total of 54.8 per cent of students had an achieving study approach; they were extrinsically motivated as they wanted to obtain high marks in the examination in order to enhance their self-ego. Only 18.8 per cent of students adopted a deep study approach; they wanted to understand and make sense of their work in order to become competent and were therefore, intrinsically motivated. Friedrich-Nel et al (2005:881) confirmed that traditional assessment methods such as written examinations are still applied in most higher education institutions in South Africa (see section 5.2.1.3).

**TABLE 7.9(e): MEANS FOR ITEMS 61–73: STUDENT: CRITERIA FOR TEACHER-STUDENT INTERACTIONS**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q61r	299	0.82
Q62r	299	0.76
Q63r	299	0.16
Q64r	299	0.45
Q65r	299	0.82
Q66r	299	0.70
Q67r	298	0.85
Q68r	299	0.75
Q69r	299	0.28
Q70r	299	0.82
Q71r	299	0.76
Q72r	299	0.83
Q73r	299	0.98
Valid N (listwise)	298	

#### **7.4.1.6 Means for items 74–90: STUDENT: Criteria for Selecting and Devising Learning Experiences**

Table 7.9(f) exhibits the means for items 74-90 on the STUDENT: Criteria for Selecting and Devising Learning Experiences conceptual continuum.

##### **◇ Question 88**

In the STUDENT: Criteria for Selecting and Devising Learning Experiences conceptual continuum, (see table 7.9(f)) for item 88 the mean was 0.47 indicating a more behaviourist orientation. In this instance, only 47% of the respondents preferred assessment to be based on critique and discussion; a humanistic-educative-caring perspective. In contrast, the remaining 53% of the respondents indicated that they preferred assessment to be based on grades/marks/percentages (%); a behaviouristic orientation.

In the corresponding item, in the TUTOR: Criteria for Selecting and Devising Learning Experiences conceptual continuum, (see table 7.9(l)) for item 176 the mean was 0.24 indicating a more behaviourist orientation. In this instance, only 24% of the respondents perceived that assessment of learning experiences was based on critique and discussion; a humanistic-educative-caring perspective. In contrast, the remaining 76% of the respondents indicated that assessment of learning experiences was based on grades/marks/percentages; a behaviouristic orientation.

Therefore, similar results were obtained for both pairs of items in the STUDENT preference and in the TUTOR perception; a behaviouristic orientation. Consequently, tutors need to concentrate on assessment methods that will induce the respondents to learn by understanding, reflecting, questioning and analysing; a humanistic orientation.

In support of a humanistic-educative-caring perspective, Friedrich-Nel et al (2005:881) stated that innovative assessment methods such as the case study reports, reflection reports, presentations, self- and peer assessment and assessment in the authentic environment be implemented. Brady (2005:9-10) recommends that assessment be formative and continuous and that methods be implemented such as portfolios, essays, interviews, journals, exhibitions and concept maps (see section 2.5.4, 4.4.3.1).

Additionally, the finding of the TUTOR perception in item 176 (76%), is similar to the finding in STUDENT preference Criteria for Teacher-Student Interactions conceptual continuum, for item 63 (84%) where respondents indicated that they preferred to know the exact criteria to be used during assessment. Therefore, respondents not only focus on knowing the exact criteria for assessment but perceive that tutors focus on grades/marks/percentages (%).

The application of traditional assessment methods such as written examinations in higher education institutions in South Africa was confirmed by Friedrich-Nel et al (2005; see section 5.2.1.3). Morolong and Chabeli (2005:45) found that newly registered nurses, previous 4th year college students, were not clinically competent to deliver nursing care due to a theory-practice gap. Morolong and Chabeli (2005:45) recommended that tutors review their teaching and assessment methods and implement those that stimulate critical thinking.

**TABLE 7.9(f): MEANS FOR ITEMS 74–90: STUDENT: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q74r	299	.49
Q75r	299	.91
Q76r	299	.83
Q77r	299	.93
Q78r	299	.86
Q79r	299	.94
Q80r	299	.76
Q81r	299	.76
Q82r	299	.63
Q83r	298	.51
Q84r	299	.85
Q85r	299	.83
Q86r	299	.92
Q87r	299	.87
Q88r	299	.47
Q89r	299	.85
Q90r	299	.98
Valid N (listwise)	298	

#### **7.4.1.7 Means for items 91–109: TUTOR: Learner Maturity Continuum**

Table 7.9(g) exhibits the means for items 91-109 on the TUTOR: Learner Maturity Continuum conceptual continuum.

##### **◇ Question 97**

In the TUTOR: Learner Maturity Continuum conceptual continuum, (see table 7.9(g)) for item 97 the mean was 0.14 indicating a more behaviourist orientation. In this instance, only 14% of the respondents perceived that tutors allowed them to choose what they need to learn; a humanistic-educative-caring perspective. In contrast, the remaining 86% of the respondents indicated that tutors direct and control the way they learn; a behaviouristic orientation.

This behaviourist directing and controlling of students is confirmed by Brammer (2006:962, 969-970) who found that registered nurses understood their role in student learning in various ways, such as completion of their allocated workload with the added burden of teaching and controlling the student and some registered nurses wanted to have no contact with the student at all. Carlson et al (2005:68, 70) found that 4th year students indicated that they were not given the responsibility or the opportunity to think critically or to make their own decisions. They were seen as the workforce and supernumerary whereas they wanted to “take charge and take the reins” (Carlson et al 2005:70).

**TABLE 7.9(g): MEANS FOR ITEMS 91–109: TUTOR: LEARNER MATURITY CONTINUUM**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q91r	299	0.89
Q92r	299	0.70
Q93r	299	0.87
Q94r	299	0.83
Q95r	298	0.23
Q96r	299	0.62
Q97r	299	0.14
Q98r	299	0.80
Q99r	299	0.60
Q100r	299	0.32
Q101r	299	0.54
Q102r	299	0.84
Q103r	299	0.68
Q104r	299	0.61
Q105r	299	0.74
Q106r	299	0.83
Q107r	299	0.76
Q108r	299	0.69
Q109r	299	0.77
Valid N (listwise)	298	

**7.4.1.8 Means for items 110–120: TUTOR: Teacher-student relationship**

Table 7.9(h) exhibits the means for items 110-120 on the TUTOR: Teacher-student relationship conceptual continuum.

◇ **Question 119**

In the TUTOR: Teacher-student relationship conceptual continuum, (see table 7.9(h)) for item 119 the mean was 0.36 indicating a more behaviourist orientation. In this instance, only 36% of the respondents perceived that tutors expected students to discover factual content for themselves; a humanistic-educative-caring perspective. In contrast, the remaining 64% of the respondents indicated that tutors presented factual content of different subjects; a behaviouristic orientation.

In the corresponding item, in the STUDENT: Teacher-student relationship conceptual continuum, (see table 7.9(b)) for item 32 the mean was 0.74 indicating a more humanist

orientation. In this instance, 74% of the respondents preferred to actively discover information about important phenomena; a humanistic-educative-caring perspective. In contrast, the remaining 26% of the respondents indicated that they preferred to passively listen to tutors revealing factual content to them; a behaviouristic orientation. Therefore, different results were obtained for both pairs of items in the STUDENT preference a humanistic orientation and in the perception of the TUTOR; a behaviouristic orientation. Consequently, respondents preferred to actively discover information about important phenomena; but perceived that tutors presented factual content of different subjects. These behaviouristic findings are supported by Waterson et al (2006(a):59-60) who reported that the curriculum is still content driven where tutors “just talk and read the book”. These latter findings are typical of a behaviouristic environment.

**TABLE 7.9(h): MEANS FOR ITEMS 110–120: TUTOR: TEACHER-STUDENT RELATIONSHIP**

**Descriptive Statistics**

	N	Mean
Q110r	299	0.65
Q111r	299	0.73
Q112r	299	0.70
Q113r	299	0.70
Q114r	299	0.70
Q115r	299	0.80
Q116r	299	0.86
Q117r	299	0.81
Q118r	299	0.95
Q119r	299	0.36
Q120r	299	0.66
Valid N (listwise)	299	

**7.4.1.9 Means for items 121–130: TUTOR: Teacher-student structure**

Table 7.9(i) exhibits the means for items 121-130 on the TUTOR: Teacher-student structure conceptual continuum.

◇ **Question 129**

In the TUTOR: Teacher-student structure conceptual continuum, (see table 7.9(i)) for items 129 the mean was 0.08 indicating a more behaviourist orientation. In this instance, only 8% of the respondents perceived that tutors and students are both involved in designing curricula; a humanistic-educative-caring perspective. In contrast, the remaining 92% of the respondents indicated that tutors design the curricula; a behaviouristic orientation.

This behaviouristic orientation is confirmed by Waterson et al (2006(a):59) who indicated that as teachers wanted their students to be successful, it is the prerogative of the teacher to determine what content is presented to learners based on the formulated learning outcomes, what learning experiences are made available to them and how they are assessed. Additionally, research regarding curricula does not indicate that students participate in the process, for example, Khanyile and Mfidi (2005:70) and Jones and Johnston (2006:941).

**TABLE 7.9(i): MEANS FOR ITEMS 121–130: TUTOR: TEACHER-STUDENT STRUCTURE**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q121r	299	0.53
Q122r	299	0.36
Q123r	299	0.85
Q124r	299	0.52
Q125r	299	0.19
Q126r	299	0.28
Q127r	299	0.63
Q128r	299	0.81
Q129r	299	0.08
Q130r	299	0.26
Valid N (listwise)	299	

**7.4.1.10 Means for items 131–144: TUTOR: Typology of Learning**

Table 7.9(j) exhibits the means for items 131-144 on the TUTOR: Typology of Learning conceptual continuum.

◇ **Question 134**

In the TUTOR: Typology of Learning conceptual continuum, (see table 7.9(j)) for item 134 the mean was 0.33 indicating a more behaviourist orientation. In this instance, only 33% of the respondents perceived that during clinical placement, a number of patients are assigned to them for total patient care; a humanistic-educative-caring perspective. In contrast, the remaining 67% of the respondents indicated that during clinical placement, specific tasks are assigned to them; a behaviouristic orientation. The assignment of specific tasks during clinical placement is supported by Carlson et al (2005:70) who found that final 4th year student nurses experienced themselves as the workforce as they were only allowed to perform basic duties in the ward, observe and continuously run errands.

**TABLE 7.9(j): MEANS FOR ITEMS 131–144: TUTOR: TYPOLOGY OF LEARNING**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q131r	299	0.66
Q132r	299	0.48
Q133r	299	0.87
Q134r	299	0.33
Q135r	299	0.65
Q136r	299	0.65
Q137r	299	0.81
Q138r	299	0.68
Q139r	299	0.50
Q140r	299	0.73
Q141r	299	0.45
Q142r	299	0.85
Q143r	299	0.81
Q144r	299	0.86
Valid N (listwise)	299	

#### **7.4.1.11 Means for items 145–160: TUTOR: Criteria for Teacher-Student Interactions**

Table 7.9(k) exhibits the means for items 145-160 on the TUTOR: Criteria for Teacher-Student Interactions conceptual continuum.

##### **◇ Question 157**

In the TUTOR: Criteria for Teacher-Student Interactions conceptual continuum, (see table 7.9(k)) for item 157 the mean was 0.19 indicating a more behaviourist orientation. In this instance, only 19% of the respondents perceived that tutors and students jointly assessed students' work; a humanistic-educative-caring perspective. In contrast, the remaining 81% of the respondents indicated that tutors assessed the work of students; a behaviouristic orientation.

In the corresponding item, in the STUDENT: Teacher-Student Interactions conceptual continuum, (see table 7.9(e)) for item 65 the mean was 0.82 indicating a more humanist orientation. In this instance, 82% of the respondents preferred that the tutors and students jointly assessed their work; a humanistic-educative-caring perspective. In contrast, the remaining 18% of the respondents indicated that they preferred tutors to assess their work; a behaviouristic orientation.

Therefore, different results were obtained for both pairs of items in the STUDENT preference a humanistic orientation and in the TUTOR perception; a behaviouristic orientation. Research conducted in South Africa confirmed that tutors assess students' work, for example, Waterson et al (2006(a):60) indicated that tutors assessed students' work but used methods that did not promote the critical thinking of students. In support of a humanistic-educative-caring approach to evaluation, Chabeli (2001:18, 23) indicated alternative methods for clinical evaluation such as portfolios, self-assessment, reflective journal writing and peer group assessment (see sections 2.5.4, 4.4.3.1).

**TABLE 7.9(k): MEANS FOR ITEMS 145–160: TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q145r	299	0.36
Q146r	299	0.88
Q147r	298	0.70
Q148r	299	0.86
Q149r	299	0.79
Q150r	299	0.85
Q151r	299	0.79
Q152r	299	0.90
Q153r	299	0.75
Q154r	298	0.91
Q155r	298	0.85
Q156r	298	0.34
Q157r	298	0.19
Q158r	298	0.91
Q159r	298	0.61
Q160r	298	0.70
Valid N (listwise)	297	

**7.4.1.12 Means for items 161–181: TUTOR: Criteria for Selecting and Devising Learning Experiences**

Table 7.9(l) exhibits the means for items 161-181 on the TUTOR: Criteria for Selecting and Devising Learning Experiences conceptual continuum.

◇ **Question 171**

In the TUTOR: Criteria for Selecting and Devising Learning Experiences conceptual continuum, (see table 7.9(l)) for item 171 the mean was 0.32 indicating a more behaviourist orientation. In this instance, only 32% of the respondents perceived that tutors created learning experiences outside of (broader than) stated outcomes; a humanistic-educative-caring perspective. In contrast, the remaining 68% of the respondents indicated that tutors created learning experiences that relate directly to stated outcomes; a behaviouristic orientation. The behaviouristic tendency to create learning opportunities directly related to stated outcomes is indicated by Friedrich-Nel et al (2005:881) who stated that the traditional educational approaches used instructional methods and learning activities centred on the lecturer.

**TABLE 7.9(l): MEANS FOR ITEMS 161–181: TUTOR: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES**

**Descriptive Statistics**

	<b>N</b>	<b>Mean</b>
Q161r	298	0.67
Q162r	298	0.71
Q163r	298	0.70
Q164r	298	0.79
Q165r	298	0.77
Q166r	298	0.29
Q167r	298	0.36
Q168r	298	0.51
Q169r	299	0.41
Q170r	299	0.87
Q171r	299	0.32
Q172r	299	0.30
Q173r	299	0.91
Q174r	299	0.68
Q175r	299	0.82
Q176r	299	0.24
Q177r	299	0.60
Q178r	298	0.66
Q179r	299	0.74
Q180r	299	0.89
Q181r	299	0.86
Valid N (listwise)	297	

**7.4.1.13 Summary of the responses per individual items**

Table 7.9(m) summarises the discussion on the items under subsection 7.4.1.

**TABLE 7.9(m): SUMMARY OF THE SPECIFIC RESPONSES PER INDIVIDUAL ITEMS**

Conceptual continuum	Question	Student Orientation		Question	Tutor Orientation	
		Student	Tutor		Tutor	Student
Learner Maturity Continuum	7	Behaviouristic		97	Behaviouristic	
	18	Behaviouristic				
	100		Behaviouristic			
Teacher-student relationship	31	Behaviouristic		119	Behaviouristic	
				32		Humanistic
Teacher-student structure	40	Behaviouristic		129	Behaviouristic	
	127		Humanistic			
Typology of Learning	47	Behaviouristic		134	Behaviouristic	
	139		Behaviouristic 50% Humanistic 50%			
Criteria for Teacher-Student Interactions	63	Behaviouristic		157	Behaviouristic	
				65	Humanistic	
Criteria for Selecting and Devising Learner Experiences	88	Behaviouristic		171	Behaviouristic	
	176		Behaviouristic			

#### **7.4.2 Mean scores of respondents for the conceptual continuums**

In calculating the mean scores per conceptual continuum a maximum score of 100 means that the respondent (at least one respondent) selected all the humanistic responses while a minimum score of 0 means that the respondent (at least one respondent) selected all the behaviouristic responses. An average score of 50 and above indicates a collective tendency towards humanism and a score of less than 50 indicates a collective tendency towards behaviourism. The results appear in table 7.10.

**TABLE 7.10: MEAN SCORES OF RESPONSES PER CONCEPTUAL CONTINUUM**

<b>Bevis and Watson conceptual continuums for Students and Tutors</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Deviation</b>
STUDENT: Learner Maturity	297	45.00	100.00	70.0337	10.92042
STUDENT: Teacher-student relationship	298	38.46	100.00	80.7950	13.04769
STUDENT: Teacher-student structure	298	0.00	100.00	64.7651	19.44213
STUDENT: Typology of Learning	298	31.25	100.00	74.8951	15.81187
STUDENT: Criteria for Teacher-Student Interactions	298	15.38	100.00	68.9726	15.12119
STUDENT: Criteria for Selecting and Devising Learning Experiences	298	29.41	100.00	78.6617	13.49719
TUTOR: Learner Maturity	298	10.53	94.74	65.1537	16.90531
TUTOR: Teacher-student relationship	299	18.18	100.00	71.9064	20.44055
TUTOR: Teacher-student structure	299	0.00	90.00	45.1839	18.01052
TUTOR: Typology of Learning	299	7.14	100.00	66.5791	17.64824
TUTOR: Criteria for Teacher-Student Interactions	297	12.50	100.00	71.1069	20.08140
TUTOR: Criteria for Selecting and Devising Learning Experiences	297	4.76	100.00	62.4178	17.48442
Valid N (listwise)	289				

**p < 0.05 level**

Table 7.10 indicates the difference between the mean scores of respondents' orientation towards the different conceptual continuums with regard to respondent preference (STUDENT) and the perception that the respondents have of the tutor/college (TUTOR).

With regard to all the continuums exhibited in table 7.10, from the student preference (STUDENT), respondents collectively reflected a preference for a humanistic curriculum focus. For all continuums, except TUTOR: Teacher-Student Structure, the mean score was larger than 50. With regard to respondents' perception of the tutor/college (TUTOR), respondents perceived a behaviouristic curriculum focus in the TUTOR: Teacher-Student

structure in which instance the mean score is 45.2. This indicates that respondents prefer a humanistic educational environment but perceived that the tutors/college display behaviouristic principles with regards to the Teacher-student structure. It is also interesting that with regard to all the continuums, the means for STUDENT are higher than for TUTOR indicating a generally more humanistic preference and a less humanistic perception of the tutors/college.

Table 7.10(a) further summarises these mean scores reflecting the numbers of mean scores for the six conceptual continuums for STUDENT and TUTOR respectively.

**TABLE 7.10(a): SUMMARY OF NUMBER OF AVERAGE SCORES PER CONCEPTUAL CONTINUUM FALLING WITHIN A 25%\* INTERVAL**

	0-24	25-49	50-74	75-100	Total
	← BEHAVIOURIST		HUMANIST →		
<b>STUDENT</b>	0	0	3	3	6
<b>TUTOR</b>	0	1	5	0	6
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>3</b>	<b>12</b>

(\* Note that as "0" is also a score the % runs over 101 numbers. This is the reason for the slight difference in the interval range)

Table 7.10(a) visualises a tendency for students' preference to be more humanistic and their perception of the tutor/college to be more behaviourist (though still humanist), or rather less humanist.

In support of the findings that respondents have a predominantly humanistic orientation Waterson et al (2006(a):56, 59-60), found that although students complained about the lack of clinical role models and theory-practice integration, they preferred the clinical environment which they viewed as less constraining, felt freer to be themselves and do their thing and be able to practice achieving outcomes.

Conversely, Waterson et al (2006(b):66-67, 69-73) indicated that students found the college environment oppressive and demotivating. Students did not want to attend block periods which they viewed with apprehension as they associated it with curriculum overload leading

to learning of unnecessary content, tests and assignments associated with discrepancies between tutors' marking, long hours spent in the classroom, teaching and assessment methods such as boring lectures that do not promote critical thinking and for which tutors are in any case inadequately prepared; and the unavailability, inaccessibility and insensitivity of tutors (Waterson et al 2006(a):56, 59-60). Tutors identified a lack of respect and internal motivation by students (Waterson et al 2006(b):67, 72). In support of lack of motivation, Masitsa (2006:486, 493-494) found that grade 12 students were not motivated to learn and indicated that this was inexplicable as students were on the verge of completing their studies and pursuing careers at higher educational institutions, such as nursing colleges. The latter aspects are all indicative of behaviouristic principles being implemented at the college whereas the environment should ideally be liberating, emancipating and empowering to students (Waterson et al 2006(b):66-67, 69-73).

These previous findings are also supported by de Villiers (1996:15-16, 19-20; see sections 5.2.1-5.2.1.3), who found that behaviouristic principles were widely applied in the curriculum and corroborated by Mouton (1997:244-247; see section 1.2.1). Additionally, in various SANC documents behaviouristic principles are applied, such as using written examinations to pass or fail a student (see section 1.2.1).

#### **7.4.3 Matched pairs *t*-test: comparisons of respondent preferences and perceptions that the respondents have of the tutor/college regarding the conceptual continuums**

The *t*-test is one of the most commonly used tests in parametric analyses to test for significant differences between statistical measures between two samples (Burns & Grove 2005:527). The matched pairs student *t*-test for comparison of the means of the student preferences with the means of the corresponding perceptions relating to tutors for the conceptual continuums are indicated in tables 7.11(a) and 7.11(b).

In preparation for the *t*-test calculation, a comparison of mean scores per conceptual continuum was first constructed as indicated in table 7.11(a).

**TABLE 7.11(a): COMPARISONS OF MEAN SCORES OF RESPONSES PER CONCEPTUAL CONTINUUM RELATED TO STUDENT-PREFERENCE AND PERCEPTION OF TUTOR/COLLEGE**

**Paired Samples Statistics**

<b>Bevis and Watson conceptual continuum</b>		<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>
Pair 1	STUDENT: Learner Maturity Continuum	70.0000	296	10.92346
	TUTOR: Learner Maturity Continuum	65.0249	296	16.88374
Pair 2	STUDENT: Teacher-student relationship	80.7950	298	13.04769
	TUTOR: Teacher-student relationship	71.9951	298	20.41713
Pair 3	STUDENT: Teacher-student structure	64.7651	298	19.44213
	TUTOR: Teacher-student structure	45.1678	298	18.03864
Pair 4	STUDENT: Typology of Learning	74.8951	298	15.81187
	TUTOR: Typology of Learning	66.5388	298	17.66418
Pair 5	STUDENT: Criteria for Teacher-Student Interactions	68.8929	296	15.13771
	TUTOR: Criteria for Teacher-Student Interactions	71.2838	296	19.88231
Pair 6	STUDENT: Criteria for Selecting Learning Experiences	78.5970	296	13.51107
	TUTOR: Criteria for Selecting Learning Experiences	62.3552	296	17.48065

A mean score of 50 and above indicated a tendency towards humanism and a score of less than 50 indicated a tendency towards behaviourism.

With regard to the all the conceptual continuums as exhibited in table 7.11(a), from the student preference (STUDENT), respondents collectively reflect a preference for a humanistic curriculum focus.

For all conceptual continuums, except TUTOR Teacher-student structure, the mean score was larger than 50. With regard to respondents' perception of the tutor/college (TUTOR), respondents perceived a behaviouristic curriculum focus in the Teacher-student structure in which instance the mean score is 45.2. This indicates that respondents prefer a humanistic educational environment but perceive that the tutors/college display behaviouristic principles

with regards to the Teacher-student structure. It is also interesting that with regard to all the conceptual continuums, except the STUDENT: Criteria for Teacher-Student Interactions, the means for STUDENT are higher than for TUTOR indicating a generally more humanistic preference and a less humanistic perception of the tutors/college.

**TABLE 7.11(b): COMPARISONS OF DIFFERENCES OF MEAN SCORES OF RESPONSES PER CONCEPTUAL CONTINUUM RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF TUTOR/COLLEGE**

**Paired Samples Test**

Pair	Bevis and Watson conceptual continuums	Mean difference	Standard deviation	<i>t</i>	N	Significance
Pair 1	STUDENT: Learner Maturity Continuum TUTOR: Learner Maturity Continuum	4.97511	18.28784	4.680	295	0.000
Pair 2	STUDENT: Teacher-student relationship TUTOR: Teacher-student relationship	8.79992	20.97951	7.241	297	0.000
Pair 3	STUDENT: Teacher-student structure TUTOR: Teacher-student structure	19.59732	23.59109	14.340	297	0.000
Pair 4	STUDENT: Typology of Learning TUTOR: Typology of Learning	8.35630	20.26451	7.118	297	0.000
Pair 5	STUDENT: Criteria for Interaction TUTOR: Criteria for Interaction	-2.39085	20.76253	-1.981	295	0.049
Pair 6	STUDENT: Criteria for Selecting Learning Experiences TUTOR: Criteria for Selecting Learning Experiences	16.24177	19.80511	14.109	295	0.000

**p < 0.05 level**

Table 7.11(b) indicates that for five of the six paired (STUDENT and TUTOR) conceptual continuums (cases) the *t*-value was significant at the 0.000 level. In all five cases the calculated *t*-value > 3.921 value is stated as cutoff point for 0.001 level of significance for paired groups. For Criteria for Interaction conceptual continuum, the *t*-value of 1.981 > 1.960; the cutoff point at the 0.05 level of significance. Thus, at p < 0.05 the null hypothesis that there is no significant difference between paired samples with regard to the conceptual continuums is rejected (Porkess 2005:252; Burns & Grove 2005:528).

#### **7.4.4 Testing of hypotheses 1-3 on the conceptual continuums internally**

Hypotheses set for the current research are discussed in section 6.5.1.1. These are based on the respondents' preferences and their perceptions of the tutor/college, and respondents' biographical detail in relation to the six conceptual continuums comprising the Bevis and Watson model as explicated in chapter 2.

In order to test these hypotheses, the Pearson Product-Moment correlation coefficient ( $r$ ) was calculated. This test is used to determine the magnitude of relationships among variables (Burns & Grove 1999:317; Polit & Beck 2004:728). The Pearson product-moment correlation analysis is an  $r$ -value ranging between +1 through 0 to -1 (Burns & Grove 2005:486). The correlation indicates a linear relationship between two variables; as the one variable changes the other changes in the same degree, either positively (in the same direction) or negatively (in the opposite direction). Therefore,  $r = +1$  indicates an absolute linear positive relationship (as the one variable increases so does the other);  $r = -1$  indicates the opposite (Burns & Grove 2005:486; Porkess 2005:61);  $r = 0$  indicates no correlation. Correlation does not imply cause and effect.

##### **7.4.4.1 Hypothesis 1: There is a positive relationship amongst the conceptual continuums regarding respondents' preferences.**

The correlation coefficients amongst the STUDENT: preferences and the conceptual continuums are depicted in table 7.12.

**TABLE 7.12: CORRELATION COEFFICIENTS AMONGST STUDENT PREFERENCE PER CONCEPTUAL CONTINUUM**

**Correlations**

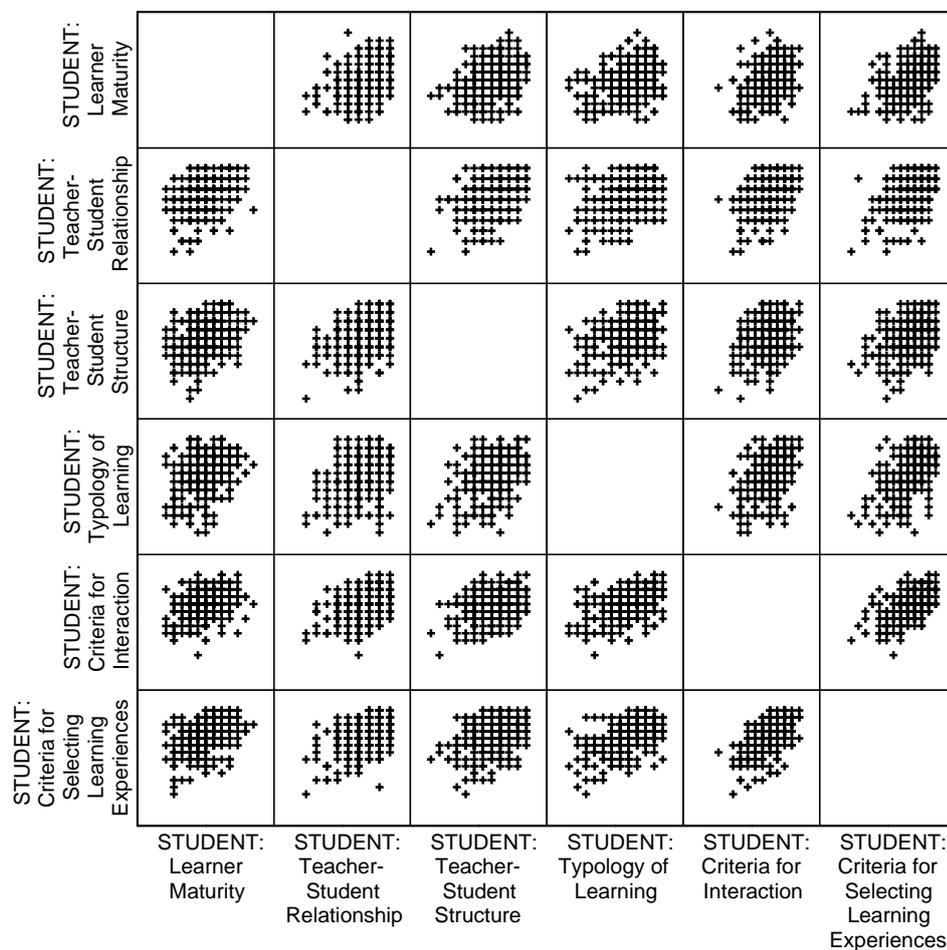
BEVIS AND WATSON CONCEPTUAL CONTINUUMS	ALTERNATIVE DETAIL	PEARSON CORRELATION					
		S1	S2	S3	S4	S5	S6
S1 STUDENT: Learner Maturity	Pearson Correlation	<b>1</b>	<b>0.423</b>	<b>0.324</b>	<b>0.364</b>	<b>0.371</b>	<b>0.439</b>
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000
	N	297	296	296	296	296	296
S2 STUDENT: Teacher-student relationship	Pearson Correlation	<b>0.423</b>	<b>1</b>	<b>0.373</b>	<b>0.366</b>	<b>0.418</b>	<b>0.457</b>
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000
	N	296	298	297	298	297	297
S3 STUDENT: Teacher-student structure	Pearson Correlation	<b>0.324</b>	<b>0.373</b>	<b>1</b>	<b>0.429</b>	<b>0.335</b>	<b>0.389</b>
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000
	N	296	297	298	297	297	297
S4 STUDENT: Typology of Learning	Pearson Correlation	<b>0.364</b>	<b>0.366</b>	<b>0.429</b>	<b>1</b>	<b>0.449</b>	<b>0.542</b>
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000
	N	296	298	297	298	297	297
S5 STUDENT: Criteria for Teacher-Student Interactions	Pearson Correlation	<b>0.371</b>	<b>0.418</b>	<b>0.335</b>	<b>0.449</b>	<b>1</b>	<b>0.569</b>
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000
	N	296	297	297	297	298	297
S6 STUDENT: Criteria for Selecting Learning Experiences	Pearson Correlation	<b>0.439</b>	<b>0.457</b>	<b>0.389</b>	<b>0.542</b>	<b>0.569</b>	<b>1</b>
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	296	297	297	297	297	298

**p < 0.05 level**

For the same reasons plaguing reliability and validity measures in binary data, the Pearson correlation coefficients are rather low. From the findings in table 7.12, hypothesis 1 was rejected at the 5% level of significance. As indicated in table 7.12, the following correlations in the conceptual continuums were above 0.5:

- STUDENT: Typology of Learning versus the Criteria for Selecting and Devising Learning Experiences (0.542)
- STUDENT: Criteria for Teacher-Student Interactions versus Criteria for Selecting and Devising Learning Experiences (0.569)

However, as Brink (1987:83) indicates, the Pearson  $r$  should be accompanied by a scattergram to visualise the actual way in which values are dispersed. Figure 7.1 indicates this for the correlations of the six conceptual continuums.



**FIGURE 7.1 CORRELATION COEFFICIENTS AMONGST STUDENT PREFERENCE PER CONCEPTUAL CONTINUUM**

Figure 7.1 indicates that although the Pearson  $r$ 's are low and the hypothesis is rejected at the  $p < 0.05$ , figuratively it seems as though some of the "correlations" are positively oriented. However, the most the researcher is prepared to state is that there might be an association among these variables (conceptual continuums) (Porkess 2005:61-62).

**7.4.4.2 Hypothesis 2: There is a positive relationship amongst the conceptual continuums regarding the perceptions respondents have of the tutor/college.**

The correlation coefficients amongst the TUTOR perception and the conceptual continuums are depicted in table 7.13.

**TABLE 7.13: CORRELATION COEFFICIENTS AMONGST STUDENT PERCEPTION OF THE TUTOR/COLLEGE**

Correlations

Bevis and Watson conceptual continuum	Pearson Correlation	T1	T2	T3	T4	T5	T6
T1 TUTOR: Learner Maturity	Pearson Correlation	<b>1</b>	<b>0.635</b>	<b>0.264</b>	<b>0.399</b>	<b>0.781</b>	<b>0.689</b>
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000
	N	298	298	298	298	296	296
T2 TUTOR: Teacher-student relationship	Pearson Correlation	<b>0.635</b>	<b>1</b>	<b>0.274</b>	<b>0.344</b>	<b>0.651</b>	<b>0.578</b>
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000
	N	298	299	299	299	297	297
T3 TUTOR: Teacher-student structure	Pearson Correlation	<b>0.264</b>	<b>0.274</b>	<b>1</b>	<b>0.214</b>	<b>0.174</b>	<b>0.201</b>
	Sig. (2-tailed)	0.000	0.000		0.000	0.003	0.000
	N	298	299	299	299	297	297
T4 TUTOR: Typology of Learning	Pearson Correlation	<b>0.399</b>	<b>0.344</b>	<b>0.214</b>	<b>1</b>	<b>0.415</b>	<b>0.432</b>
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000
	N	298	299	299	299	297	297
T5 TUTOR: Criteria for Teacher-Student Interactions	Pearson Correlation	<b>0.781</b>	<b>0.651</b>	<b>0.174</b>	<b>0.415</b>	<b>1</b>	<b>0.725</b>
	Sig. (2-tailed)	0.000	0.000	0.003	0.000		0.000
	N	296	297	297	297	297	296
T6 TUTOR: Criteria for Selecting Learning Experiences	Pearson Correlation	<b>0.689</b>	<b>0.578</b>	<b>0.201</b>	<b>0.432</b>	<b>0.725</b>	<b>1</b>
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	296	297	297	297	296	297

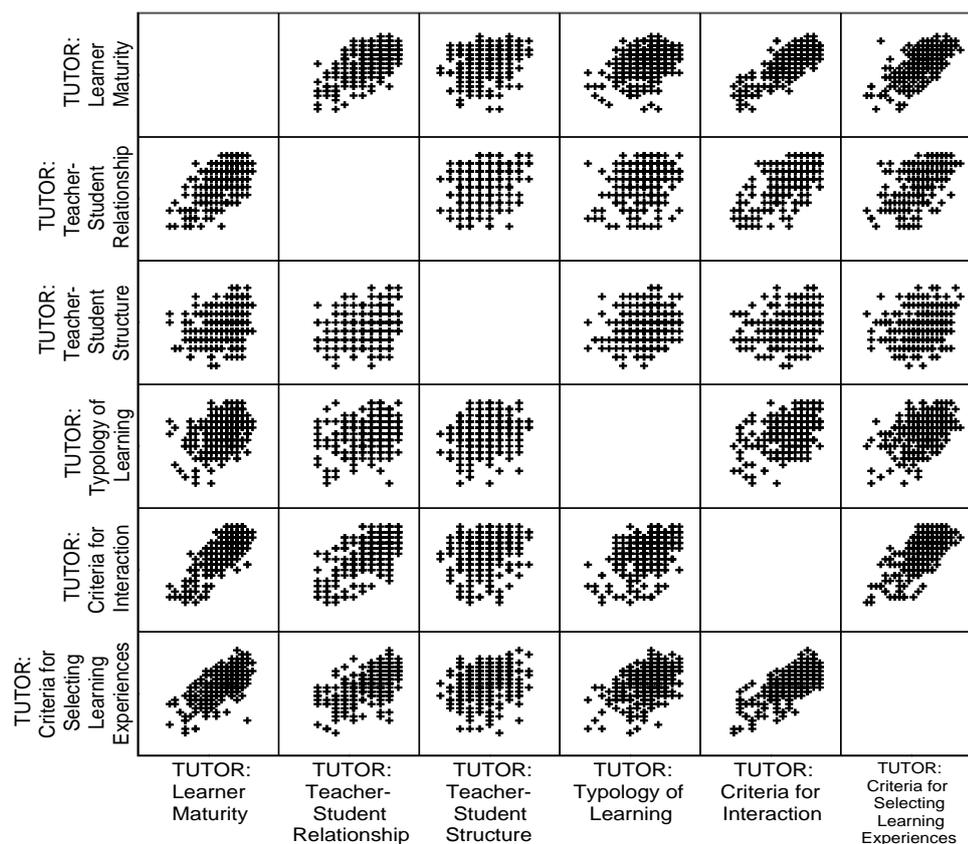
**P < 0.05**

From the findings in table 7.13, hypothesis 2 was rejected at the 5% level of significance.

As indicated in table 7.13, the following correlations in the conceptual continuums were above 0.6:

- TUTOR: Learner Maturity Continuum versus the Teacher-student relationship (0.635).
- TUTOR: Learner Maturity Continuum versus the Criteria for Teacher-Student Interactions (0.781).
- TUTOR: Learner Maturity Continuum versus the Criteria for Selecting and Devising Learning Experiences (0.689).
- TUTOR: Teacher-student relationship versus Criteria for Teacher-Student Interactions (0.651).
- TUTOR: Criteria for Teacher-Student Interactions versus Criteria for Selecting and Devising Learning Experiences (0.725).

The scattergrams for the sub-hypotheses implied by hypothesis 2 are contained in figure 7.2.



**FIGURE 7.2 CORRELATION COEFFICIENTS AMONGST STUDENT PERCEPTION OF THE TUTOR/COLLEGE**

As stated in the previous result, although the Pearson  $r$ 's are “moderate”, visually it seems as though the “associations” are positively oriented.

**7.4.4.3 Hypothesis 3: There is no relationship with regard to the conceptual continuums between the preferences of respondents and the perceptions they have of the tutor/college.**

The result of the Pearson  $r$  for this hypothesis is contained in table 7.14

**TABLE 7.14: PEARSON CORRELATION COEFFICIENTS BETWEEN STUDENT-PREFERENCE AND PERCEPTION OF TUTOR/COLLEGE PER CONCEPTUAL CONTINUUM**

Paired Bevis and Watson conceptual continuums		Correlation	Significance
STUDENT: TUTOR:	Learner Maturity Continuum Learner Maturity Continuum	0.190	0.001
STUDENT: TUTOR:	Teacher-student relationship Teacher-student relationship	0.276	0.000
STUDENT: TUTOR:	Teacher-student structure Teacher-student structure	0.298	0.000
STUDENT: TUTOR:	Typology of Learning Typology of Learning	0.271	0.000
STUDENT: TUTOR:	Criteria for Interactions Criteria for Interactions	0.321	0.000
STUDENT: TUTOR:	Criteria for Selecting Learning Experiences Criteria for Selecting Learning Experiences	0.203	0.000

**p < 0.05 level**

From the findings in table 7.14, the null hypothesis 3 was rejected at the 5% level of significance. In all the conceptual continuums the correlation coefficient is significantly different from zero because the significance value is less than 0.05. However, the *r*-values are extremely low and no convincing positive linear correlation is deduced.

#### **7.4.5 Testing hypotheses relating to biographic data and the conceptual continuums**

Except for hypothesis 4, which was tested using the Pearson Product Moment correlation coefficient, the hypotheses were tested through Oneway ANOVA, ANOVA, multiple comparisons of groups and the Scheffé test where null hypotheses were rejected.

##### **7.4.5.1 Hypothesis 4: There is no relationship between respondents' age and their preferences regarding, and their perceptions of the tutor/college in terms of, the conceptual continuums.**

A summary of the Pearson *r*-values is contained in table 7.15

**TABLE 7.15: CORRELATIONS BETWEEN THE SCORES OBTAINED FOR THE BEVIS AND WATSON CONCEPTUAL CONTINUUMS AND THE AGE OF THE RESPONDENTS**

Conceptual Continuums		Age
STUDENT: Learner Maturity	Pearson Correlation	0.072
	Sig. (2-tailed)	0.217
	N	294
STUDENT: Teacher-student relationship	Pearson Correlation	0.093
	Sig. (2-tailed)	0.110
	N	295
STUDENT: Teacher-student structure	Pearson Correlation	0.077
	Sig. (2-tailed)	0.189
	N	295
STUDENT: Typology of Learning	Pearson Correlation	0.163
	Sig. (2-tailed)	0.005*
	N	295
STUDENT: Criteria for Teacher-Student Interactions	Pearson Correlation	0.110
	Sig. (2-tailed)	0.060
	N	295
STUDENT: Criteria for Selecting and Devising Learning Experiences	Pearson Correlation	0.066
	Sig. (2-tailed)	0.259
	N	295
TUTOR: Learner Maturity	Pearson Correlation	0.108
	Sig. (2-tailed)	0.065
	N	295
TUTOR: Teacher-student relationship	Pearson Correlation	0.153
	Sig. (2-tailed)	0.009*
	N	296
TUTOR: Teacher-student structure	Pearson Correlation	0.118
	Sig. (2-tailed)	0.043*
	N	296
TUTOR: Typology of Learning	Pearson Correlation	0.122
	Sig. (2-tailed)	0.036*
	N	296
TUTOR: Criteria for Teacher-Student Interactions	Pearson Correlation	0.116
	Sig. (2-tailed)	0.047*
	N	294
TUTOR: Criteria for Selecting and Devising Learning Experiences	Pearson Correlation	0.040
	Sig. (2-tailed)	0.490*
	N	294

**Pearson  $r$  correlation is significant at  $p < 0.05$  level**

Based on the very low correlation coefficients, and the fact that no Pearson ( $r$ ) is significant at the  $p = 0.05$  level, the stated null hypothesis was accepted at the 0.05 level of significance. Thus, there was no significant correlation (relationship) between the scores of the humanistic- or behaviouristic orientation and the age of the respondents with regard to the student preference and the perception that the student had of the tutor.

In the cases of STUDENT: Typology of Learning and TUTOR: Teacher–student relationship, TUTOR: Teacher–student structure, TUTOR: Typology of Learning, TUTOR: Criteria for Teacher-Student Interactions and TUTOR: Criteria for Selecting and Devising Learning Experiences, the significance is less than 0.05, meaning that the correlation coefficient is significantly different from zero. However, the correlations are significantly low and it would be correct to state that the scores of the models are largely independent of age.

In the case of the significance of the two tailed analysis, that is, an analysis in which both ends of the sampling distribution are used to determine improbable values (Burns & Grove 1999:302, 483; Polit & Beck 2004:482, 734), six conceptual continuums seem to have a slight relationship with age as indicated by \*. However, relations are minute. Further statistics have not been calculated and the direction of the relationships is thus not known.

**7.4.5.2 Hypothesis 5: There is no significant difference between first, second, third and fourth year respondents with regard to their preferences regarding, and their perceptions of the tutor/college pertaining to, the conceptual continuums.**

#### **7.4.5.2.1 Oneway ANOVA**

In order to test the hypothesis, the analysis of variance, using the Oneway ANOVA, was calculated for each conceptual continuum. The Oneway ANOVA test determines the mean differences amongst 2 or more groups by comparing variability between groups to variability within groups (Burns & Grove 1999:297, 320-322, 453; Polit & Beck 2004:489-493, 711). This test applies as four year groups (one to four) have been investigated. The results appear in table 7.16 (foundational descriptive statistics) and 7.17 (ANOVA).

**TABLE 7.16: ONEWAY ANOVA OF MEAN SCORES PER LEVEL OF ADVANCEMENT OF RESPONDENTS AND THEIR PREFERENCES AND PERCEPTIONS IN TERMS OF THE FOUR CONCEPTUAL CONTINUUMS**

		Descriptives					
		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
STUDENT:Learner Maturity	First year	79	67.7848	10.02391	1.12778	45.00	85.00
	Second year	80	70.3125	10.38328	1.16089	45.00	95.00
	Third year	79	72.1519	12.02784	1.35324	45.00	100.00
	Fourth year	59	69.8305	10.90579	1.41981	50.00	90.00
	Total	297	70.0337	10.92042	.63367	45.00	100.00
STUDENT:Teacher-student relationship	First year	80	80.6731	11.86609	1.32667	46.15	100.00
	Second year	80	80.1923	14.57330	1.62934	38.46	100.00
	Third year	78	80.7692	12.62759	1.42979	46.15	100.00
	Fourth year	60	81.7949	13.20754	1.70509	46.15	100.00
	Total	298	80.7950	13.04769	.75583	38.46	100.00
STUDENT:Teacher-student structure	First year	80	70.1136	16.63084	1.85938	27.27	100.00
	Second year	80	63.1818	20.14177	2.25192	.00	100.00
	Third year	79	62.3705	19.35242	2.17732	9.09	100.00
	Fourth year	59	62.8659	21.17173	2.75632	18.18	100.00
	Total	298	64.7651	19.44213	1.12625	.00	100.00
STUDENT:Typology of Learning	First year	80	75.4688	16.84039	1.88281	43.75	100.00
	Second year	80	72.1875	16.15478	1.80616	31.25	100.00
	Third year	78	76.0417	14.74956	1.67006	37.50	100.00
	Fourth year	60	76.2500	15.21387	1.96410	31.25	100.00
	Total	298	74.8951	15.81187	.91596	31.25	100.00
STUDENT: Criteria for Interactions	First year	80	70.7692	16.97699	1.89808	30.77	100.00
	Second year	80	69.4231	13.40613	1.49885	30.77	92.31
	Third year	79	67.6728	16.54315	1.86125	15.38	100.00
	Fourth year	59	67.6662	12.51644	1.62950	38.46	92.31
	Total	298	68.9726	15.12119	.87595	15.38	100.00
STUDENT: Criteria for Selecting Learning Experiences	First year	80	75.9559	13.63386	1.52431	41.18	100.00
	Second year	79	79.1512	13.31416	1.49796	29.41	100.00
	Third year	79	79.8958	13.27446	1.49349	41.18	100.00
	Fourth year	60	80.0000	13.66506	1.76415	35.29	100.00
	Total	298	78.6617	13.49719	.78187	29.41	100.00
TUTOR: Learner Maturity	First year	79	68.6209	13.49614	1.51843	31.58	94.74
	Second year	80	69.7368	14.27319	1.59579	15.79	89.47
	Third year	79	61.4257	18.38190	2.06813	10.53	89.47
	Fourth year	60	59.3860	19.52754	2.52099	10.53	89.47
	Total	298	65.1537	16.90531	.97930	10.53	94.74
TUTOR: Teacher-student relationship	First year	80	74.2045	18.14978	2.02921	18.18	100.00
	Second year	80	73.7500	19.99026	2.23498	18.18	100.00
	Third year	79	70.3107	22.11094	2.48767	18.18	100.00
	Fourth year	60	68.4848	21.46522	2.77115	18.18	100.00
	Total	299	71.9064	20.44055	1.18211	18.18	100.00
TUTOR: Teacher-sudent structure	First year	80	45.3750	17.27981	1.93194	10.00	90.00
	Second year	80	44.6250	18.20723	2.03563	10.00	90.00
	Third year	79	48.6076	16.62051	1.86995	10.00	90.00
	Fourth year	60	41.1667	19.92287	2.57203	.00	80.00
	Total	299	45.1839	18.01052	1.04158	.00	90.00
TUTOR: Typology of Learning	First year	80	68.0357	15.78788	1.76514	21.43	100.00
	Second year	80	69.9107	17.44807	1.95075	14.29	100.00
	Third year	79	66.6365	17.63494	1.98409	14.29	100.00
	Fourth year	60	60.1190	18.98003	2.45031	7.14	100.00
	Total	299	66.5791	17.64824	1.02062	7.14	100.00
TUTOR: Criteria for Interactions	First year	78	76.6026	15.38982	1.74255	18.75	100.00
	Second year	80	75.2344	15.86271	1.77350	25.00	100.00
	Third year	79	67.7215	21.45150	2.41348	18.75	100.00
	Fourth year	60	62.9167	24.94344	3.22018	12.50	100.00
	Total	297	71.1069	20.08140	1.16524	12.50	100.00
TUTOR: Criteria for Selecting Learning Experiences	First year	79	66.6064	13.94577	1.56902	23.81	100.00
	Second year	80	67.0238	14.82361	1.65733	19.05	95.24
	Third year	79	59.3128	17.81411	2.00424	9.52	95.24
	Fourth year	59	54.7215	21.11841	2.74938	4.76	95.24
	Total	297	62.4178	17.48442	1.01455	4.76	100.00

Table 7.16 indicates that the only section where a behaviouristic attitude predominates in the first, second, third and fourth levels, is in the TUTOR: Teacher-Student Structure where the mean score for all year groups is less than 50 with a collective mean score of 45.2 rounded. In all other cases the mean score is larger than 50, which indicates a predominantly humanistic curriculum focus.

Additionally, there were differences in the mean scores so the F statistic was calculated to determine if the differences were significant between- and within the groups. The F statistic is a calculated value of the ANOVA test and the F distribution table is used to determine the level of significance of the F statistic (Burns & Grove 1999:320-321; Polit & Beck 2004:489-491). The results appear in table 7.17.

**TABLE 7.17: ANOVA OF MEAN SCORES PER LEVEL OF ADVANCEMENT OF RESPONDENTS AND THEIR PREFERENCES AND PERCEPTIONS IN TERMS OF THE FOUR CONCEPTUAL CONTINUUMS**

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
STUDENT:Learner Maturity	Between Groups	762.652	3	254.217	2.157	.093
	Within Groups	4537.012	293	117.874		
	Total	5299.663	296			
STUDENT:Teacher-Student Relationship	Between Groups	90.285	3	30.095	.175	.913
	Within Groups	0471.647	294	171.672		
	Total	0561.932	297			
STUDENT:Teacher-Student Structure	Between Groups	3154.869	3	1051.623	2.834	.039
	Within Groups	109110.1	294	371.123		
	Total	112265.0	297			
STUDENT:Typology of Learning	Between Groups	825.499	3	275.166	1.102	.349
	Within Groups	3429.036	294	249.759		
	Total	4254.535	297			
STUDENT: Criteria for Interaction	Between Groups	508.616	3	169.539	.740	.529
	Within Groups	7400.522	294	229.253		
	Total	7909.138	297			
STUDENT: Criteria for Selecting Learning Experiences	Between Groups	832.413	3	277.471	1.531	.206
	Within Groups	3273.274	294	181.202		
	Total	4105.687	297			
TUTOR: Learner Maturity	Between Groups	5724.060	3	1908.020	7.087	.000
	Within Groups	9155.469	294	269.236		
	Total	4879.529	297			
TUTOR: Teacher-Student Relationship	Between Groups	1598.001	3	532.667	1.278	.282
	Within Groups	122911.2	295	416.648		
	Total	124509.2	298			
TUTOR: Teacher-Student Structure	Between Groups	1922.214	3	640.738	1.995	.115
	Within Groups	4742.669	295	321.162		
	Total	6664.883	298			
TUTOR: Typology of Learning	Between Groups	3561.907	3	1187.302	3.924	.009
	Within Groups	9253.259	295	302.553		
	Total	2815.166	298			
TUTOR: Criteria for Interaction	Between Groups	8648.864	3	2882.955	7.629	.000
	Within Groups	110716.9	293	377.873		
	Total	119365.8	296			
TUTOR: Criteria for Selecting Learning Experiences	Between Groups	7339.550	3	2446.517	8.621	.000
	Within Groups	3149.162	293	283.786		
	Total	0488.712	296			

**p < 0.05 level**

From the findings in table 7.17, the null hypothesis 5 was rejected at the 5% level of significance.

Respondents had significant differences in their focus in the STUDENT: Teacher-student structure. The significance value of 0.039 is less than 0.05.

With regard to the perception that respondents have of the tutor/college, significant differences are indicated in the TUTOR: Learner Maturity Continuum, TUTOR: Typology of Learning, TUTOR: Criteria for Teacher-Student Interactions and TUTOR: Criteria for Selecting and Devising Learning Experiences.

Although all the year levels displayed a humanistic orientation, there was a significant difference between the means of the fourth year on the one hand and the first, second and third year students on the other. The fourth year students had the least humanist orientation, that is, they had a more behaviouristic orientation than the other year groups.

As there are four levels of respondents, it is not possible to determine from the ANOVA exactly where the significant differences lie. Consequently, these differences were further investigated by means of multiple comparisons of the groups.

#### **7.4.5.2.2 Multiple comparisons of groups**

A post-hoc analysis was conducted to determine the location of the differences amongst the groups by using the Scheffé test (Burns & Grove 1999:320-322). The results appear in the following tables 7.18 and 7.19.

**TABLE 7.18: MULTIPLE COMPARISONS OF THE CURRICULUM FOCUS OF THE FIRST, SECOND, THIRD AND FOURTH YEAR STUDENTS WITH REGARD TO STUDENT PREFERENCE**

Multiple Comparisons

Scheffé

Dependent Variable	(I) Year group	(J) Year group	Mean Difference (I-J)	Std. Error	Sig.
STUDENT:Learner Maturity	First year	Second year	-2.52769	1.72206	.542
		Third year	-4.36709	1.72747	.096
		Fourth year	-2.04570	1.86814	.753
	Second year	First year	2.52769	1.72206	.542
		Third year	-1.83940	1.72206	.767
		Fourth year	.48199	1.86314	.995
	Third year	First year	4.36709	1.72747	.096
		Second year	1.83940	1.72206	.767
		Fourth year	2.32139	1.86814	.672
	Fourth year	First year	2.04570	1.86814	.753
		Second year	-.48199	1.86314	.995
		Third year	-2.32139	1.86814	.672
STUDENT:Teacher-student relationship	First year	Second year	-.48077	2.07167	.997
		Third year	-.09615	2.08491	1.000
		Fourth year	-1.12179	2.23766	.969
	Second year	First year	-.48077	2.07167	.997
		Third year	-.57692	2.08491	.994
		Fourth year	-1.60256	2.23766	.916
	Third year	First year	.09615	2.08491	1.000
		Second year	.57692	2.08491	.994
		Fourth year	-1.02564	2.24992	.976
	Fourth year	First year	1.12179	2.23766	.969
		Second year	1.60256	2.23766	.916
		Third year	1.02564	2.24992	.976
STUDENT:Teacher-student structure	First year	Second year	6.93182	3.04599	.162
		Third year	7.74310	3.05562	.095
		Fourth year	7.24769	3.30594	.189
	Second year	First year	-6.93182	3.04599	.162
		Third year	.81128	3.05562	.995
		Fourth year	.31587	3.30594	1.000
	Third year	First year	-7.74310	3.05562	.095
		Second year	-.81128	3.05562	.995
		Fourth year	-.49541	3.31481	.999
	Fourth year	First year	-7.24769	3.30594	.189
		Second year	-.31587	3.30594	1.000
		Third year	.49541	3.31481	.999
STUDENT:Typology of Learning	First year	Second year	3.28125	2.49879	.632
		Third year	-.57292	2.51476	.997
		Fourth year	-.78125	2.69900	.994
	Second year	First year	-3.28125	2.49879	.632
		Third year	-3.85417	2.51476	.504
		Fourth year	-4.06250	2.69900	.520
	Third year	First year	.57292	2.51476	.997
		Second year	3.85417	2.51476	.504
		Fourth year	-.20833	2.71379	1.000
	Fourth year	First year	.78125	2.69900	.994
		Second year	4.06250	2.69900	.520
		Third year	-.20833	2.71379	1.000
STUDENT: Criteria for Interaction	First year	Second year	1.34615	2.39402	.957
		Third year	3.09640	2.40159	.646
		Fourth year	3.10300	2.59833	.700
	Second year	First year	-1.34615	2.39402	.957
		Third year	1.75024	2.40159	.912
		Fourth year	1.75684	2.59833	.928
	Third year	First year	-3.09640	2.40159	.646
		Second year	-1.75024	2.40159	.912
		Fourth year	.00660	2.60530	1.000
	Fourth year	First year	-3.10300	2.59833	.700
		Second year	-1.75684	2.59833	.928
		Third year	-.00660	2.60530	1.000
STUDENT: Criteria for Selecting Learning Experiences	First year	Second year	-3.19527	2.13511	.525
		Third year	-3.93987	2.13511	.335
		Fourth year	-4.04412	2.29892	.379
	Second year	First year	3.19527	2.13511	.525
		Third year	-.74460	2.14182	.989
		Fourth year	-.84885	2.30515	.987
	Third year	First year	3.93987	2.13511	.335
		Second year	.74460	2.14182	.989
		Fourth year	-.10424	2.30515	1.000
	Fourth year	First year	4.04412	2.29892	.379
		Second year	.84885	2.30515	.987
		Third year	.10424	2.30515	1.000

p < 0.05 level

Values of less than 0.05 signify that the mean scores of the two groups are significantly different at the 5% level of significance. According to table 7.18 the post-hoc analysis via the Scheffé test revealed that at the 5% level of significance there is no significant differences in student preference between the first, second, third and fourth year levels with regard to STUDENT: Teacher-Student Structure.

**TABLE 7.19: MULTIPLE COMPARISONS OF THE CURRICULUM FOCUS OF THE FIRST, SECOND, THIRD AND FOURTH YEAR STUDENTS WITH REGARD TO STUDENT PERCEPTION OF THE TUTOR**

Multiple Comparisons				
Scheffé				
Dependent Variable	(I) Year group	(J) Year group	Mean Difference (I-J)	Sig.
TUTOR: Learner Maturity	First year	Second year	-1.11592	.980
		Third year	7.19520	.057
		Fourth year	9.23495	.014
	Second year	First year	1.11592	.980
		Third year	8.31113	.018
		Fourth year	10.35088	.004
	Third year	First year	-7.19520	.057
		Second year	-8.31113	.018
		Fourth year	2.03975	.913
	Fourth year	First year	-9.23495	.014
		Second year	-10.35088	.004
		Third year	-2.03975	.913
TUTOR: Teacher-student relationship	First year	Second year	.45455	.999
		Third year	3.89384	.695
		Fourth year	5.71970	.443
	Second year	First year	-.45455	.999
		Third year	3.43930	.770
		Fourth year	5.26515	.517
	Third year	First year	-3.89384	.695
		Second year	-3.43930	.770
		Fourth year	1.82585	.965
	Fourth year	First year	-5.71970	.443
		Second year	-5.26515	.517
		Third year	-1.82585	.965
TUTOR: Teacher-student structure	First year	Second year	.75000	.995
		Third year	-3.23259	.731
		Fourth year	4.20833	.596
	Second year	First year	-.75000	.995
		Third year	-3.98259	.581
		Fourth year	3.45833	.735
	Third year	First year	3.23259	.731
		Second year	3.98259	.581
		Fourth year	7.44093	.120
	Fourth year	First year	-4.20833	.596
		Second year	-3.45833	.735
		Third year	-7.44093	.120
TUTOR: Typology of Learning	First year	Second year	-1.87500	.926
		Third year	1.39919	.968
		Fourth year	7.91667	.071
	Second year	First year	1.87500	.926
		Third year	3.27419	.704
		Fourth year	9.79167	.014
	Third year	First year	-1.39919	.968
		Second year	-3.27419	.704
		Fourth year	6.51748	.190
	Fourth year	First year	-7.91667	.071
		Second year	-9.79167	.014
		Third year	-6.51748	.190
TUTOR: Criteria for Interaction	First year	Second year	1.36819	.978
		Third year	8.88105	.044
		Fourth year	13.68590	.001
	Second year	First year	-1.36819	.978
		Third year	7.51286	.117
		Fourth year	12.31771	.004
	Third year	First year	-8.88105	.044
		Second year	-7.51286	.117
		Fourth year	4.80485	.556
	Fourth year	First year	-13.68590	.001
		Second year	-12.31771	.004
		Third year	-4.80485	.556
TUTOR: Criteria for Selecting Learning Experiences	First year	Second year	-.41742	.999
		Third year	7.29355	.062
		Fourth year	11.88484	.001
	Second year	First year	.41742	.999
		Third year	7.71097	.042
		Fourth year	12.30226	.001
	Third year	First year	-7.29355	.062
		Second year	-7.71097	.042
		Fourth year	4.59129	.475
	Fourth year	First year	-11.88484	.001
		Second year	-12.30226	.001
		Third year	-4.59129	.475

\*. The mean difference is significant at the .05 level.

**p < 0.05 level**

In cases where the significance value is less than 0.05 it signifies that the mean scores of the two groups are significantly different at the 5% level of significance. Table 7.19 indicates in this instance that there are significant differences between the first, second, third and fourth levels with regard to TUTOR: Learner Maturity Continuum, TUTOR: Typology of Learning, TUTOR: Criteria for Teacher-Student Interactions and TUTOR: Criteria for Selecting and Devising Learning Experiences.

To investigate the findings in the previous paragraph further, homogeneous subgroups were submitted to the Scheffé test.

#### **7.4.5.2.3 The Scheffé test**

The homogeneous subgroups indicated that there were significant differences between the scores of first, second, third and fourth year levels and the conceptual continuums with regard to the perception that the student has of the tutor.

With regards to student preference no significant difference was found.

With regards to the Bevis and Watson conceptual continuums, from the perception that the student has of the tutors/college, it was found that respondents had a humanistic curriculum focus in the TUTOR: Learner Maturity Continuum, Typology of Learning, Criteria for Teacher-Student Interactions and Criteria for Selecting and Devising Learning Experiences.

Although all the year levels displayed a humanistic orientation, there was a significant difference between the means of the fourth year on the one hand and the first, second and third year students on the other hand. The fourth year students had the least humanist orientation and relatively, a more behaviourist orientation than the other year groups.

The previously discussed results are illustrated in the homogeneous subgroups in the following tables 7.20-7.23 and means plot from figures 7.3 to 7.6.

**TABLE 7.20: HOMOGENOUS SUBGROUPS PER YEAR LEVEL RELATING TO TUTOR: LEARNER MATURITY CONTINUUM**

**TUTOR: Learner Maturity**

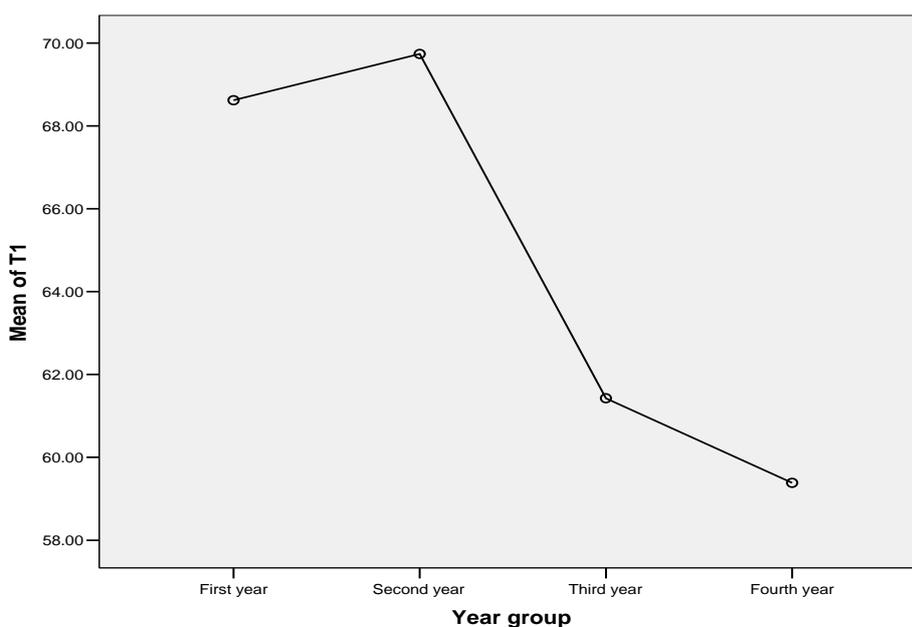
Scheffé<sup>a,b</sup>

Year group	N	Subset for alpha = .05		
		1	2	3
Fourth year	60	59.3860		
Third year	79	61.4257	61.4257	
First year	79		68.6209	68.6209
Second year	80			69.7368
Sig.		.904	.072	.982

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 73.417.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.20 indicates that the mean of the fourth year students differs significantly from the mean of the first and second year students. In addition, the mean of the third year students differs significantly from the mean of the second year students. The means plot in figure 7.3 illustrates these results.



**FIGURE 7.3 HOMOGENOUS SUBGROUPS PER YEAR LEVEL MEANS PLOT FOR TUTOR: LEARNER MATURITY CONTINUUM**

**TABLE 7.21: HOMOGENOUS SUBGROUPS PER YEAR LEVEL RELATING TO TUTOR: TYPOLOGY OF LEARNING**

**TUTOR: Typology of Learning**

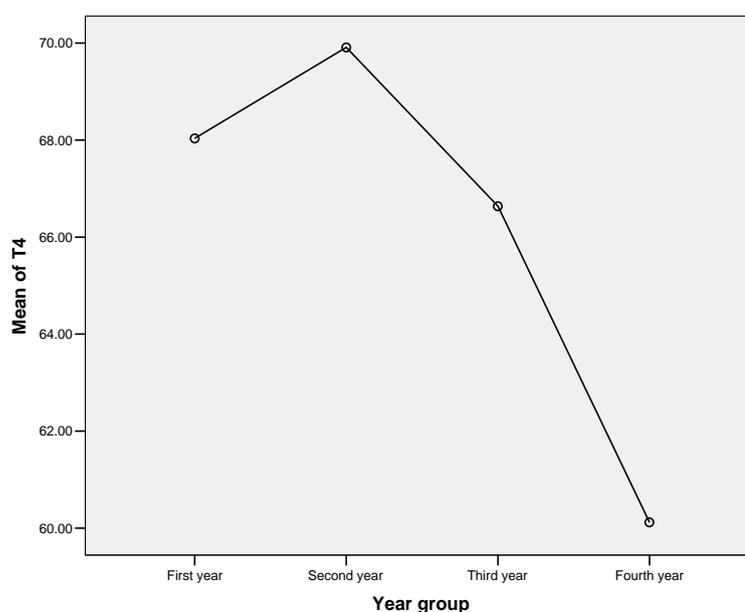
Scheffé<sup>a,b</sup>

Year group	N	Subset for alpha = .05	
		1	2
Fourth year	60	60.1190	
Third year	79	66.6365	66.6365
First year	80	68.0357	68.0357
Second year	80		69.9107
Sig.		.056	.728

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 73.631.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.21 reflects that the senior students, the fourth years, have a lower average that is, they are more behaviouristic. The mean of the fourth year students differs significantly from the mean of the second year students. The mean of the first and third year students are in between. The means plot illustrates the latter results in figure 7.4.



**FIGURE 7.4: HOMOGENOUS SUBGROUPS PER YEAR LEVEL MEANS PLOT FOR TUTOR: TYPOLOGY OF LEARNING**

**TABLE 7.22: HOMOGENOUS SUBGROUPS PER YEAR LEVEL RELATING TO TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS**

**TUTOR: Criteria for Interaction**

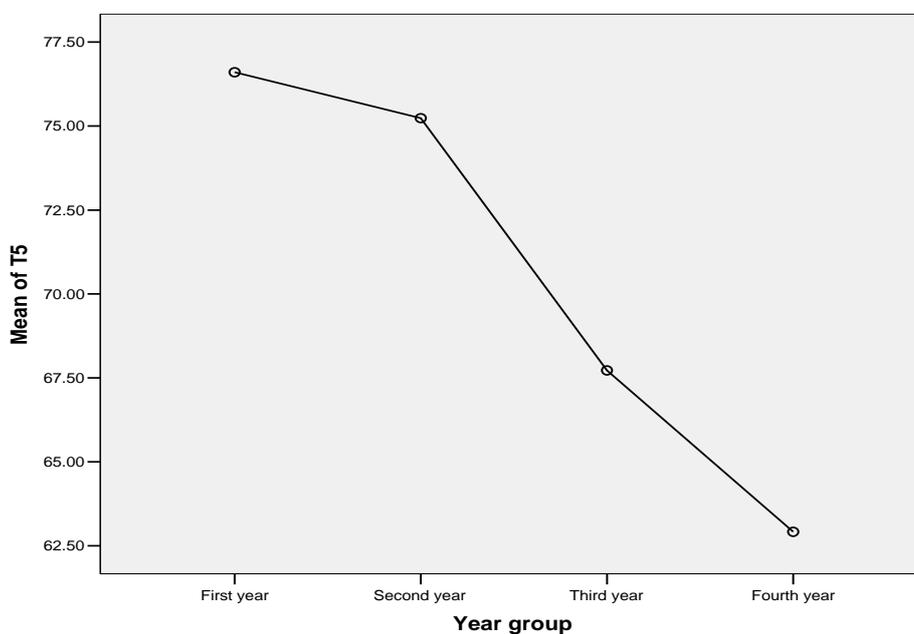
Scheffé<sup>a,b</sup>

Year group	N	Subset for alpha = .05	
		1	2
Fourth year	60	62.9167	
Third year	79	67.7215	67.7215
Second year	80		75.2344
First year	78		76.6026
Sig.		.526	.056

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 73.199.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.22 indicates that the mean of the fourth year students differs significantly from the mean of the first and second year students, with the mean of the third year students in between. The means plot illustrates the latter results in figure 7.5.



**FIGURE 7.5: HOMOGENOUS SUBGROUPS PER YEAR LEVEL MEANS PLOT FOR TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS**

**TABLE 7.23: HOMOGENOUS SUBGROUPS PER YEAR LEVEL PERTAINING TO TUTOR: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES**

**TUTOR: Criteria for Selecting Learning Experiences**

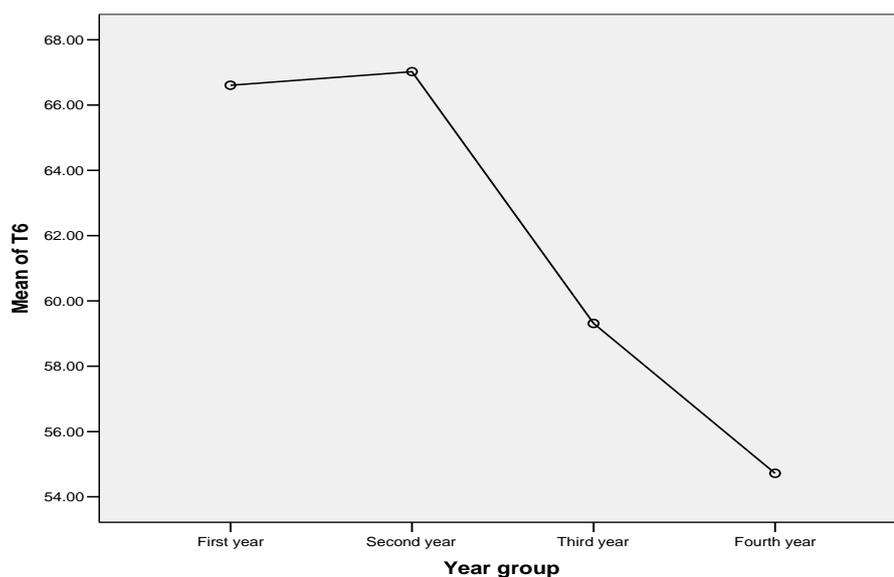
Scheffé<sup>a,b</sup>

Year group	N	Subset for alpha = .05	
		1	2
Fourth year	59	54.7215	
Third year	79	59.3128	59.3128
First year	79		66.6064
Second year	80		67.0238
Sig.		.439	.056

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 73.039.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.23 indicates that the mean of the fourth year students differs significantly from the means of the first and second year students, with the mean of the third year students in between. The means plot illustrates these results in figure 7.6.



**FIGURE 7.6: HOMOGENOUS SUBGROUPS PER YEAR LEVEL MEANS PLOT FOR TUTOR: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES**

#### 7.4.5.2.4 Discussion of results with regard to hypothesis 5

In summary, in all four of the Bevis and Watson conceptual continuums, the fourth year students displayed the least humanistic orientation, that is, they had a relatively more behaviouristic orientation. The latter results correlate with the findings of the study by Mouton (1997:247). She found that although there was a definite move in college A towards an educational focus, several behaviouristic training aspects were still reflected in this educational milieu. In the first year, *training* of students appeared to be the norm. In the second year, the academic development and growth of students appeared to be in a *transitional* phase, that is, progression was towards educating the students. At this point, it appeared that tutors were well on their way to implementing educative principles, but during the third year a relapse occurred and students adopted more behaviouristic, and less humanistic principles in the way they learned. The latter pattern is perpetuated during the fourth year and again found during this recent study. Some of the training trends manifested were the implementation of study guides with their overemphasis on the attainment of behavioural objectives as proof of learning; the immaturity of students as evidenced by their dependence on the tutor and their inability to take responsibility for their own learning; students learned rules and procedures by means of memorisation or rote learning; the lecture was the main teaching method and the tutor was seen as an authority figure (see section 1.2.1). Consequently, the behaviouristic elements in the educational setting may result in respondents tending to grow less humanistic and more behaviouristic.

Fourth year students were found to be the least humanistic in the TUTOR: conceptual continuums. Significant differences were found in the means, for example, at the TUTOR: Criteria for Selection and Devising Learning Experiences, the fourth year students had a mean of 54.72 and the second years a mean of 67.02, that is, a difference of 12.30. No significant differences were found in the STUDENT: conceptual continuums. Therefore, the respondents preferred a humanistic orientation but perceived that the tutors had a less humanistic orientation. A possible reason for the latter result may be due to the curriculum content. In the fourth year a large component of the curriculum consists of ethos, professional practice with components such as ward administration, research and pharmacology. Students appear to find these modules difficult, especially research and pharmacology. Consequently, they may seek more structure and thus accept being taught by the lecture method.

Another reason for students being less humanistic may be due to the fact that they lack role models, especially with regards to professional practice and socialisation in the educational environment. The latter statement is supported by Waterson et al (2006(a):56) who found that students identified a lack of role models in the clinical area as a cause for their poor academic performance. Similar results were reported by Carlson et al (2005:65, 68, 70-71), during a study of the experiences of final, 4th year nursing students in their preparedness to become registered nurses. Students in this study stated that they experienced a lack of professional nurse role models in their professional socialisation. Toohey (2002:529 in Carlson et al 2005:70-71) stated that students can learn desirable professional nursing practice from positive role models. Fourth year students (final year) also reported a lack of confidence and a consequent need for structured, direct learning opportunities to build their confidence (Carlson et al 2005:68). Additionally, students experienced nursing staff as uncaring and unempathetic with the patients (Carlson et al 2005:71). Therefore, they did not experience caring and in such a situation they would find it difficult to learn to be caring towards patients, staff and fellow students.

With regards to the lecture method, it is evident from the finding in the study by Waterson et al (2006(a):56, 60, 64), that the lecture still remains one of the main teaching strategies in one of the nursing colleges participating in this current study. In the Waterson et al (2006(a):56, 60, 64) study, learners stated that tutors do not prepare adequately for lectures, lack knowledge and as a result some tutors just read from books.

In the STUDENT: Teacher-student structure conceptual continuum (see table 7.9(c)), for question 40, it was found that 57% of respondents preferred the lecture method; a behaviouristic orientation.

In the corresponding item, in the TUTOR: Teacher-student structure conceptual continuum (see table 7.9(i)) for question 127, it was found that 63% of respondents perceived that the tutor implemented self-study activities (see section 7.4.1.3).

The finding that 4th year students were the least humanistic may be partly due to some of the results found in a study by South African researchers Morolong and Chabeli (2005:38; see section 7.4.1.6). These researchers found that newly qualified 4th year students were

not competent to deliver quality nursing care to patients. Additionally, it was found that nurses lacked the knowledge of how to integrate modules such as basic nursing science, human biological sciences, chemical sciences, pharmacology and social sciences (Morolong & Chabeli 2005:44). The latter could be as a result of the behaviouristic principle of teaching modules (subjects) in isolation and by different tutors who do not have the necessary skills and knowledge themselves to integrate the modules. Consequently, tutors might not have the expertise to show the students how to gain theory-practice integration. The latter aspect is evidenced by the findings that a theory-practice gap exists due to the ineffective clinical accompaniment of students by nurse educators and professional nurses (Morolong & Chabeli 2005:45). By concentrating on correcting these behaviouristic tendencies the tutor could move the respondents higher up on the humanistic side of the Training-Education Continuum.

The findings of Morolong and Chabeli as stated in the previous paragraph are supported by Becker et al (2003:57) and Waterson et al (2006(a):57). Additionally, Becker et al (2003:57-58), stated that the authoritarian behavioural-objective curriculum model and the division of subjects by traditional subject boundaries, has resulted in the fragmentation of learning, lack of retention and integration of knowledge and in particular basic sciences, within the clinical context. As previously stated, tutors need to pay attention to these aspects in order to increase the humanistic orientation of the 4th year respondents.

As advocated by Bevis and Watson, in order to create a more humanistic-educative-caring clinical environment for the 4th year respondents, the tutor must ensure that the environment facilitates theory-practice integration. This theory-practice integration will be achieved by promoting the integration of knowledge, skills, attitudes and values so that students are able to render holistic, comprehensive and caring, nursing care to patients. The integration of knowledge, skills, values and attitudes will enable the nurse to demonstrate practical, foundational and reflexive competence. These three competencies are identified by SAQA as being interconnected and referred to as applied competence (Morolong & Chabeli 2005:40).

With regard to integration, in the STUDENT: Criteria for Selecting and Devising Learning Experiences conceptual continuum (see table 7.9(f)), for question 87 the mean was 0.87 indicating a more humanistic orientation. In this instance, 87% of the respondents preferred to integrate theory and practice; a humanistic-educative-caring perspective. In contrast, the

remaining 13% of the respondents indicated that they preferred to study theory and practice separately; a behaviouristic orientation.

In the corresponding item, in the TUTOR: Criteria for Selecting and Devising and Learning Experiences conceptual continuum (see table 7.9(1), for question 173 the mean was 0.91 indicating a more humanistic orientation. In this instance, 91% of the respondents perceived that the tutor integrated theory-practice; a humanistic-educative-caring perspective. In contrast, the remaining 9% of the respondents indicated that the tutor did not integrate theory-practice; a behaviouristic orientation.

Therefore, similar results were obtained for both pairs of items in the STUDENT preference and in the TUTOR perception; a humanistic orientation.

In support of Bevis and Watson, Morolong and Chabeli (2005:45), stated that the clinical educational environment should be dynamic, authentic and learner-orientated to enable the learner to apply self-discipline and learner work ethics; a place where nurses are able not only to experience meaningful and humane learning experiences but also to deliver quality, competent and caring, nursing care to patients. The tutor must implement dialectical and dialogical teaching methods such as problem based learning, application of structured clinical scenarios, hold clinical conferences and multi-modal assessment methods such as reflective journals, portfolios and peer group assessment. These teaching- and assessment methods will stimulate critical thinking of students. Critical thinking will enable learners to learn by analysing, synthesising and evaluating information (Morolong & Chabeli 2005:45-46). Thus, by eliminating some of the behaviouristic elements in the educational setting, the tutor will enable the respondents to grow more humanistic and less behaviouristic.

**7.4.5.3 Hypothesis 6: There is no significant difference between the college block periods respondents have attended and their preferences regarding, and their perceptions of the tutor/college in relation to, the different conceptual continuums.**

In order to test this hypothesis, the analysis of variance, using the Oneway ANOVA, was calculated for each Bevis and Watson conceptual continuum. The Oneway ANOVA test determines the mean differences amongst 2 or more groups by comparing variability

between groups to variability within groups (Burns & Grove 1999:297, 320-322, 453; Polit & Beck 2004:489-493, 711). This test applies as four block periods, one to four, have been investigated. The results appear in table 7.24 (foundational descriptive statistics) and 7.25 (ANOVA).

**TABLE 7.24: MEAN SCORES RELATING TO COLLEGE BLOCK PERIODS AND RESPONDENTS' PREFERENCES AND THEIR PERCEPTIONS OF TUTORS/COLLEGE WITH REGARD TO THE DIFFERENT CONCEPTUAL CONTINUUMS**

		Descriptives					
		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
STUDENT:Learner Maturity	1A	5	68.0000	10.36822	4.63681	55.00	80.00
	1B	4	72.5000	11.90238	5.95119	60.00	85.00
	1D	288	70.0347	10.94803	.64512	45.00	100.00
	Total	297	70.0337	10.92042	.63367	45.00	100.00
STUDENT:Teacher-student relationship	1A	5	81.5385	10.32031	4.61538	69.23	92.31
	1B	4	75.0000	9.67927	4.83964	61.54	84.62
	1D	289	80.8624	13.13874	.77287	38.46	100.00
	Total	298	80.7950	13.04769	.75583	38.46	100.00
STUDENT:Teacher-student structure	1A	5	63.6364	26.50433	11.85310	36.36	100.00
	1B	4	59.0909	11.73631	5.86816	45.45	72.73
	1D	289	64.8632	19.44578	1.14387	.00	100.00
	Total	298	64.7651	19.44213	1.12625	.00	100.00
STUDENT:Typology of Learning	1A	5	65.0000	21.91960	9.80274	43.75	100.00
	1B	4	75.0000	22.24391	11.12196	43.75	93.75
	1D	289	75.0649	15.62920	.91936	31.25	100.00
	Total	298	74.8951	15.81187	.91596	31.25	100.00
STUDENT: Criteria for Interactions	1A	5	76.9231	18.84223	8.42650	53.85	100.00
	1B	4	61.5385	16.61728	8.30864	38.46	76.92
	1D	289	68.9380	15.03736	.88455	15.38	100.00
	Total	298	68.9726	15.12119	.87595	15.38	100.00
STUDENT: Criteria for Selecting Learning Experiences	1A	5	75.2941	11.31493	5.06019	64.71	94.12
	1B	4	72.0588	12.12678	6.06339	58.82	88.24
	1D	289	78.8113	13.55478	.79734	29.41	100.00
	Total	298	78.6617	13.49719	.78187	29.41	100.00
TUTOR: Learner Maturity	1A	5	74.7368	7.80652	3.49118	63.16	84.21
	1B	4	64.4737	12.43636	6.21818	47.37	73.68
	1D	289	64.9973	17.04810	1.00283	10.53	94.74
	Total	298	65.1537	16.90531	.97930	10.53	94.74
TUTOR: Teacher-student relationship	1A	5	80.0000	11.85310	5.30087	63.64	90.91
	1B	4	77.2727	11.73631	5.86816	63.64	90.91
	1D	290	71.6928	20.63676	1.21183	18.18	100.00
	Total	299	71.9064	20.44055	1.18211	18.18	100.00
TUTOR: Teacher-student structure	1A	5	52.0000	17.88854	8.00000	30.00	70.00
	1B	4	47.5000	12.58306	6.29153	30.00	60.00
	1D	290	45.0345	18.09717	1.06270	.00	90.00
	Total	299	45.1839	18.01052	1.04158	.00	90.00
TUTOR: Typology of Learning	1A	5	71.4286	18.21078	8.14411	50.00	92.86
	1B	4	60.7143	23.69018	11.84509	35.71	92.86
	1D	290	66.5764	17.60287	1.03368	7.14	100.00
	Total	299	66.5791	17.64824	1.02062	7.14	100.00
TUTOR: Criteria for Interactions	1A	5	82.5000	2.79508	1.25000	81.25	87.50
	1B	4	76.5625	20.00976	10.00488	56.25	93.75
	1D	288	70.8333	20.22037	1.19150	12.50	100.00
	Total	297	71.1069	20.08140	1.16524	12.50	100.00
TUTOR: Criteria for Selecting Learning Experiences	1A	5	75.2381	3.98410	1.78174	71.43	80.95
	1B	4	60.7143	2.38095	1.19048	57.14	61.90
	1D	288	62.2189	17.66544	1.04095	4.76	100.00
	Total	297	62.4178	17.48442	1.01455	4.76	100.00

Table 7.24 indicates that the only section where a behaviouristic attitude predominates in relation to college block periods 1A, 1B and 1D, is in the TUTOR: Tutor-student structure where the mean score is 45.2. In all other cases the mean score was larger than 50, which indicated a predominantly humanistic curriculum focus.

Additionally, there were differences in the mean scores so the F statistic was calculated to determine if the differences were significant between and within the groups who attended college blocks (Burns & Grove 1999:320-321; Polit & Beck 2004:489-491). The results appear in table 7.25.

**TABLE 7.25: ONEWAY ANOVA OF COLLEGE BLOCK PERIODS AND RESPONDENTS' PREFERENCES AND THEIR PERCEPTIONS OF TUTORS/COLLEGE WITH REGARD TO THE DIFFERENT CONCEPTUAL CONTINUUMS**

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
STUDENT:Learner Maturity	Between Groups	45.011	2	22.505	.188	.829
	Within Groups	35254.653	294	119.914		
	Total	35299.663	296			
STUDENT:Teacher-student relationship	Between Groups	138.404	2	69.202	.405	.667
	Within Groups	50423.527	295	170.927		
	Total	50561.932	297			
STUDENT:Teacher-student structure	Between Groups	137.935	2	68.968	.181	.834
	Within Groups	112127.0	295	380.092		
	Total	112265.0	297			
STUDENT:Typology of Learning	Between Groups	497.939	2	248.970	.996	.371
	Within Groups	73756.596	295	250.022		
	Total	74254.535	297			
STUDENT: Criteria for Interactions	Between Groups	537.462	2	268.731	1.177	.310
	Within Groups	67371.675	295	228.379		
	Total	67909.138	297			
STUDENT: Criteria for Selecting Learning Experiences	Between Groups	237.564	2	118.782	.650	.523
	Within Groups	53868.123	295	182.604		
	Total	54105.687	297			
TUTOR: Learner Maturity	Between Groups	468.105	2	234.052	.818	.442
	Within Groups	84411.424	295	286.140		
	Total	84879.529	297			
TUTOR: Teacher-student relationship	Between Groups	455.954	2	227.977	.544	.581
	Within Groups	124053.3	296	419.099		
	Total	124509.2	298			
TUTOR: Teacher-student structure	Between Groups	260.228	2	130.114	.400	.671
	Within Groups	96404.655	296	325.691		
	Total	96664.883	298			
TUTOR: Typology of Learning	Between Groups	255.173	2	127.587	.408	.665
	Within Groups	92559.993	296	312.703		
	Total	92815.166	298			
TUTOR: Criteria for Interactions	Between Groups	789.621	2	394.811	.979	.377
	Within Groups	118576.2	294	403.320		
	Total	119365.8	296			
TUTOR: Criteria for Selecting Learning Experiences	Between Groups	844.800	2	422.400	1.385	.252
	Within Groups	89643.912	294	304.911		
	Total	90488.712	296			

**p < 0.05 level**

In cases where the significance value is less than 0.05 it signifies that the mean scores of the two groups are significantly different at the 5% level of significance. Table 7.21 indicates that there are no significant differences between the means of the college blocks, that is, all the significance values are larger than 0.05. From the findings in table 7.21, the null hypothesis 6 was accepted at the 0.5 level of significance. There was no significant difference between the Curriculum Focus of respondents who attended different college block periods and the models with regard to respondents' preference and their perception of the tutors/college.

With regard to the small sample size, 97% of all year groups completed the instrument during their last college block. The latter aspect ensured that respondents had completed their theory- and clinical component. Therefore, all students in that particular year group had had the same learning experiences and clinical exposure (see table 7.4). The respondents in block 1A and 1B were the ones who were selected in the random sample but were absent from class on the day the questionnaires were administered. They, therefore, completed the questionnaire during blocks 1A and 1B at the beginning of the following year (see section 7.2.1.4).

**7.4.5.4 Hypothesis 7: There is no significant difference between the different language groups with regard to respondents' preferences, and their perceptions of the tutor/college relating to, the conceptual continuums.**

**7.4.5.4.1 Oneway ANOVA**

As previously indicated, in order to test this hypothesis, the analysis of variance, using the Oneway ANOVA, was calculated for each Bevis and Watson conceptual continuum. The results appear in tables 7.26 and 7.27.

**TABLE 7.26: ONEWAY ANOVA OF MEAN SCORES RELATING TO LANGUAGE AND RESPONDENTS' PREFERENCES AND THEIR PERCEPTIONS OF TUTORS/COLLEGE WITH REGARD TO THE DIFFERENT CONCEPTUAL CONTINUUMS**

Descriptives							
		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
STUDENT:Learner Maturity	African	219	69.7260	10.56512	.71392	45.00	100.00
	English	11	65.0000	15.65248	4.71940	50.00	85.00
	Afrikaans	23	67.8261	12.77658	2.66410	45.00	90.00
	Other	44	73.9773	9.43642	1.42259	50.00	90.00
	Total	297	70.0337	10.92042	.63367	45.00	100.00
STUDENT:Teacher-student relationship	African	220	80.4196	13.25786	.89384	38.46	100.00
	English	11	75.5245	16.43282	4.95468	46.15	100.00
	Afrikaans	23	77.5920	12.89529	2.68885	46.15	100.00
	Other	44	85.6643	9.75705	1.47093	61.54	100.00
	Total	298	80.7950	13.04769	.75583	38.46	100.00
STUDENT:Teacher-student structure	African	220	65.7025	19.31539	1.30224	.00	100.00
	English	11	51.2397	24.14581	7.28024	9.09	81.82
	Afrikaans	23	57.3123	19.07610	3.97764	27.27	100.00
	Other	44	67.3554	17.35080	2.61573	18.18	100.00
	Total	298	64.7651	19.44213	1.12625	.00	100.00
STUDENT:Typology of Learning	African	220	74.1193	16.18506	1.09120	31.25	100.00
	English	11	65.3409	14.88593	4.48828	43.75	93.75
	Afrikaans	23	77.4457	14.92633	3.11235	50.00	100.00
	Other	44	79.8295	13.12837	1.97918	43.75	100.00
	Total	298	74.8951	15.81187	.91596	31.25	100.00
STUDENT: Criteria for Interactions	African	220	68.7063	15.31400	1.03247	15.38	100.00
	English	11	60.1399	19.40481	5.85077	30.77	92.31
	Afrikaans	23	66.2207	13.67004	2.85040	38.46	84.62
	Other	44	73.9510	12.32734	1.85842	53.85	100.00
	Total	298	68.9726	15.12119	.87595	15.38	100.00
STUDENT: Criteria for Selecting Learning Experiences	African	220	78.6898	13.53628	.91262	29.41	100.00
	English	11	68.4492	15.62376	4.71074	41.18	88.24
	Afrikaans	23	74.4246	13.80773	2.87911	41.18	94.12
	Other	44	83.2888	10.60974	1.59948	52.94	100.00
	Total	298	78.6617	13.49719	.78187	29.41	100.00
TUTOR: Learner Maturity	African	220	64.3301	16.92275	1.14093	10.53	94.74
	English	11	61.2440	21.98876	6.62986	26.32	84.21
	Afrikaans	23	64.5309	15.40336	3.21182	26.32	84.21
	Other	44	70.5742	15.61792	2.35449	26.32	89.47
	Total	298	65.1537	16.90531	.97930	10.53	94.74
TUTOR: Teacher-student relationship	African	221	71.2875	20.88803	1.40508	18.18	100.00
	English	11	62.8099	19.68955	5.93662	36.36	90.91
	Afrikaans	23	73.5178	17.53242	3.65576	36.36	100.00
	Other	44	76.4463	19.24165	2.90079	27.27	100.00
	Total	299	71.9064	20.44055	1.18211	18.18	100.00
TUTOR: Teacher-student structure	African	221	44.8869	17.98006	1.20947	.00	90.00
	English	11	34.5455	16.34848	4.92925	20.00	70.00
	Afrikaans	23	45.6522	16.46652	3.43351	10.00	70.00
	Other	44	49.0909	18.65453	2.81228	.00	90.00
	Total	299	45.1839	18.01052	1.04158	.00	90.00
TUTOR: Typology of Learning	African	221	65.6109	18.23238	1.22644	7.14	100.00
	English	11	61.6883	16.37343	4.93677	35.71	85.71
	Afrikaans	23	71.4286	16.54252	3.44935	14.29	100.00
	Other	44	70.1299	14.79754	2.23081	42.86	100.00
	Total	299	66.5791	17.64824	1.02062	7.14	100.00
TUTOR: Criteria Interactions	African	219	70.3767	20.30164	1.37186	12.50	100.00
	English	11	60.2273	27.28220	8.22589	18.75	100.00
	Afrikaans	23	72.0109	19.84220	4.13738	18.75	93.75
	Other	44	76.9886	15.58994	2.35027	31.25	100.00
	Total	297	71.1069	20.08140	1.16524	12.50	100.00
TUTOR: Criteria for Selecting Learning Experiences	African	220	61.2554	17.38179	1.17188	4.76	95.24
	English	11	60.1732	19.43332	5.85937	23.81	85.71
	Afrikaans	23	64.5963	19.46650	4.05905	19.05	90.48
	Other	43	67.7741	15.82205	2.41284	19.05	100.00
	Total	297	62.4178	17.48442	1.01455	4.76	100.00

Table 7.26 indicates that the only section where a behaviouristic focus predominates with regards to language is in the TUTOR: Teacher-student structure where the mean score is 45.2. In all other cases the mean score was larger than 50, which indicates a predominantly humanistic curriculum focus.

Additionally, there were differences in the mean scores so the F statistic was calculated to determine if the differences were significant between and within the language groups (Burns & Grove 1999:320-321; Polit & Beck 2004:489-491). The results appear in table 7.27.

**TABLE 7.27: ANOVA OF LANGUAGE AND RESPONDENTS' PREFERENCES AND THEIR PERCEPTIONS OF TUTORS/COLLEGE WITH REGARD TO THE DIFFERENT CONCEPTUAL CONTINUUMS**

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
STUDENT:Learner Maturity	Between Groups	1095.820	3	365.273	3.129	.026
	Within Groups	34203.843	293	116.737		
	Total	35299.663	296			
STUDENT:Teacher-student relationship	Between Groups	1615.794	3	538.598	3.235	.023
	Within Groups	48946.137	294	166.483		
	Total	50561.932	297			
STUDENT:Teacher-student structure	Between Groups	3778.371	3	1259.457	3.413	.018
	Within Groups	108486.6	294	369.002		
	Total	112265.0	297			
STUDENT:Typology of Learning	Between Groups	2357.480	3	785.827	3.213	.023
	Within Groups	71897.056	294	244.548		
	Total	74254.535	297			
STUDENT: Criteria for Interactions	Between Groups	2138.504	3	712.835	3.186	.024
	Within Groups	65770.634	294	223.710		
	Total	67909.138	297			
STUDENT: Criteria for Selecting Learning Experiences	Between Groups	2502.380	3	834.127	4.752	.003
	Within Groups	51603.307	294	175.521		
	Total	54105.687	297			
TUTOR: Learner Maturity	Between Groups	1619.059	3	539.686	1.906	.129
	Within Groups	83260.470	294	283.199		
	Total	84879.529	297			
TUTOR: Teacher-student relationship	Between Groups	1961.431	3	653.810	1.574	.196
	Within Groups	122547.8	295	415.416		
	Total	124509.2	298			
TUTOR: Teacher-student structure	Between Groups	1941.130	3	647.043	2.015	.112
	Within Groups	94723.753	295	321.097		
	Total	96664.883	298			
TUTOR: Typology of Learning	Between Groups	1565.953	3	521.984	1.688	.170
	Within Groups	91249.213	295	309.319		
	Total	92815.166	298			
TUTOR: Criteria for Interactions	Between Groups	2959.761	3	986.587	2.483	.061
	Within Groups	116406.0	293	397.290		
	Total	119365.8	296			
TUTOR: Criteria for Selecting Learning Experiences	Between Groups	1695.489	3	565.163	1.865	.136
	Within Groups	88793.223	293	303.049		
	Total	90488.712	296			

**p < 0.05 level**

From the findings in table 7.27, the null hypothesis 7 was rejected at the 5% level of significance. There were significant differences between the scores of respondents who had a humanistic orientation with regards to the mini models and student preference.

With regards to the Bevis and Watson conceptual continuums, from the respondent preference it was found that respondents had significant differences in their humanistic curriculum focus in the STUDENT: Learner Maturity Continuum, STUDENT: Teacher-student relationship, STUDENT: Teacher-student structure, STUDENT: Typology of Learning, STUDENT: Criteria for Teacher-Student Interactions and STUDENT: Criteria for Selecting and Devising Learning Experiences.

Although significant differences were found in hypothesis 7, a humanistic orientation predominated. For example, the student preference with regards to the Typology of Learning was humanistic and she perceived the tutor as maintaining a humanistic approach to this section.

Although all the language groups displayed a humanistic orientation, there was a significant difference between the means of the English and “other” language groups. The exact composition of the “other” language group was unknown. The English speaking group had the lowest mean, that is, the least humanistic orientation and therefore the more behaviouristic orientation. In contrast, the “other” language group had the highest mean, that is, they had the highest humanistic orientation in the language groups.

With regards to the Bevis and Watson conceptual continuums, from the perception that the student has of the tutor, it was found that respondents had no significant differences in their Curriculum Focus. As the samples were drawn from the same population it would be expected that there would be little difference in the two sources of variance. However, as there are four language groups, it is not possible to determine from the ANOVA exactly where the significant differences lie. Consequently, these differences were further investigated by means of multiple comparisons of the groups.

### 7.4.5.4.2 Multiple comparisons of groups

A post-hoc analysis was conducted to determine the location of the differences amongst the groups by using the Scheffé test (Burns & Grove 1999:320-322). The results appear in table 7.28 and 7.29.

**TABLE 7.28: MULTIPLE COMPARISONS OF THE DIFFERENCE IN THE FOCUS IN THE CONCEPTUAL CONTINUUMS ACCORDING TO LANGUAGE AND STUDENT PREFERENCE**

Scheffé					
Multiple Comparisons					
Dependent Variable	(I) Language	(J) Language	Mean Difference (I-J)	Std. Error	Sig.
STUDENT: Learner Maturity	African	English	4.72603	3.33848	.572
		Afrikaans	1.89994	2.36824	.886
		Other	-4.25125	1.78498	.131
	English	African	-4.72603	3.33848	.572
		Afrikaans	-2.82609	3.96080	.917
		Other	-8.97727	3.64219	.110
	Afrikaans	African	-1.89994	2.36824	.886
		English	2.82609	3.96080	.917
		Other	-6.15119	2.78004	.182
	Other	African	4.25125	1.78498	.131
		English	8.97727	3.64219	.110
		Afrikaans	6.15119	2.78004	.182
STUDENT: Teacher-student relationship	African	English	4.89510	3.98643	.681
		Afrikaans	2.82761	2.82757	.801
		Other	-5.24476	2.13084	.111
	English	African	-4.89510	3.98643	.681
		Afrikaans	-2.06750	4.73004	.979
		Other	-10.13986	4.34955	.145
	Afrikaans	African	-2.82761	2.82757	.801
		English	2.06750	4.73004	.979
		Other	-8.07236	3.31996	.118
	Other	African	5.24476	2.13084	.111
		English	10.13986	4.34955	.145
		Afrikaans	8.07236	3.31996	.118
STUDENT: Teacher-student structure	African	English	14.46281	5.93489	.117
		Afrikaans	8.39023	4.20961	.267
		Other	-1.65289	3.17233	.965
	English	African	-14.46281	5.93489	.117
		Afrikaans	-6.07258	7.04196	.863
		Other	-16.11570	6.47550	.105
	Afrikaans	African	-8.39023	4.20961	.267
		English	6.07258	7.04196	.863
		Other	-10.04312	4.94267	.250
	Other	African	1.65289	3.17233	.965
		English	16.11570	6.47550	.105
		Afrikaans	10.04312	4.94267	.250
STUDENT: Typology of Learning	African	English	8.77841	4.83148	.349
		Afrikaans	-3.32633	3.42697	.815
		Other	-5.71023	2.58253	.183
	English	African	-8.77841	4.83148	.349
		Afrikaans	-12.10474	5.73272	.218
		Other	-14.48864	5.27158	.058
	Afrikaans	African	3.32633	3.42697	.815
		English	12.10474	5.73272	.218
		Other	-2.38389	4.02373	.950
	Other	African	5.71023	2.58253	.183
		English	14.48864	5.27158	.058
		Afrikaans	2.38389	4.02373	.950
STUDENT: Criteria for Interactions	African	English	8.56643	4.62105	.331
		Afrikaans	2.48556	3.27771	.902
		Other	-5.24476	2.47006	.214
	English	African	-8.56643	4.62105	.331
		Afrikaans	-6.08088	5.48304	.746
		Other	-13.81119	5.04198	.060
	Afrikaans	African	-2.48556	3.27771	.902
		English	6.08088	5.48304	.746
		Other	-7.73031	3.84848	.260
	Other	African	5.24476	2.47006	.214
		English	13.81119	5.04198	.060
		Afrikaans	7.73031	3.84848	.260
STUDENT: Criteria for Selecting Learning Experiences	African	English	10.24064	4.09320	.102
		Afrikaans	4.26529	2.90331	.541
		Other	-4.59893	2.18791	.222
	English	African	-10.24064	4.09320	.102
		Afrikaans	-5.97535	4.85673	.679
		Other	-14.83957	4.46605	.013
	Afrikaans	African	-4.26529	2.90331	.541
		English	5.97535	4.85673	.679
		Other	-8.86422	3.40888	.082
	Other	African	4.59893	2.18791	.222
		English	14.83957	4.46605	.013
		Afrikaans	8.86422	3.40888	.082

\*. The mean difference is significant at the .05 level.

**p < 0.05 level**

Table 7.28 indicates no cases where the significance value is less than 0.05 that would signify that the mean scores of the two groups are significantly different at the 5% level of significance. Consequently, the post-hoc analysis using the Scheffé test revealed no significant differences in student preference and the home languages.

**TABLE 7.29: MULTIPLE COMPARISONS OF THE DIFFERENCE IN THE FOCUS IN THE CONCEPTUAL CONTINUUMS ACCORDING TO LANGUAGE AND STUDENT PERCEPTION OF THE TUTOR/COLLEGE**

Scheffé					
Multiple Comparisons					
Dependent Variable	(I) Language	(J) Language	Mean Difference (I-J)	Std. Error	Sig.
TUTOR: Learner Maturity	African	English	3.08612	5.19929	.950
		Afrikaans	-.20075	3.68785	1.000
		Other	-6.24402	2.77914	.171
	English	African	-3.08612	5.19929	.950
		Afrikaans	-3.28687	6.16914	.963
		Other	-9.33014	5.67289	.441
	Afrikaans	African	.20075	3.68785	1.000
		English	3.28687	6.16914	.963
		Other	-6.04327	4.33005	.584
	Other	African	6.24402	2.77914	.171
		English	9.33014	5.67289	.441
		Afrikaans	6.04327	4.33005	.584
TUTOR: Teacher-student relationship	African	English	8.47762	6.29641	.613
		Afrikaans	-2.23025	4.46557	.969
		Other	-5.15874	3.36467	.504
	English	African	-8.47762	6.29641	.613
		Afrikaans	-10.70787	7.47173	.562
		Other	-13.63636	6.87069	.270
	Afrikaans	African	2.23025	4.46557	.969
		English	10.70787	7.47173	.562
		Other	-2.92849	5.24432	.958
	Other	African	5.15874	3.36467	.504
		English	13.63636	6.87069	.270
		Afrikaans	2.92849	5.24432	.958
TUTOR: Teacher-student structure	African	English	10.34142	5.53567	.324
		Afrikaans	-.76530	3.92603	.998
		Other	-4.20403	2.95814	.569
	English	African	-10.34142	5.53567	.324
		Afrikaans	-11.10672	6.56898	.415
		Other	-14.54545	6.04056	.124
	Afrikaans	African	.76530	3.92603	.998
		English	11.10672	6.56898	.415
		Other	-3.43874	4.61069	.906
	Other	African	4.20403	2.95814	.569
		English	14.54545	6.04056	.124
		Afrikaans	3.43874	4.61069	.906
TUTOR: Typology of Learning	African	English	3.92255	5.43319	.914
		Afrikaans	-5.81771	3.85335	.517
		Other	-4.51901	2.90338	.491
	English	African	-3.92255	5.43319	.914
		Afrikaans	-9.74026	6.44737	.517
		Other	-8.44156	5.92874	.567
	Afrikaans	African	5.81771	3.85335	.517
		English	9.74026	6.44737	.517
		Other	1.29870	4.52533	.994
	Other	African	4.51901	2.90338	.491
		English	8.44156	5.92874	.567
		Afrikaans	-1.29870	4.52533	.994
TUTOR: Criteria for Interactions	African	English	10.14944	6.15885	.439
		Afrikaans	-1.63416	4.36894	.987
		Other	-6.61192	3.29294	.260
	English	African	-10.14944	6.15885	.439
		Afrikaans	-11.78360	7.30690	.459
		Other	-16.76136	6.71912	.104
	Afrikaans	African	1.63416	4.36894	.987
		English	11.78360	7.30690	.459
		Other	-4.97777	5.12863	.815
	Other	African	6.61192	3.29294	.260
		English	16.76136	6.71912	.104
		Afrikaans	4.97777	5.12863	.815
TUTOR: Criteria for Selecting Learning Experiences	African	English	1.08225	5.37842	.998
		Afrikaans	-3.34086	3.81491	.857
		Other	-6.51868	2.90261	.171
	English	African	-1.08225	5.37842	.998
		Afrikaans	-4.42311	6.38168	.923
		Other	-7.60093	5.88196	.644
	Afrikaans	African	3.34086	3.81491	.857
		English	4.42311	6.38168	.923
		Other	-3.17781	4.49707	.919
	Other	African	6.51868	2.90261	.171
		English	7.60093	5.88196	.644
		Afrikaans	3.17781	4.49707	.919

$p < 0.05$  level

Table 7.29 indicates no cases where the significance value is less than 0.05 that would signify that the mean scores of the two groups are significantly different at the 5% level of significance. Consequently, the post-hoc analysis using the Scheffé test revealed no significant differences in student perception of the tutor/college and home languages.

#### **7.4.5.4.3 The Scheffé test**

In a further analysis using the Scheffé test, the results of the homogeneous subgroups indicated that there were significant differences between the scores of English speaking respondents and respondents from the “other” language group with regard to respondent preference and perception of the tutor/college. These differences are illustrated in the following tables 7.30-7.36. and the means plot in figures 7.7 to 7.13

**TABLE 7.30: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: LEARNER MATURITY CONTINUUM**

**STUDENT:Learner Maturity**

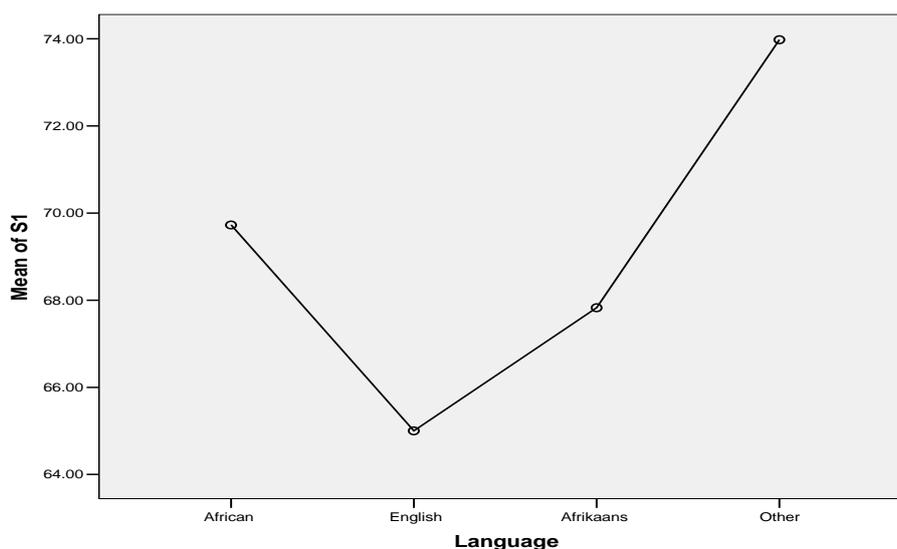
Scheffé<sup>a,b</sup>

Language	N	Subset for alpha = .05	
		1	2
English	11	65.0000	
Afrikaans	23	67.8261	67.8261
African	219	69.7260	69.7260
Other	44		73.9773
Sig.		.501	.263

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 24.740.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.30 indicates that there is a significant difference between English and “other” languages with Afrikaans and African in between. Figure 7.7 also indicates that the group with English as home language has the least humanistic orientation, with the “other” language group the highest. These results are indicated in the means plot (see figure 7.7).



**FIGURE 7.7: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: LEARNER MATURITY CONTINUUM**

**TABLE 7.31: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: TEACHER-STUDENT STRUCTURE**

**STUDENT:Teacher-student structure**

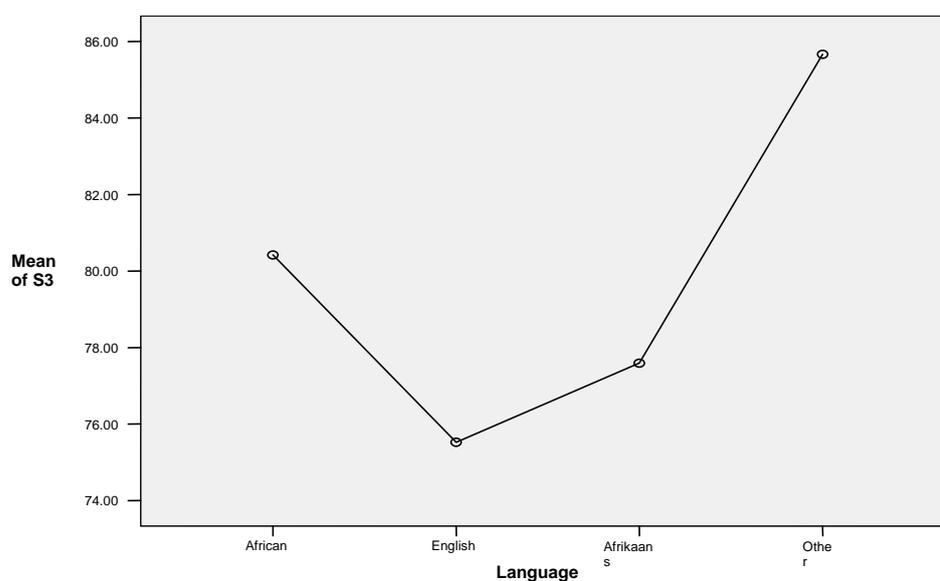
Scheffé<sup>a,b</sup>

Language	N	Subset for alpha = .05	
		1	2
English	11	51.2397	
Afrikaans	23	57.3123	57.3123
African	220	65.7025	65.7025
Other	44		67.3554
Sig.		.074	.338

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 24.743.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.31 indicates a significant difference in the humanistic focus of English speaking and “other” language with Afrikaans and African in between. The means plot in figure 7.8 indicates that the group with English as home language has the least humanistic mean, with the “other” language group, the highest.



**FIGURE 7.8: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: TEACHER-STUDENT STRUCTURE**

**TABLE 7.32: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: TYPOLOGY OF LEARNING**

STUDENT: Typology of Learning

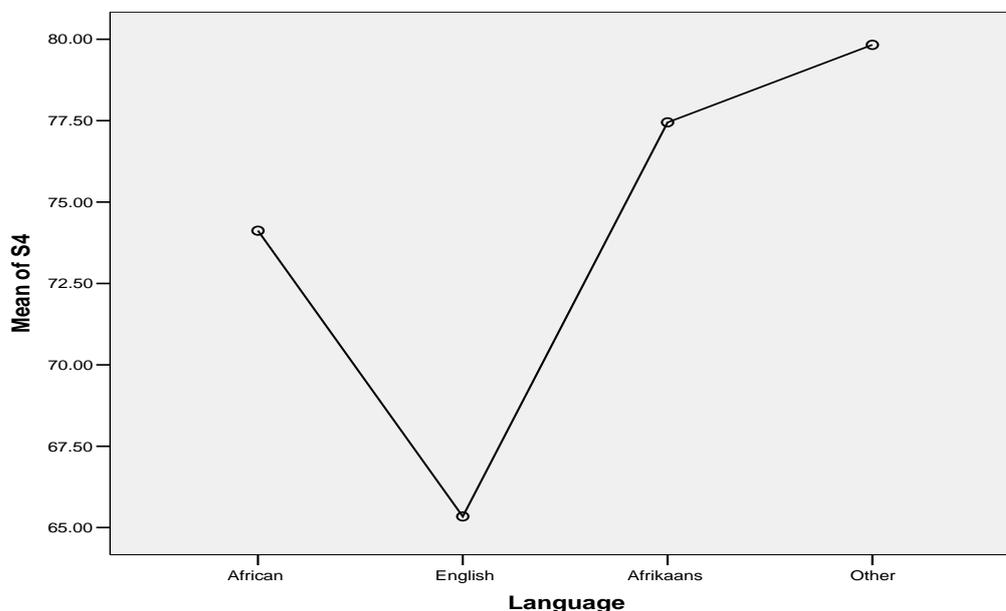
Scheffé<sup>a,b</sup>

Language	N	Subset for alpha = .05	
		1	2
English	11	65.3409	
African	220	74.1193	74.1193
Afrikaans	23	77.4457	77.4457
Other	44		79.8295
Sig.		.062	.649

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 24.743.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

A previously stated, table 7.32 indicates that the group with English as home language has the lowest, that is, the least humanistic mean, with the “other” language group the highest. The means plot illustrates the latter results in figure 7.9.



**FIGURE 7.9: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: TYPOLOGY OF LEARNING**

**TABLE 7.33: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: CRITERIA FOR TEACHER-STUDENT INTERACTIONS**

**STUDENT: Criteria for Interactions**

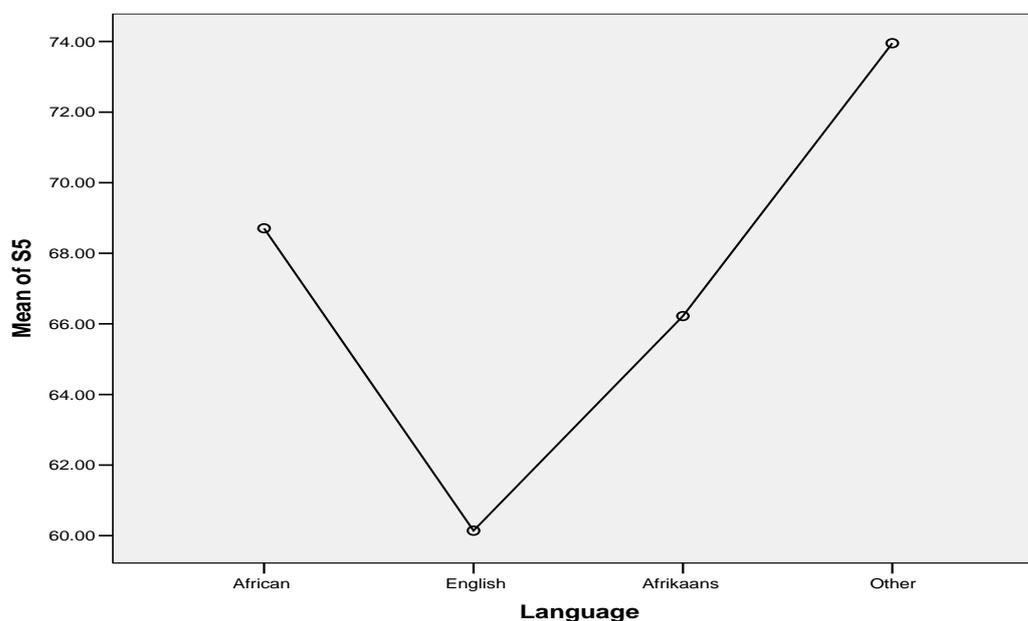
Scheffé<sup>a,b</sup>

Language	N	Subset for alpha = .05	
		1	2
English	11	60.1399	
Afrikaans	23	66.2207	66.2207
African	220	68.7063	68.7063
Other	44		73.9510
Sig.		.257	.349

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 24.743.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.33 indicates that the group with English as home language has the lowest, that is, the least humanistic mean, with the “other” language group the highest. The means plot illustrates the latter results in figure 7.10.



**FIGURE 7.10: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: CRITERIA FOR TEACHER-STUDENT INTERACTIONS**

**TABLE 7.34: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO STUDENT: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES**

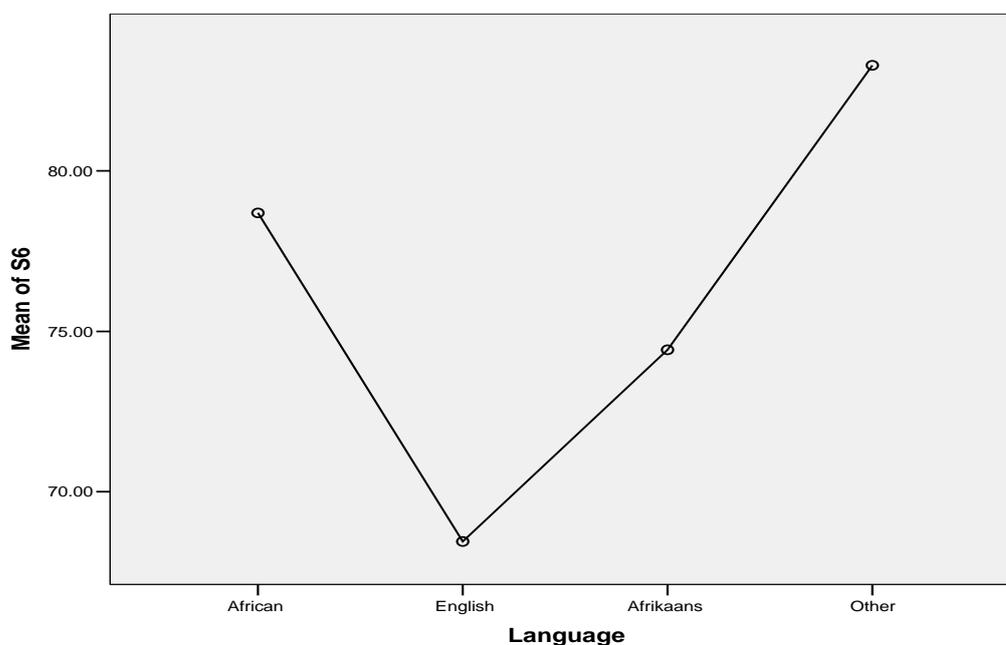
**STUDENT: Criteria for Selecting Learning Experiences**  
Scheffé<sup>a,b</sup>

Language	N	Subset for alpha = .05	
		1	2
English	11	68.4492	
Afrikaans	23	74.4246	74.4246
African	220	78.6898	78.6898
Other	44		83.2888
Sig.		.063	.139

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 24.743.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.34 indicates that the differences in the language groups are the same as the previous findings. The means plot illustrates the latter results in figure 7.11.



**FIGURE 7.11: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR STUDENT: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES**

**TABLE 7.35: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO TUTOR: TEACHER-STUDENT STRUCTURE**

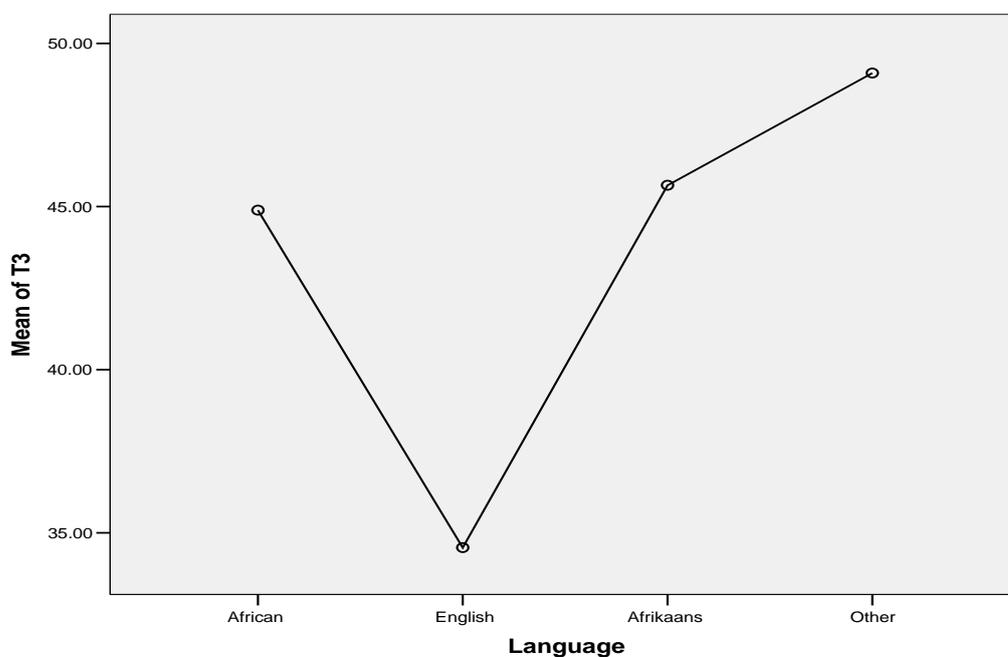
**TUTOR: Teacher-student structure**  
Scheffé<sup>a,b</sup>

Language	N	Subset for alpha = .05	
		1	2
English	11	34.5455	
African	221	44.8869	44.8869
Afrikaans	23	45.6522	45.6522
Other	44		49.0909
Sig.		.193	.878

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 24.746.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.35 indicates that all the language groups have a behaviouristic orientation with regard to the conceptual continuum. However, the group with English as home language has the lowest, that is, the most behaviouristic mean, with the "other" language group having the highest behaviouristic mean which indicates a tendency towards humanism. The means plot illustrates the latter results in figure 7.12.



**FIGURE 7.12: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR TUTOR: TEACHER-STUDENT STRUCTURE**

**TABLE 7.36: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP RELATING TO TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS**

TUTOR: Criteria for Interactions

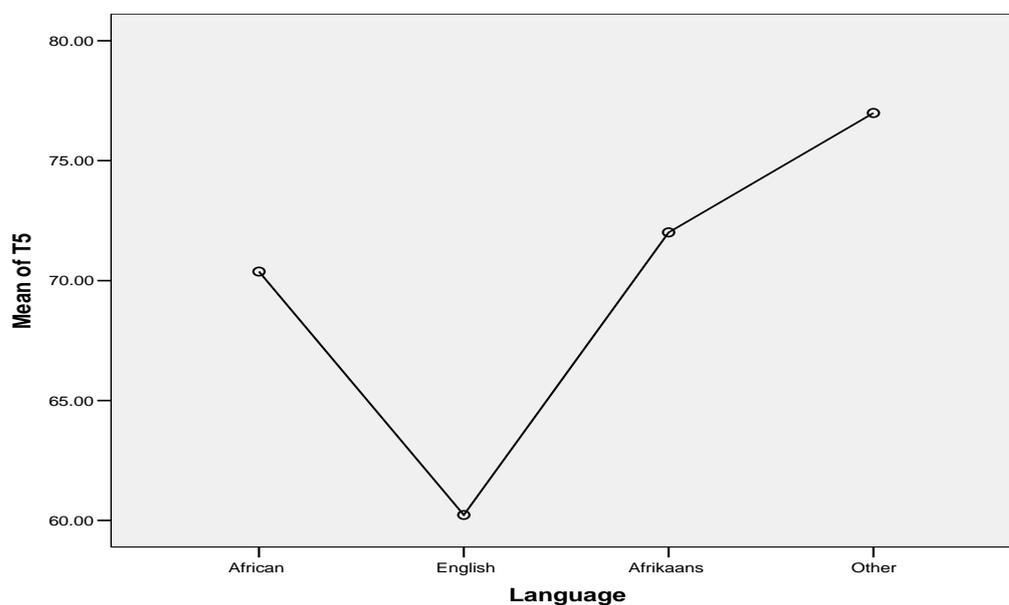
Scheffé<sup>a,b</sup>

Language	N	Subset for alpha = .05	
		1	2
English	11	60.2273	
African	219	70.3767	70.3767
Afrikaans	23	72.0109	72.0109
Other	44		76.9886
Sig.		.231	.715

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 24.740.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 7.36 indicates that the group with English as home language has the lowest, that is, the least humanistic mean, with the “other” language group the highest. The means plot illustrates the latter results in figure 7.13.



**FIGURE 7.13: HOMOGENOUS SUBGROUPS PER LANGUAGE GROUP MEANS PLOT FOR TUTOR: CRITERIA FOR TEACHER-STUDENT INTERACTIONS**

#### **7.4.5.4 Discussion of results with regard to hypothesis 7**

A behaviouristic orientation was found at the TUTOR: Teacher-student structure. The other results indicate that the same humanistic pattern is prevalent throughout the homogenous group analyses and plots, except for the change of the means between the Afrikaans and African languages.

The findings of hypothesis 7 were contrary to expectations as it was expected that English speaking students would have had a more humanistic-educative-caring orientation. It was assumed that the African speaking student nurses would have a behaviourist orientation due to the poor level and quality of education they have received in comparison to English speaking students (Pienaar 1998:5, 142; see section 6.5.1.2.4).

A possible reason for English speaking students having the least humanistic score is that they may have had a better learning environment but the teaching and learning strategies may have been behaviouristic in nature. They may have been subjected to lectures, rote learning, learning only the content that would enable them to pass the final examination and a teacher who had all the power and authority and did not allow the students to take responsibility for their own learning.

#### **7.4.5.5 Hypothesis 8: There is no significant difference between the two colleges with regard to respondents' preferences, and their perceptions of the tutor/college, in relation to the conceptual continuums.**

##### **7.4.5.5.1 Oneway ANOVA**

In order to test hypothesis 8, the analysis of variance, using the Oneway ANOVA, was calculated for each Bevis and Watson conceptual continuum and section thereof. The Oneway ANOVA test determines the mean differences amongst 2 or more groups by comparing variability between groups to variability within groups (Burns & Grove 1999:297, 320-322, 453; Polit & Beck 2004:489-493, 711). The results appear in table 7.37 and 7.38.

**TABLE 7.37: ONEWAY ANOVA FOR COLLEGES PERTAINING TO STUDENT PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE RELATING TO THE CONCEPTUAL CONTINUUMS**

	Colleges	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
STUDENT: Learner Maturity	College A	158	69.4304	10.75161	0.8535	45.00	95.00
	College B	139	70.7194	11.10818	0.94218	45.00	100.00
	Total	297	70.0337	10.92042	0.63367	45.00	100.00
STUDENT: Teacher-student relationship	College A	159	78.7615	12.34473	0.97900	38.46	100.00
	College B	139	83.1212	13.47953	1.14332	38.46	100.00
	Total	298	80.7950	13.04769	0.75583	38.46	100.00
STUDENT: Teacher-student structure	College A	159	63.2361	18.64614	1.47874	9.09	100.00
	College B	139	66.5141	20.24038	1.71677	0.00	100.00
	Total	298	64.7651	19.44213	1.12625	0.00	100.00
STUDENT: Typology of Learning	College A	159	72.9167	15.71834	1.24655	37.50	100.00
	College B	139	77.1583	15.66954	1.32907	31.25	100.00
	Total	298	74.8951	15.81187	0.91596	31.25	100.00
STUDENT: Criteria for Interactions	College A	160	67.4519	15.02289	1.18766	30.77	100.00
	College B	138	70.7358	15.09722	1.28516	15.38	100.00
	Total	298	68.9726	15.12119	0.87595	15.38	100.00
STUDENT: Criteria for Selecting Learning Experiences	College A	160	76.5441	14.34803	1.13431	29.41	100.00
	College B	138	81.1168	12.02908	1.02398	41.18	100.00
	Total	298	78.6617	13.49719	0.78187	29.41	100.00
TUTOR: Learner Maturity	College A	160	64.2105	16.59954	1.31231	10.53	94.74
	College B	138	66.2471	17.24884	1.46832	10.53	94.74
	Total	298	65.1637	16.90531	0.97930	10.53	94.74
TUTOR: Teacher-student relationship	College A	160	73.4659	19.15551	1.51438	18.18	100.00
	College B	139	70.1112	21.75784	1.84548	18.18	100.00
	Total	299	71.9064	20.44055	1.18211	18.18	100.00
TUTOR: Teacher-student structure	College A	160	45.1250	17.80352	1.40749	0.00	90.00
	College B	139	45.2518	18.31017	1.55305	10.00	90.00
	Total	299	45.1839	18.01052	1.04158	0.00	90.00
TUTOR: Typology of Learning	College A	160	64.6875	17.77378	1.40514	7.14	100.00
	College B	139	68.7564	17.31097	1.46830	7.14	100.00
	Total	299	66.5791	17.64824	1.02062	7.14	100.00
TUTOR: Criteria for Interactions	College A	158	72.0728	19.68440	1.56601	12.50	100.00
	College B	139	70.0090	20.53932	1.74212	12.50	100.00
	Total	297	71.1069	20.08140	1.16524	12.50	100.00
TUTOR: Criteria for Selecting Learning Experiences	College A	159	62.7134	17.05361	1.35244	4.76	95.24
	College B	138	62.0773	18.02439	1.53434	9.52	100.00
	Total	297	62.4178	17.48442	1.01455	4.76	100.00

Table 7.37 indicates the same results for both colleges. Both colleges have a humanistic orientation and the only section where a behaviouristic attitude predominates is in the TUTOR: Teacher-student structure where the mean score is 45.2.

Additionally, there were differences in the mean scores so the F statistic was calculated to determine if the differences were significant between and within the groups (Burns & Grove 1999:320-321; Polit & Beck 2004:489-491). The results appear in table 7.38.

**TABLE 7.38: ANOVA OF DIFFERENCES BETWEEN THE TWO COLLEGES WITH REGARD TO STUDENT PREFERENCE AND PERCEPTION OF THE TUTOR**

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
STUDENT:Learner Maturity	Between Groups	122.872	1	122.872	1.030	.311
	Within Groups	35176.792	295	119.243		
	Total	35299.663	296			
STUDENT:Teacher-student relationship	Between Groups	1409.646	1	1409.646	8.489	.004
	Within Groups	49152.286	296	166.055		
	Total	50561.932	297			
STUDENT:Teacher-student structure	Between Groups	796.882	1	796.882	2.116	.147
	Within Groups	111468.1	296	376.581		
	Total	112265.0	297			
STUDENT:Typology of Learning	Between Groups	1334.309	1	1334.309	5.416	.021
	Within Groups	72920.226	296	246.352		
	Total	74254.535	297			
STUDENT: Criteria for Interactions	Between Groups	799.011	1	799.011	3.524	.061
	Within Groups	67110.127	296	226.723		
	Total	67909.138	297			
STUDENT: Criteria for Selecting Learning Experiences	Between Groups	1549.258	1	1549.258	8.725	.003
	Within Groups	52556.429	296	177.556		
	Total	54105.687	297			
TUTOR: Learner Maturity	Between Groups	307.326	1	307.326	1.076	.301
	Within Groups	84572.203	296	285.717		
	Total	84879.529	297			
TUTOR: Teacher-student relationship	Between Groups	837.100	1	837.100	2.010	.157
	Within Groups	123672.1	297	416.405		
	Total	124509.2	298			
TUTOR: Teacher-student structure	Between Groups	1.196	1	1.196	.004	.952
	Within Groups	96663.687	297	325.467		
	Total	96664.883	298			
TUTOR: Typology of Learning	Between Groups	1231.467	1	1231.467	3.994	.047
	Within Groups	91583.700	297	308.363		
	Total	92815.166	298			
TUTOR: Criteria for Interactions	Between Groups	314.954	1	314.954	.780	.378
	Within Groups	119050.8	295	403.562		
	Total	119365.8	296			
TUTOR: Criteria for Selecting Learning Experiences	Between Groups	29.892	1	29.892	.097	.755
	Within Groups	90458.819	295	306.640		
	Total	90488.712	296			

**p < 0.05 level**

In cases where the significance value is less than 0.05 it signifies that the mean scores of the two groups are significantly different at the 5% level of significance. From the findings in table 7.38, the null hypothesis 8 was rejected at the 5% level of significance, as there are some differences.

With regards to the Bevis and Watson conceptual continuums, it was found that respondents had significant differences in their humanistic focus in the STUDENT: Teacher-student

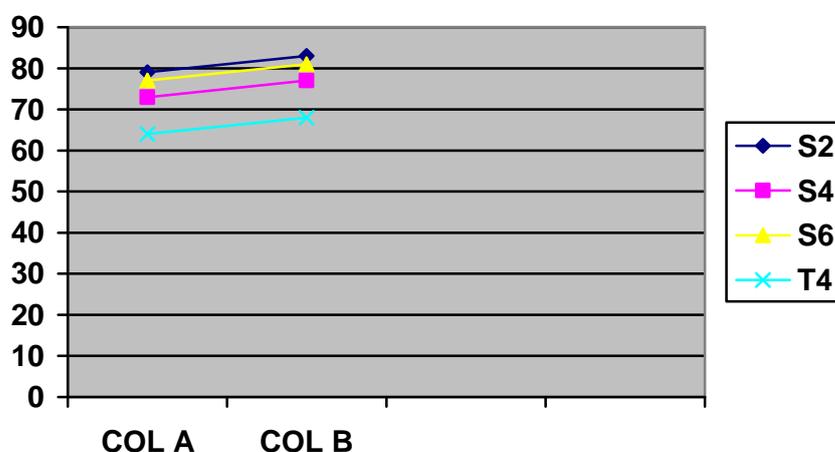
relationships, STUDENT: Typology of Learning and STUDENT: Criteria for Selecting and Devising Learning Experiences.

With regards to the perception that the student has of the tutor/college, a significant differences exists in their humanistic focus in the TUTOR: Typology of Learning.

Although these results displayed a humanistic orientation in both colleges, the mean of college A and college B differed significantly. College A is less humanistic than college B.

Additionally, the two colleges differ significantly within their humanistic orientation with regard to the conceptual continuum Typology of Learning, although respondents' preference and perception of tutors/college is congruent.

The significant differences in the results of the two colleges are illustrated in the means plot in figure 7.14.



**FIGURE 7.14: DIFFERENCES BETWEEN THE TWO COLLEGES WITH REGARD TO THE STUDENT: TEACHER-STUDENT RELATIONSHIP AND TYPOLOGY OF LEARNING AND THE TUTOR: TYPOLOGY OF LEARNING AND CRITERIA FOR SELECTING AND DEVISING LEARNING EDXPERIECES**

Figure 7.14 indicates that although the results of both colleges indicate a humanistic orientation, the mean of college A differs significantly from the mean of college B.

#### **7.4.5.5.2 Discussion of results with regard to hypothesis 8**

The differences between the humanistic orientation of college A and B may be attributed to the differences in their educational environments. As previously stated, it has already been found in the study by Waterson et al (2006(a):56, 59-60, 64; see sections 7.4.1.1, 7.4.1.2, 7.4.1.3, 7.4.2), that the educational environment at college A may be viewed as behaviouristic in nature. This is evidenced by students in college A stating that their educational environment was characterised by curriculum overload, lack of theory-practice integration, teaching and assessment methods that do not promote critical thinking, tutors' lack of skills and experience, inadequate preparation of tutors for lectures, insufficient knowledge of tutors' regarding outcome based education and the approach to teaching and learning, inadequate process of remedial teaching, discrepancies between tutors' marking, lack of clinical role models and the high expectations from the affiliated university regarding standards of nursing education in a nursing college. Additional support (see section 7.4.2), of the prevailing behaviouristic tendencies in the educational environment is evidenced in the findings in part two of the study by Waterson et al (2006(b):66-68).

In contrast, college B may have an educational environment that is completely opposite to that of college A and this would account for the difference in the humanistic orientation of the colleges. College B may have created a trusting, respectful, liberating, safe, educational environment for their students who are treated as adults. Therefore, their educational environment may be characterised by learning based on adult learning principles, cooperative learning, learners taking responsibility for their own learning and learners being treated as co-learners where they jointly decide what will be learned, what teaching and learning strategies, interactions and learning experiences will be employed to meet their learning outcomes.

#### **7.4.5.6 Hypothesis 9: There is no significant difference between male and female respondents with regard to their preferences, and their perceptions of the tutor/college, pertaining to the conceptual continuums.**

##### **7.4.5.6.1 Oneway ANOVA**

In order to test this hypothesis, the analysis of variance, using the Oneway ANOVA, was calculated for each Bevis and Watson conceptual continuum. The Oneway ANOVA test determines the mean differences amongst 2 or more groups by comparing variability

between groups to variability within groups (Burns & Grove 1999:297, 320-322, 453; Polit & Beck 2004: 489-493, 711).The results appear in table 7.39 (foundational descriptive statistics) and 7.40 (ANOVA).

**TABLE 7.39: ONEWAY ANOVA OF GENDER RELATED TO STUDENT-PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE REGARDING DIFFERENT CONCEPTUAL CONTINUUMS**

		Descriptives					
		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
STUDENT:Learner Maturity	Male	31	69.8387	10.44700	1.87634	45.00	90.00
	Female	266	70.0564	10.99299	.67402	45.00	100.00
	Total	297	70.0337	10.92042	.63367	45.00	100.00
STUDENT:Teacher-student relationship	Male	31	77.6675	16.65935	2.99211	46.15	100.00
	Female	267	81.1582	12.55027	.76806	38.46	100.00
	Total	298	80.7950	13.04769	.75583	38.46	100.00
STUDENT:Teacher-student structure	Male	30	65.7576	16.31189	2.97813	27.27	100.00
	Female	268	64.6540	19.78497	1.20856	.00	100.00
	Total	298	64.7651	19.44213	1.12625	.00	100.00
STUDENT:Typology of Learning	Male	31	67.1371	18.25512	3.27872	31.25	93.75
	Female	267	75.7959	15.28853	.93564	31.25	100.00
	Total	298	74.8951	15.81187	.91596	31.25	100.00
STUDENT: Criteria for Interactions	Male	31	61.5385	14.04417	2.52241	30.77	84.62
	Female	267	69.8358	15.02877	.91975	15.38	100.00
	Total	298	68.9726	15.12119	.87595	15.38	100.00
STUDENT: Criteria for Selecting Learning Experiences	Male	31	74.5731	15.51775	2.78707	41.18	94.12
	Female	267	79.1364	13.19365	.80744	29.41	100.00
	Total	298	78.6617	13.49719	.78187	29.41	100.00
TUTOR: Learner Maturity	Male	31	59.7623	18.90582	3.39559	26.32	84.21
	Female	267	65.7796	16.58323	1.01488	10.53	94.74
	Total	298	65.1537	16.90531	.97930	10.53	94.74
TUTOR: Teacher-student relationship	Male	31	64.5161	20.77756	3.73176	18.18	100.00
	Female	268	72.7612	20.26686	1.23800	18.18	100.00
	Total	299	71.9064	20.44055	1.18211	18.18	100.00
TUTOR: Teacher-student structure	Male	31	37.4194	14.82515	2.66267	10.00	70.00
	Female	268	46.0821	18.15313	1.10888	.00	90.00
	Total	299	45.1839	18.01052	1.04158	.00	90.00
TUTOR: Typology of Learning	Male	31	62.6728	21.00451	3.77252	14.29	92.86
	Female	268	67.0309	17.20680	1.05107	7.14	100.00
	Total	299	66.5791	17.64824	1.02062	7.14	100.00
TUTOR: Criteria for Interactions	Male	30	61.6667	22.84537	4.17097	12.50	93.75
	Female	267	72.1676	19.51059	1.19403	12.50	100.00
	Total	297	71.1069	20.08140	1.16524	12.50	100.00
TUTOR: Criteria for Selecting Learning Experiences	Male	30	58.4127	19.28965	3.52179	4.76	85.71
	Female	267	62.8678	17.25122	1.05576	9.52	100.00
	Total	297	62.4178	17.48442	1.01455	4.76	100.00

Table 7.39 indicates that the only section where a behaviouristic attitude predominates regarding male and female is in the TUTOR: Tutor-student structure where the mean score is 45.2. In all other cases the mean score was larger than 50, which indicated a predominantly humanistic curriculum focus.

Additionally, there were differences in the mean scores so the F statistic was calculated to determine if the differences were significant between and within the groups (Burns & Grove 1999:320-321; Polit & Beck 2004:489-491). The results appear in table 7.40.

**TABLE 7.40: ANOVA OF GENDER RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE REGARDING DIFFERENT CONCEPTUAL CONTINUUMS**

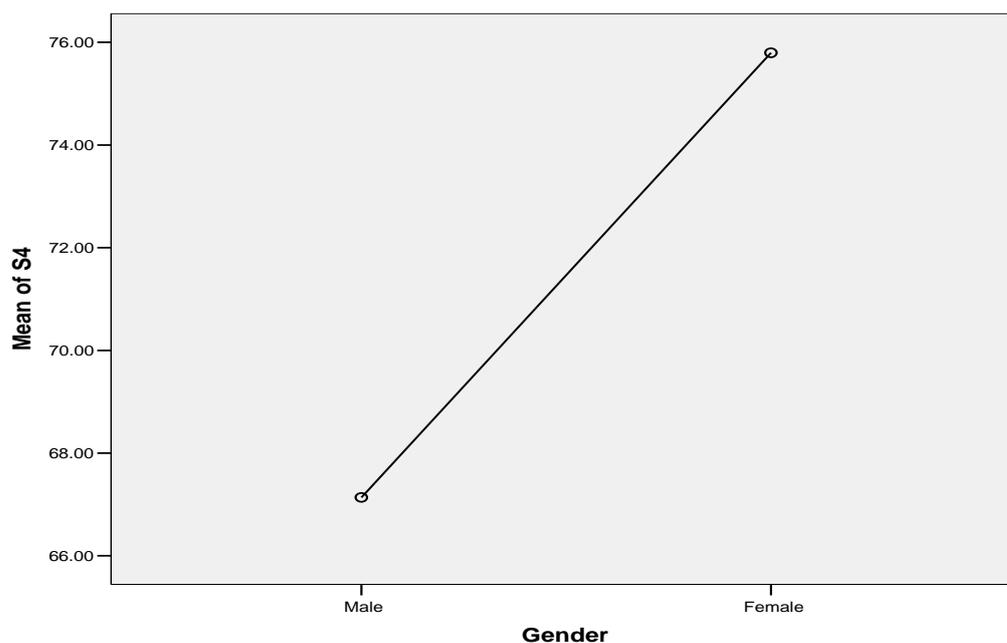
		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
STUDENT:Learner Maturity	Between Groups	1.316	1	1.316	.011	.917
	Within Groups	35298.348	295	119.655		
	Total	35299.663	296			
STUDENT:Teacher-student relationship	Between Groups	338.435	1	338.435	1.995	.159
	Within Groups	50223.497	296	169.674		
	Total	50561.932	297			
STUDENT:Teacher-student structure	Between Groups	32.858	1	32.858	.087	.769
	Within Groups	112232.1	296	379.163		
	Total	112265.0	297			
STUDENT:Typology of Learning	Between Groups	2082.430	1	2082.430	8.541	.004
	Within Groups	72172.105	296	243.825		
	Total	74254.535	297			
STUDENT: Criteria for Interactions	Between Groups	1912.196	1	1912.196	8.576	.004
	Within Groups	65996.942	296	222.963		
	Total	67909.138	297			
STUDENT: Criteria for Selecting Learning Experiences	Between Groups	578.387	1	578.387	3.198	.075
	Within Groups	53527.301	296	180.835		
	Total	54105.687	297			
TUTOR: Learner Maturity	Between Groups	1005.683	1	1005.683	3.549	.061
	Within Groups	83873.846	296	283.358		
	Total	84879.529	297			
TUTOR: Teacher-student relationship	Between Groups	1888.920	1	1888.920	4.575	.033
	Within Groups	122620.3	297	412.863		
	Total	124509.2	298			
TUTOR: Teacher-student structure	Between Groups	2085.141	1	2085.141	6.548	.011
	Within Groups	94579.742	297	318.450		
	Total	96664.883	298			
TUTOR: Typology of Learning	Between Groups	527.741	1	527.741	1.698	.194
	Within Groups	92287.425	297	310.732		
	Total	92815.166	298			
TUTOR: Criteria for Interactions	Between Groups	2973.939	1	2973.939	7.538	.006
	Within Groups	116391.9	295	394.549		
	Total	119365.8	296			
TUTOR: Criteria for Selecting Learning Experiences	Between Groups	535.303	1	535.303	1.756	.186
	Within Groups	89953.409	295	304.927		
	Total	90488.712	296			

**p < 0.05 level**

Table 7.40 indicated that in the cases of, STUDENT: Typology of Learning, STUDENT: Criteria for Teacher-Student Interactions, TUTOR: Teacher-student relationship, TUTOR: Teacher-student structure and TUTOR: Criteria for Teacher-Student Interactions, there are significant differences between the year groups at  $p < 0.05$ .

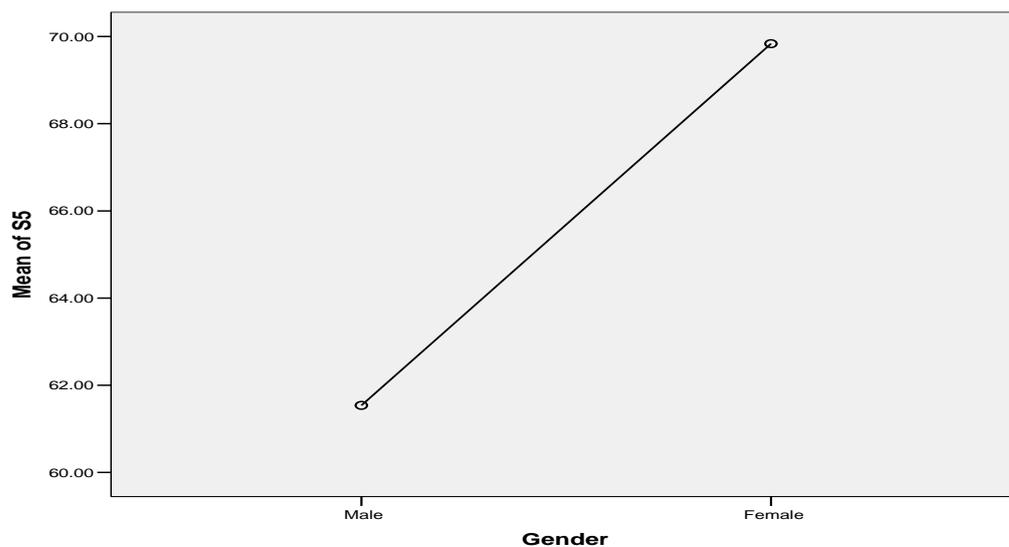
From the findings in table 7.40, the null hypothesis 9 is rejected at the 5% level of significance. There were significant differences between the scores of male and female respondents who had a humanistic or behaviouristic orientation with regard to both respondent preference and respondent perception of the tutor/college.

The results in table 7.40 are illustrated in the homogeneous subgroups means plot in the following figures 7.15 to 7.19.



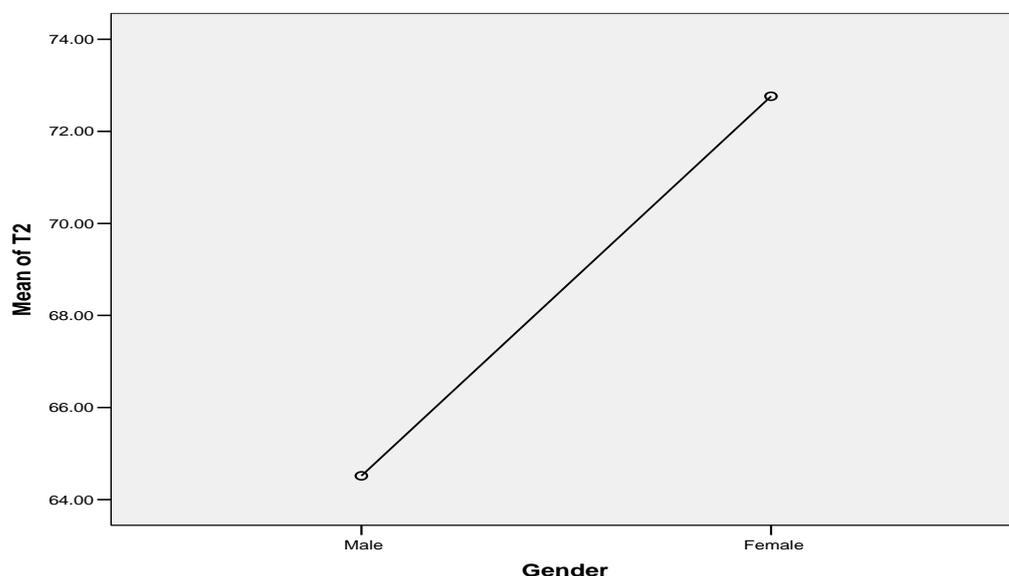
**FIGURE 7.15: HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR STUDENT: TYPOLOGY OF LEARNING**

Figure 7.15 indicated that although the results of both females and males indicate a humanistic orientation, the mean of females differs significantly from the mean of males. Males are less humanistic than females.



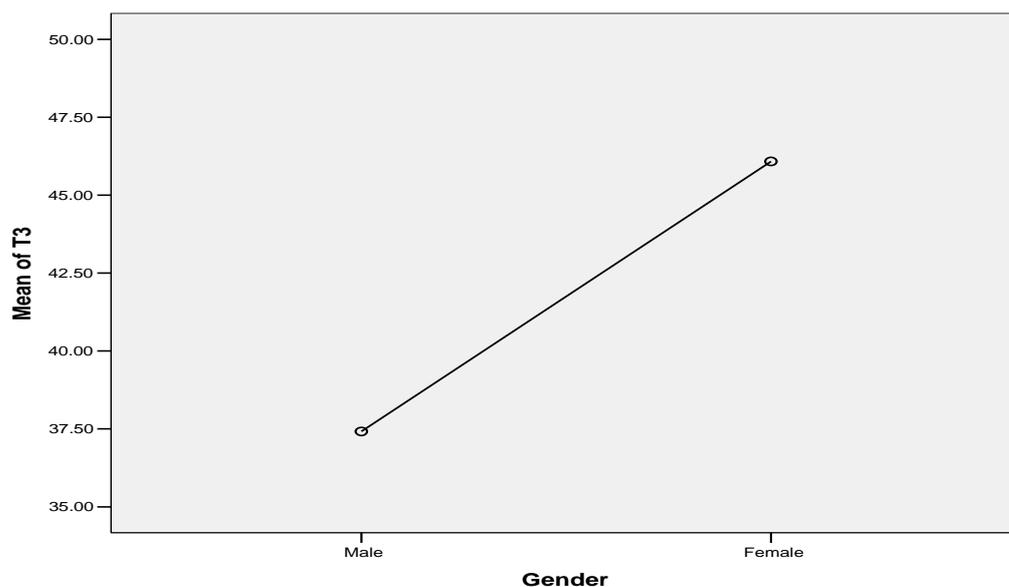
**FIGURE 7.16: HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR STUDENT: TEACHER-STUDENT INTERACTIONS**

Figure 7.16 indicates that although the results of both females and males indicate a humanistic orientation, the mean of females differs significantly from the mean of males. Males are less humanistic than females.



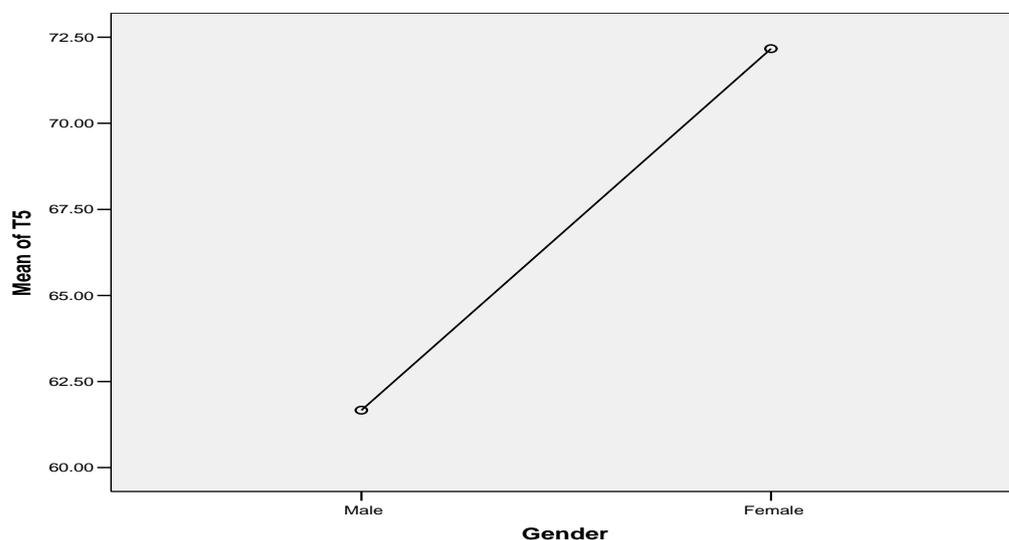
**FIGURE 7.17: HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR TUTOR: TEACHER-STUDENT RELATIONSHIP**

Figure 7.17 indicated that although the results of both females and males indicate a humanistic orientation, the mean of females differs significantly from the mean of males. Males are less humanistic than females.



**FIGURE 7.18: HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR TUTOR: TEACHER-STUDENT STRUCTURE**

Figure 7.18 indicated that although the results of both females and males indicate a behaviouristic orientation, the mean of females differs significantly from the mean of males. Males displayed a more behaviouristic orientation than females.



**FIGURE 7.19: HOMOGENOUS SUBGROUPS PER GENDER MEANS PLOT FOR TUTOR: TEACHER-STUDENT INTERACTIONS**

Figure 7.19 indicated that although the results of both females and males indicate a humanistic orientation, the mean of females differs significantly from the mean of males. Males are less humanistic than females.

Additionally, although both males and females indicated significant differences, in the STUDENT and TUTOR conceptual continuum Criteria for Teacher -Student Interactions, they both reflected a humanistic orientation from the perspective of personal preference and perception of the tutor/college. Consequently there is congruence in student preference and perception in this regard.

#### **7.4.5.6.2 Discussion of results with regard to hypothesis 9**

A significant difference was found in the humanistic and behaviouristic orientation of males and females. In the humanistic orientation, males had the least humanistic tendency.

A reason for the significant differences between males and females may be due to the fact that socially, nursing has always been viewed as the preserve of females with a low social status. This view is supported by Lawler (in Johns 1996:1135), who stated that the work of nursing was typically seen as “sex-typed female tasks, low status, unrecognised, under valued, privatised, invisible and unproductive”. Further, it can be seen culturally as male chauvinistic domination in a society where interactions are identified by patriarchal values (Johns 1996:1135).

Additionally, nursing is viewed as synonymous with the role of women. Females appeared to have the caring, commitment and compassionate attributes required to nurse and were not afraid to become emotionally involved in the care of their patients. This view is supported by James 1989 (in Johns 1996:1135), who stated that nursing was a skilled but emotionally difficult task performed by women.

According to Paterson et al (1995:600) male nursing students learn to care as nurses through educative learning experiences such as the interactional strategies of storytelling, modelling, being cared for, the “*aha*” encounter and observing and giving care (see section 1.2.2, 2.5.4, 4.4.2.4).

**7.4.5.7 Hypothesis 10: There is no significant difference between external- and internal students with regard to their preferences, and their perceptions of the tutor/college, with regard to the conceptual continuums.**

As a point of clarification, internal students are employees of Gauteng Health Department on study leave and external candidates are from the community (see section 6.5.1.2.7).

In order to test this hypothesis, the analysis of variance, using the Oneway ANOVA, was calculated for each Bevis and Watson conceptual continuum. The Oneway ANOVA test determines the mean differences amongst 2 or more groups by comparing variability between groups to variability within groups (Burns & Grove 1999:297, 320-322, 453; Polit & Beck 2004:489-493, 711). This test applies as two groups have been investigated. The results appear in table 7.41 (foundational descriptive statistics) and 7.42 (ANOVA).

**TABLE 7.41: ONEWAY ANOVA OF INTERNAL- AND EXTERNAL RESPONDENTS RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE REGARDING THE DIFFERENT CONCEPTUAL CONTINUUMS**

		Descriptives					
		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
STUDENT:Learner Maturity	Internal	66	69.5455	8.97549	1.10481	50.00	90.00
	External	231	70.1732	11.42900	.75197	45.00	100.00
	Total	297	70.0337	10.92042	.63367	45.00	100.00
STUDENT:Teacher-student relationship	Internal	67	80.0230	13.26004	1.61997	46.15	100.00
	External	231	81.0190	13.00597	.85573	38.46	100.00
	Total	298	80.7950	13.04769	.75583	38.46	100.00
STUDENT:Teacher-student structure	Internal	67	67.4355	17.27412	2.11037	18.18	90.91
	External	231	63.9906	19.99505	1.31558	.00	100.00
	Total	298	64.7651	19.44213	1.12625	.00	100.00
STUDENT:Typology of Learning	Internal	67	75.9328	15.88808	1.94104	37.50	100.00
	External	231	74.5942	15.81153	1.04032	31.25	100.00
	Total	298	74.8951	15.81187	.91596	31.25	100.00
STUDENT: Criteria for Interactions	Internal	67	68.7715	15.37766	1.87868	30.77	100.00
	External	231	69.0310	15.07928	.99214	15.38	100.00
	Total	298	68.9726	15.12119	.87595	15.38	100.00
STUDENT: Criteria for Selecting Learning Experiences	Internal	67	77.4363	13.60773	1.66245	41.18	100.00
	External	231	79.0171	13.47375	.88651	29.41	100.00
	Total	298	78.6617	13.49719	.78187	29.41	100.00
TUTOR: Learner Maturity	Internal	67	63.7863	16.45392	2.01017	10.53	94.74
	External	231	65.5502	17.04848	1.12171	10.53	94.74
	Total	298	65.1537	16.90531	.97930	10.53	94.74
TUTOR: Teacher-student relationship	Internal	67	71.7775	18.59950	2.27229	27.27	100.00
	External	232	71.9436	20.97986	1.37740	18.18	100.00
	Total	299	71.9064	20.44055	1.18211	18.18	100.00
TUTOR: Teacher-student structure	Internal	67	46.1194	19.53670	2.38679	.00	90.00
	External	232	44.9138	17.58077	1.15423	.00	90.00
	Total	299	45.1839	18.01052	1.04158	.00	90.00
TUTOR: Typology of Learning	Internal	67	66.9510	18.47778	2.25742	14.29	100.00
	External	232	66.4717	17.44118	1.14507	7.14	100.00
	Total	299	66.5791	17.64824	1.02062	7.14	100.00
TUTOR: Criteria for Interactions	Internal	66	71.4962	19.49263	2.39938	18.75	100.00
	External	231	70.9957	20.28657	1.33476	12.50	100.00
	Total	297	71.1069	20.08140	1.16524	12.50	100.00
TUTOR: Criteria for Selecting Learning Experiences	Internal	65	61.6117	15.24267	1.89062	19.05	90.48
	External	232	62.6437	18.08649	1.18744	4.76	100.00
	Total	297	62.4178	17.48442	1.01455	4.76	100.00

Table 7.41 indicates that the only section where a behaviouristic attitude predominates with regard to internal- and external students is in the TUTOR: Teacher-student structure where the mean score is 45.2. In all other cases the mean score was larger than 50, which indicated a predominantly humanistic curriculum focus.

Additionally, there were differences in the mean scores so the F statistic was calculated to determine if the differences were significant between- and within the internal- and external groups. The F statistic is a calculated value of the ANOVA test and the F distribution table is used to determine the level of significance of the F statistic (Burns & Grove 1999:320-321; Polit & Beck 2004:489-491). The results appear in table 7.42.

**TABLE 7.42: ANOVA OF INTERNAL- AND EXTERNAL RESPONDENTS RELATED TO STUDENT- PREFERENCE AND PERCEPTION OF THE TUTOR/COLLEGE REGARDING THE DIFFERENT CONCEPTUAL CONTINUUMS**

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
STUDENT:Learner Maturity	Between Groups	20.226	1	20.226	.169	.681
	Within Groups	35279.437	295	119.591		
	Total	35299.663	296			
STUDENT:Teacher-student relationship	Between Groups	51.524	1	51.524	.302	.583
	Within Groups	50510.408	296	170.643		
	Total	50561.932	297			
STUDENT:Teacher-student structure	Between Groups	616.379	1	616.379	1.634	.202
	Within Groups	111648.6	296	377.191		
	Total	112265.0	297			
STUDENT:Typology of Learning	Between Groups	93.073	1	93.073	.371	.543
	Within Groups	74161.462	296	250.545		
	Total	74254.535	297			
STUDENT: Criteria for Interactions	Between Groups	3.496	1	3.496	.015	.902
	Within Groups	67905.642	296	229.411		
	Total	67909.138	297			
STUDENT: Criteria for Selecting Learning Experiences	Between Groups	129.771	1	129.771	.712	.400
	Within Groups	53975.916	296	182.351		
	Total	54105.687	297			
TUTOR: Learner Maturity	Between Groups	161.593	1	161.593	.565	.453
	Within Groups	84717.936	296	286.209		
	Total	84879.529	297			
TUTOR: Teacher-student relationship	Between Groups	1.434	1	1.434	.003	.953
	Within Groups	124507.8	297	419.218		
	Total	124509.2	298			
TUTOR: Teacher-student structure	Between Groups	75.562	1	75.562	.232	.630
	Within Groups	96589.321	297	325.217		
	Total	96664.883	298			
TUTOR: Typology of Learning	Between Groups	11.942	1	11.942	.038	.845
	Within Groups	92803.224	297	312.469		
	Total	92815.166	298			
TUTOR: Criteria for Interactions	Between Groups	12.861	1	12.861	.032	.859
	Within Groups	119352.9	295	404.586		
	Total	119365.8	296			
TUTOR: Criteria for Selecting Learning Experiences	Between Groups	54.071	1	54.071	.176	.675
	Within Groups	90434.640	295	306.558		
	Total	90488.712	296			

**p < 0.05 level**

In cases where the significance value is less than 0.05 it signifies that the mean scores of the two groups are significantly different at the 5% level of significance. From the findings of table 7.42, the null hypothesis 10 was accepted at the 0.5 level of significance. There was no significant difference between the scores of internal- and external respondents with regard to respondent preference and the perception they had of the tutor/college.

#### **7.4.5.7.1 Discussion of results with regard to hypothesis 10**

A possible reason for no significant differences being found in the two groups may be due to the fact that they have similar characteristics such as viewing themselves as adult learners, and falling in the same age, language and academic year group.

### **7.5 CONCLUSION**

Statistics were discussed regarding biographical data, items and conceptual continuums. From the results obtained, certain significant findings were noted. The findings in terms of the differences between the various variables and the Curriculum Focus are summarised in table 7. 43 and are discussed in the following section.

#### **7.5.1 Differences between the various variables and the Curriculum Focus**

As reflected in table 7.8, not all the conceptual continuums had a high reliability. The Cronbach alpha reliability coefficient statistic should at least be above 0.6; preferably above 0.8. The latter result only occurred in the STUDENT: Typology of Learning; TUTOR: Learner Maturity Continuum; TUTOR: Teacher-student relationship; TUTOR: Criteria for Teacher-Student Interactions and TUTOR: Criteria for Selecting and Devising Learning Experiences.

The remainder of the sections were all below 0.6 which indicated a moderate to low reliability. As previously stated, the results could be due to the binary response, homogeneity of the sample and the number of items in each section (see section 7.3.2.) and for these reasons perhaps even a 0.05 Cronbach could be accepted.

However, it is the contention of the researcher that the instrument had high validity even though the factor analysis indicated the opposite. All the conditions for validity have been met such as the implementation of the scientific foundation laid during the previous study by

formulating empirical referents/criteria within the conceptual framework of a Humanistic-Educative-Caring Curriculum Paradigm versus a Stimulus-Response Curriculum Paradigm. The present study used the criteria as standards from which items were formulated, expanded on and substantiated for the present instrument (see sections 6.4, 6.4.4.1, 6.4.4.3, 6.4.4.3.8; appendix G).

Specific mean scores for per individual item were discussed and summarised in table 7.9(m). Mean scores of respondents for the conceptual continuums revealed a humanistic orientation except in the TUTOR: Teacher-student structure.

### **7.5.2 Hypothesis testing: differences between the various variables and the Curriculum Focus**

As indicated in table 7.43 the following conclusions were drawn after testing the hypotheses:

- Significant differences were found between the conceptual continuums and the variables Curriculum Focus, level of year group, language, college A and B and gender.
- In hypotheses 5 and 8 where significant differences were found, a humanistic orientation predominated.
- In hypotheses 7 and 9 where significant differences were found, respondents displayed a Behaviouristic orientation with regards to the TUTOR: Teacher-student structure.

**TABLE 7.43: SIGNIFICANT DIFFERENCES AND CORRELATIONS IN STUDENT PREFERENCE AND STUDENT TUTOR PERCEPTION AND CORRELATIONS WITH REGARDS TO THE CONCEPTUAL CONTINUUMS**

HYPOTHESIS	VARIABLE	SIGNIFICANCE AND CORRELATIONS
1	Student preference	No $r > 0.6$
2	Tutor perception	Some $r > 0.6$
3	Student preference and tutor perception	No $r > 0.4$
4	Age	No significant correlation
5	Level of year groups	✓
6	College blocks	✗
7	Language	✓
8	College A and college B	✓
9	Gender	✓
10	Internal- and external student	✗

## 7.6 SUMMARY

In this chapter the results of the study were discussed according to the following aspects:

- analysis of the biographical data
- reliability and validity of the instrument
- statistics on items and the conceptual continuums.

In the following chapter a summary of the study and the findings are presented. Conclusions and implications are also drawn on which recommendations are based. Additionally, limitations of the study are discussed.

## CHAPTER 8

### SUMMARY OF THE STUDY, FINDINGS AND CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

#### 8.1 INTRODUCTION

In chapter 7 the results of the study were discussed according to the following aspects:

- analysis of the biographical data
- reliability and validity of the instrument
- statistics on items and the conceptual continuums.

In this chapter, a summary of the study and the findings are presented. Conclusions are drawn and the implications, recommendations and limitations of the study are discussed.

#### 8.2 SUMMARY OF THE STUDY

The research question the researcher set out to answer in this study was:

*“What is the educational focus of a nursing college when viewed within Bevis and Watson’s Humanistic-Educative-Caring Curriculum Paradigm versus a Stimulus-Response Curriculum Paradigm?”*

The purpose of the study was to develop and test a quantitative measurement instrument based on the Bevis and Watson Humanistic-Educative-Caring versus the Stimulus-Response Curriculum Paradigm to determine whether students are being trained or educated. The six conceptual continuums contained in the Bevis and Watson model are the Learner Maturity Continuum, Teacher-student relationship, Teacher-student interactions, Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences. The study consisted of a developmental and a testing phase.

During the developmental phase, empirical referents/criteria, formulated for the six conceptual continuums during a previous study conducted by the researcher (Mouton 1997), provided the conceptual framework for which items were developed for the instrument. The items were formulated by substantiating and expanding on the empirical referents/criteria by means of a literature study. During the literature study, the Behaviouristic- and Humanistic-Educative-Caring Curriculum Paradigms and recent trends and issues in South Africa were discussed in detail.

However, before the empirical study, a pretest study was conducted to pretest the instrument. This pretest study proved a very important part of the study as many problem areas were detected and modifications introduced. Thereafter, the items were incorporated in the instrument and served as criteria against which the educational focus of students was determined. The instrument, therefore, provided a scientific foundation to determine the educational focus of the *student*, which may range from behaviouristic (stimulus-response) to humanistic-educative-caring.

Additionally, the hypotheses, relating to the biographic detail versus the conceptual continuums, as formulated in chapter 6, were statistically tested (see sections 6.5.1.1, 6.5.1.2).

During the developmental phase, a non-probability sampling design using a purposive sample was implemented. During the testing phase, a probability sampling design was implemented and the sampling method was a stratified, proportional, simple, random sample. During the developmental phase, data were analysed by means of content analysis and during the testing phase analysis was done by means of descriptive and inferential methods using the Statistical Package for Social Sciences (SPSS) version 14.

### **8.3 SUMMARY OF THE FINDINGS**

In the next section, findings are summarised according to the biographical data and the statistics obtained for the items on the conceptual continuums.

### **8.3.1 Summary of the findings of the biographical data**

#### **8.3.1.1 Distribution of respondents in colleges**

All year groups were evenly distributed and represented except the fourth year which was due to 21 respondents not returning the instrument at one of the colleges. A 7% difference existed between the distribution of respondents in college A and college B which was due to only 19 respondents in college B, in the fourth level, completing the questionnaire (see table 7.1).

#### **8.3.1.2 Distribution of internal- and external candidates**

Of the respondents, 22.4% internal and 77.6% external respondents had completed the questionnaire (see table 7.2). As reflected in tables 7.7(a) and 7.7(b), for the period 2004 until 2006, from a total of 832 external- and internal candidates, college A only selected 166 (20 %) internal candidates (GCSC 2004-2006; see table 7.7(a)). In contrast, for the same period college B only selected 118 (18 %) internal candidates, from a total of 655 external- and internal candidates (GCSC 2004-2006; see table 7.7(b)). Although the number of internal students had increased, the majority of students selected were external candidates.

#### **8.3.1.3 Distribution of year groups**

All year groups were evenly distributed and represented except the fourth year which was due to 21 respondents not completing the instrument at one of the colleges (see table 7.3).

#### **8.3.1.4 Distribution of college blocks**

Regarding college blocks, 97% of all year groups completed the instrument during the last college block 1D. The remainder of the respondents completed the questionnaire at the beginning of the following year. Consequently, all respondents had completed their theory- and clinical component and were exposed to similar learning experiences and clinical areas (see table 7.4; see sections 7.2.1.4, 7.4.5.3).

#### **8.3.1.5 Distribution of the age of respondents**

As reflected in table 7.5, the average age of the respondents was 29 years. The majority of respondents, 102 (34.1%) fell within the 26-30 year age group. However, the combined age groups between 21 to 35 years comprised the greatest number namely 242 (80.9%) respondents with only 15.8% falling within the older combined age group of 36-50 years old.

### **8.3.1.6 Distribution of gender**

As indicated in table 7.6, the sample selected consisted of 89.6% females and 10.4% males. The nursing profession has always been the preserve of females as supported by the statistics of the Gauteng Central Selection Centre in tables 7.7(a) and 7.7(b). Both colleges reflected an increase in the number of males selected for the period 2004 until 2006. However, for the same period in college A, from a total of 832 external- and internal candidates selected, only 112 (13.5 %) males were selected (GCSC 2004-2006; see table 7.7(a)). In contrast, in college B, from a total of 655 external- and internal candidates selected, only 95 (14.5 %) males were selected (GCSC 2004-2006; see table 7.7(b)).

### **8.3.1.7 Distribution of language groups**

Of the respondents, 73.9% indicated that they spoke an African language, 14.7% spoke “other” languages, 3.7% were English speaking and 7.7% were Afrikaans speaking (see table 7.7).

### **8.3.1.8 Distribution of the different races at colleges A and B for the period 2004-2006**

During the period 2004 to 2006, statistics of the Gauteng Central Selection Centre indicated a decline or a minimal increase in the selection of coloured- and white candidates. College A selected 17 coloureds and 5 whites for 2004 and 12 coloureds and 4 whites for 2006 (see table 7.7(a)). Additionally, for college A, for the period 2004 until 2006, from a total of 832 external- and internal candidates selected, only 43 (5.1%) coloured- and white candidates were selected. The majority of candidates selected were black; totalling 757 (91 %) selected for the four-year comprehensive diploma course (GCSC 2004-2006).

College B indicated an increase as they selected 3 coloureds and 2 whites for 2004 and 6 coloureds and 18 whites for 2006 (see table 7.7(b)). In addition, for college B, for the period 2004 until 2006, from a total of 655 external- and internal candidates selected, only 41 (6.3%) coloured and white candidates were selected. The majority of candidates selected were black; totalling 611 (93 %) selected for the four-year comprehensive diploma course (GCSC 2004-2006).

### **8.3.2 Summary of the findings of the statistics on the items and the conceptual continuums**

#### **8.3.2.1 Reliability of the instrument**

According to table 7.8 the Cronbach alpha coefficient correlation was found to be:

- Low, for the STUDENT: Learner Maturity Continuum; Teacher-student relationship; Criteria for Selecting and Devising Learning Experiences and for TUTOR: Teacher-student structure.
- Moderate, for the STUDENT: Teacher-student structure; Typology of Learning; Criteria for Teacher-Student Interactions and for TUTOR: Learner Maturity Continuum; Teacher-student relationship; Typology of Learning; Criteria for Selecting and Devising Learning Experiences.
- High, for the TUTOR: Criteria for Teacher-Student Interactions (see table 8.2).

Binary data tend to give lower readings in all aspects. However, the instrument has potential and requires further refinement.

#### **8.3.2.2 Mean scores per individual items**

Specific responses to individual items with low mean scores (indicating a behaviouristic orientation in contrast to a more humanistic orientation) were discussed. The findings are summarised in table 7.9(m).

#### **8.3.2.3 Mean scores of responses for the conceptual continuums**

For the conceptual continuums, all the respondents recorded a humanistic preference except in the TUTOR: Teacher-student structure where the respondents perceived that the tutor/college displayed a behaviouristic orientation (see section 7.4.2; tables 7.10, 7.10(a)).

#### **8.3.2.4 Comparison of the matched pairs *t*-test mean scores of responses for the conceptual continuums**

Comparison of the means of the student preference with the means of the corresponding tutor perception also indicated a humanistic orientation except in the TUTOR: Teacher-student structure (see section 7.4.3; tables 7.11(a-b)).

### 8.3.3 Summary of the findings testing of the hypotheses

A summary of the findings of the testing of the hypotheses are reflected in table 8.1.

**TABLE 8.1: SUMMARY OF THE FINDINGS OF THE TESTING OF THE HYPOTHESES**

NO	HYPOTHESIS	RESULT	FINDING	ACCEPT/REJECT
1	There is a positive relationship amongst the conceptual continuums regarding respondents' preferences.	<p><b>PEARSON CORRELATION TEST</b></p> <ul style="list-style-type: none"> <li>Correlation coefficient significantly different from zero</li> <li>Low correlation due to binary data</li> <li>Pearson <math>r</math>'s <math>&gt; 0.5</math> were found in the following conceptual continuums and student perception and they might be indicative of an association between these variables:</li> </ul> <p>STUDENT: Typology of Learning versus the Criteria for Selecting and Devising Learning Experiences (<math>r = 0.542</math>)</p> <p>STUDENT: Criteria for Teacher-Student Interactions versus Criteria for Selecting and Devising Learning Experiences (<math>r = 0.569</math>)</p>	<ul style="list-style-type: none"> <li>No correlation above <math>r = 0.6</math></li> </ul>	Reject as association $r < 0.6$
2	There is a positive relationship amongst the conceptual continuums regarding the perceptions respondents have of the tutor/college.	<p><b>PEARSON CORRELATION TEST</b></p> <ul style="list-style-type: none"> <li>Correlation coefficient significantly different from zero</li> <li>Pearson <math>r</math>'s <math>&gt; 0.6</math> are in the case of binary data quite acceptable.</li> <li>Therefore, the correlation between the following conceptual continuums and perception that the student has of the tutor/college are indicative of at least an association between these variables:</li> </ul> <p>TUTOR: Learner Maturity Continuum versus the Teacher-student relationships (<math>r = 0.635</math>)</p> <p>TUTOR: Learner Maturity Continuum versus the Criteria for Teacher-Student Interactions (<math>r = 0.781</math>)</p> <p>TUTOR: Learner Maturity Continuum versus the Criteria for Selecting and Devising Learning Experiences (<math>r = 0.689</math>)</p> <p>TUTOR: Teacher-student relationship versus Criteria for Teacher-Student Interactions (<math>r = 0.651</math>)</p> <p>TUTOR: Criteria for Teacher-Student Interactions versus Criteria for Selecting and Devising Learning Experiences (<math>r = 0.725</math>)</p>	<ul style="list-style-type: none"> <li>Positive correlations above <math>r = 0.6</math></li> </ul>	Accept as association $r > 0.6$

**TABLE 8.1: Continued**

NO	HYPOTHESIS	RESULT	FINDING	ACCEPT/ REJECT
3	There is no relationship with regard to the conceptual continuums between the preferences of respondents and the perceptions they have of the tutor/college.	<b>PEARSON CORRELATION TEST</b> <ul style="list-style-type: none"> <li>• Correlation coefficient significantly different from zero</li> <li>• Low correlation</li> </ul>	<ul style="list-style-type: none"> <li>• No correlation above <math>r = 0.6</math></li> </ul>	Reject as association $r < 0.6$
4	There is no relationship between respondents' age and their preferences regarding, and their perceptions of the tutor/college in terms of, the conceptual continuums.	<b>PEARSON CORRELATION TEST</b> <ul style="list-style-type: none"> <li>• No scores correlate to any significant difference</li> <li>• Low correlation.</li> <li>• Score independent of age</li> </ul>	<ul style="list-style-type: none"> <li>• Very low correlation</li> </ul>	No significant correlation

**TABLE 8.1: Continued**

NO	HYPOTHESIS	RESULT	FINDING	ACCEPT/ REJECT
5	There is no significant difference between first, second, third and fourth year respondents with regard to their preferences regarding, and their perceptions of the tutor/college pertaining to, the conceptual continuums.	<b>ONEWAY ANOVA TEST</b> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Teacher-student structure</li> </ul> </li> </ul> <u>Humanistic Orientation</u> All other conceptual continuums	<ul style="list-style-type: none"> <li>• Is significant difference in means</li> </ul>	
		<b>ANOVA TEST</b> F statistic calculated <u>Humanistic Orientation</u> Significant differences in <ul style="list-style-type: none"> <li>• STUDENT:               <ul style="list-style-type: none"> <li>- Teacher-student structure</li> </ul> </li> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Learner Maturity Continuum</li> <li>- Teacher-student relationship</li> <li>- Typology of Learning</li> <li>- Criteria for Teacher-Student Interactions</li> <li>- Criteria for Selecting and Devising Learning Experiences</li> </ul> </li> </ul> <u>Behaviouristic Orientation</u> None	<ul style="list-style-type: none"> <li>• Is significant difference in means</li> </ul>	Reject
		<b>MULTIPLE COMPARISONS</b> <u>Humanistic Orientation</u> Significant differences in <ul style="list-style-type: none"> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Learner Maturity Continuum</li> <li>- Typology of Learning</li> <li>- Criteria for Teacher-Student Interactions</li> <li>- Criteria for Selecting and Devising Learning Experiences</li> </ul> </li> <li>• STUDENT: None</li> </ul> <u>Behaviouristic Orientation</u> None	<ul style="list-style-type: none"> <li>• All humanistic but 4th years least humanistic, that is, more behaviouristic</li> </ul>	
		<b>HOMOGENOUS SUBGROUPS PLOTTED</b> <u>Humanistic Orientation</u> Significant differences in <ul style="list-style-type: none"> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Learner Maturity Continuum</li> <li>- Typology of Learning</li> <li>- Criteria for Teacher-Student Interactions</li> <li>- Criteria for Selecting and Devising Learning Experiences</li> </ul> </li> <li>• STUDENT: None</li> </ul> <u>Behaviouristic Orientation</u> None	<ul style="list-style-type: none"> <li>• All humanistic but 4th years least humanistic, that is, more behaviouristic</li> </ul>	

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**TABLE 8.1: Continued**

NO	HYPOTHESIS	RESULT	FINDING	ACCEPT/ REJECT
6	There is no significant difference between the college block periods respondents have attended and their preferences regarding, and their perceptions of the tutor/college in relation to, the different conceptual continuums.	<b>ONEWAY ANOVA TEST</b> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Teacher-student structure</li> </ul> </li> </ul> <u>Humanistic Orientation</u> All other conceptual continuums	<ul style="list-style-type: none"> <li>• Is significant difference in means</li> </ul>	
		<b>ANOVA TEST</b> F statistic calculated No significant difference	<ul style="list-style-type: none"> <li>• No significant difference in means</li> </ul>	Accept
7	There is no significant difference between the different language groups with regard to respondents' preferences, and their perceptions of the tutor/college relating to, the conceptual continuums.	<b>ONEWAY ANOVA TEST</b> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Teacher-student structure</li> </ul> </li> </ul> <u>Humanistic Orientation</u> All other conceptual continuums	<ul style="list-style-type: none"> <li>• Is significant difference in means</li> </ul>	
		<b>ANOVA TEST</b> F statistic calculated <u>Humanistic Orientation</u> Significant differences in <ul style="list-style-type: none"> <li>• STUDENT:               <ul style="list-style-type: none"> <li>- Learner Maturity Continuum</li> <li>- Teacher-student relationship</li> <li>- Teacher-student structure</li> <li>- Typology of Learning</li> <li>- Criteria for Teacher-Student Interactions</li> <li>- Criteria for Selecting and Devising Learning Experiences</li> </ul> </li> </ul> <u>Behaviouristic Orientation</u> None	<ul style="list-style-type: none"> <li>• Is significant difference in means</li> </ul>	Reject
		<b>MULTIPLE COMPARISONS</b> No significant difference	<ul style="list-style-type: none"> <li>• Is significant difference in means</li> </ul>	
		<b>HOMOGENOUS</b> <u>Humanistic Orientation</u> Significant difference in <ul style="list-style-type: none"> <li>• STUDENT:               <ul style="list-style-type: none"> <li>- Learner Maturity Continuum</li> <li>- Teacher-student structure</li> <li>- Typology of Learning</li> <li>- Criteria for Teacher-Student Interactions</li> <li>- Criteria for Selecting and Devising Learning Experiences</li> </ul> </li> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Criteria for Teacher-Student Interactions</li> </ul> </li> </ul> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Teacher-student structure</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Is significant difference in means</li> <li>• Other: = highest humanistic</li> <li>• English = least humanistic, that is, more behaviouristic</li> <li>• Both behaviouristic = TUTOR: Teacher-student structure</li> </ul>	

Continued on next page

TABLE 8.1: Continued

NO	HYPOTHESIS	RESULT	FINDING	ACCEPT/ REJECT
8	There is no significant difference between the two colleges with regard to respondents' preferences, and their perceptions of the tutor/college, in relation to the conceptual continuums.	<b>ONEWAY ANOVA TEST</b> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Teacher-student structure</li> </ul> </li> </ul> <u>Humanistic Orientation</u> All other conceptual continuums	<ul style="list-style-type: none"> <li>• Is significant difference in means</li> </ul>	
		<b>ANOVA TEST</b> F statistic calculated <u>Humanistic Orientation</u> Significant difference in <ul style="list-style-type: none"> <li>• STUDENT:               <ul style="list-style-type: none"> <li>- Teacher-student relationship</li> <li>- Typology of Learning</li> <li>- Criteria for Teacher-Student Interactions</li> </ul> </li> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Typology of Learning</li> </ul> </li> </ul> <u>Behaviouristic Orientation</u> None	<ul style="list-style-type: none"> <li>• Both college A and B are humanistic</li> <li>• College B more humanistic</li> <li>• Significant difference between means</li> <li>• Both colleges indicated significant humanistic differences in the conceptual continuum Typology of Learning from the perspective of both the STUDENT and the TUTOR.</li> </ul> <p>This means that the preference of the respondent with regards to the Typology of Learning conceptual continuum was humanistic and she perceived the tutor as maintaining a humanistic approach to this section.</p>	Reject
		<b>PLOTTED MEANS</b> <u>Humanistic Orientation</u> Significantly more humanistic in <ul style="list-style-type: none"> <li>• STUDENT:               <ul style="list-style-type: none"> <li>- Teacher-student relationship</li> <li>- Typology of Learning</li> <li>- Criteria for Selecting and Devising Learning Experiences</li> </ul> </li> <li>• TUTOR:               <ul style="list-style-type: none"> <li>- Typology of Learning</li> </ul> </li> </ul> <u>Behaviouristic Orientation</u> None	<ul style="list-style-type: none"> <li>• Both college A and B are humanistic</li> <li>• College B more humanistic</li> <li>• Is significant difference between means of colleges</li> <li>• Both colleges indicated significant humanistic differences in the conceptual continuum Typology of Learning from the perspective of both the preference of the STUDENT and the perception that the student has of the TUTOR.</li> </ul> <p>This means that the preference of the respondent with regards to the Typology of Learning conceptual continuums was humanistic and she perceived the tutor as maintaining a humanistic approach to this section.</p>	

Continued on next page

TABLE 8.1: Continued

NO	HYPOTHESIS	RESULT	FINDING	ACCEPT/ REJECT
9	There is no significant difference between male and female respondents with regard to their preferences, and their perceptions of the tutor/college, pertaining to the conceptual continuums.	<b>ONEWAY ANOVA TEST</b> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>TUTOR: <ul style="list-style-type: none"> <li>Teacher-student structure</li> </ul> </li> </ul> <u>Humanistic Orientation</u> All other conceptual continuums	<ul style="list-style-type: none"> <li>Is significant difference in means</li> <li>Behaviouristic only in TUTOR: Teacher-student structure</li> </ul>	
		<b>ANOVA TEST</b> F statistic calculated <u>Humanistic Orientation</u> <ul style="list-style-type: none"> <li>STUDENT: <ul style="list-style-type: none"> <li>Typology of Learning,</li> <li>Criteria for Teacher-Student Interaction</li> </ul> </li> <li>TUTOR: <ul style="list-style-type: none"> <li>Teacher-student relationship</li> <li>Criteria for Teacher-Student Interactions</li> </ul> </li> </ul> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>TUTOR: <ul style="list-style-type: none"> <li>Teacher-student structure</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Is significant difference in means</li> <li>Both females and males indicated significant humanistic differences in the conceptual continuum Teacher-Student Interactions from both the preference of the STUDENT and perception that the student has of the TUTOR.</li> </ul> <p>This means that the preference of the student with regards to the Criteria for Teacher-Student Interactions conceptual continuum was humanistic and she perceived the tutor as maintaining a humanistic approach to this section.</p>	Reject
		<b>PLOTTED MEANS</b> <u>Humanistic Orientation</u> <ul style="list-style-type: none"> <li>STUDENT: <ul style="list-style-type: none"> <li>Typology of Learning,</li> <li>Criteria for Teacher-Student Interactions.</li> </ul> </li> <li>TUTOR: <ul style="list-style-type: none"> <li>Teacher-student relationship</li> <li>Criteria for Teacher-Student Interactions</li> </ul> </li> </ul> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>TUTOR: <ul style="list-style-type: none"> <li>Teacher-student structure</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Is significant difference in means</li> <li>Both females and males indicated significant humanistic differences in the conceptual continuum Teacher-Student Interactions from both the preference of the STUDENT and perception that the student has of the TUTOR.</li> </ul> <p>This means that the preference of the student with regards to the Criteria for Teacher-Student Interactions conceptual continuum was humanistic and she perceived the tutor as maintaining a humanistic approach to this section.</p>	
10	There is no significant difference between external- and internal students with regard to their preferences, and their perceptions of the tutor/college, with regard to the conceptual continuums.	<b>ONEWAY ANOVA TEST</b> <u>Behaviouristic Orientation</u> <ul style="list-style-type: none"> <li>TUTOR: <ul style="list-style-type: none"> <li>Teacher-student structure</li> </ul> </li> </ul> <u>Humanistic Orientation</u> All other conceptual continuums	<ul style="list-style-type: none"> <li>Significant difference in means</li> </ul>	
		<b>ANOVA TEST</b> F statistic calculated - No significant difference	<ul style="list-style-type: none"> <li>No significant difference in means</li> </ul>	Accept

## 8.4 CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Based on the findings, conclusions were drawn, implications highlighted and recommendations made as discussed in the following section.

### 8.4.1 Reliability of the instrument

#### 8.4.1.1 Conclusions

The instrument is in its developmental stage and “problems” such as low reliability should be anticipated. Binary data tend to give lower readings in all aspects. However, the instrument has potential and requires further refinement.

The parameters for the Cronbach alpha set for this study are exhibited in table 8.2.

**TABLE 8.2: DEGREE OF RELATEDNESS OF CORRELATION**

Correlation (r)	Degree of Relatedness	STUDENT	TUTOR
0.25 to 0.49	Low (weak)	<ul style="list-style-type: none"> <li>- Learner Maturity Continuum</li> <li>- Teacher-student relationship</li> <li>- Criteria for Selecting and Devising Learning Experiences</li> </ul>	<ul style="list-style-type: none"> <li>- Teacher-student structure</li> </ul>
0.5 to 0.74	Moderate	<ul style="list-style-type: none"> <li>- Teacher-student structure</li> <li>- Typology of Learning</li> <li>- Criteria for Teacher-Student Interactions</li> </ul>	<ul style="list-style-type: none"> <li>- Learner Maturity Continuum</li> <li>- Teacher-student relationship</li> <li>- Typology of Learning</li> <li>- Criteria for Selecting and Devising Learning Experiences</li> </ul>
0.75 to 0.99	High		<ul style="list-style-type: none"> <li>- Criteria for Teacher-Student Interactions</li> </ul>

(Brink 1987:79; Burns & Grove 1999:317-318; Polit & Beck 2004:417-418)

It is further concluded that respondents seem to have a more coherent perception of the tutor/college than they have of themselves; their preferences regarding the different items and conceptual continuums. Even though respondents indicated a humanistic orientation this specific aspect might indicate the contrary; that students are not in touch with self as an integrated whole and the reflecting on external issues are “easier” than reflecting on internal issues. This discrepancy is also reflected by the low correlations in hypothesis 3.

#### **8.4.1.2 Implications**

The most important issue is that as the instrument is at its developmental stage, further research is required to enhance its validity and reliability. Refinement of an instrument takes years to perfect and it is important that someone, in addition to the researcher, takes up this task. The reader is reminded that different types of measuring scales were considered and that perhaps one of these scales would produce a more discriminating and sensitive measurement. It is imperative that this instrument is developed further so that a scientific foundation is available on which to base a humanistic-educative-caring curriculum for nurses.

#### **8.4.1.3 Recommendations: duplication of this present study; refinement of the instrument**

The present study should be duplicated in order to refine the instrument (questionnaire) and enhance its validity and reliability. The latter study must include a larger sample for each year group and include nursing colleges across South Africa as well as degree students at universities. Additionally, a comparative study should be undertaken to compare how the preference of the student differs from the perception that the student has of the tutor.

Further, prospective students undertaking nursing research should be encouraged to test this instrument or one of the conceptual continuums. Implementation of the instrument or some of the conceptual continuums may add scientific knowledge to nursing theory and practice.

### **8.4.2 Hypothesis 5: year of study versus the Curriculum Focus**

#### **8.4.2.1 Conclusions**

Of importance in this regard is the fact that according to the outcomes of hypothesis 5, the humanistic-educative-caring orientation respondents entered the profession and the gains made in this regard, during the earlier years of study seem to be lost towards completion of their studies (fourth year). Thus, it seems as though nursing education undermines its quest and its gains towards educating humanistic-educative-caring nurses capable of life-long independent and self-directed learning.

#### **8.4.2.2 Implications**

The humanistic-educative-caring gains of students not capitalised on may result in these almost professionals becoming more dependent on tutors and significant others (mostly “superiors”) in the clinical field; this as a time when they need to wean themselves towards self-directed actions.

#### **8.4.2.3 Recommendations**

It is recommended that all aspects that might lead towards the tendency of fourth year students to become less humanistic-educative-caring oriented and relatively more behaviouristically oriented regarding their Curriculum Focus, be investigated, as this change in orientation impacts on their professional self-image and perception.

In order to combat the behaviouristic tendencies of the fourth year student, the tutor will have to create a humanistic-educative-caring educational environment from her first contact with the student, that is, during the first year of study. Additionally, she must ensure that this educational foundation is maintained in all the following years.

Thus, in the first year, the tutor must implement educative principles which enable the student to move from an immature position to a mature position on the Learner Maturity Continuum. In order to achieve this, the tutor has to change her alliance from the content to the student. Tutors have to ensure that the process of learning is emphasised, that is, it is more important *how* the student learns than what she learns. A shift is required from the attainment of behavioural objectives to the attainment of broad, educative goals. Students have to be actively involved in, and take responsibility for their own learning. Tutors and students have to collaborate as co-learners; the tutor as the expert learner and the student as the novice learner. The tutor also has to adapt her teaching methods to the way a student learns and in partnership with the student, select educative learning experiences. She has to implement a variety of teaching strategies such as group discussions, which promote and stimulate the higher order thought processes such as questioning and analysing. Additionally, these teaching methods must complement the learning style of the student; the student should choose the one most suited to her style of learning.

Evaluation has to be frequent and aimed at determining the progress, development and growth of the student towards maturity and responsible learning. Thus, the tutor has to ensure that the content becomes the vehicle around which scholarly activities are developed. Her greatest task will be to ensure that all the latter aspects are reinforced during the fourth year of study.

The aspects stated in the previous paragraphs will place the focus on education and not training and will provide the platform for eliminating the perpetuation of the training aspect in the fourth year of study.

In addition, the nature of the curriculum content should be investigated. Placing “new” content towards the end of the curriculum might also account for the decreased humanistic preference of the student. For instance, if nursing management is placed towards the end of student learning programmes and more independent and self-directed actions are required from students for which they are as yet not prepared, this might lead to them reverting to lower levels of the Curriculum Focus. Nursing management needs to be taught and implemented with the necessary humanistic-educative-caring orientation on the part of the curriculum so that it would not be necessary for students to feel insecure and to revert to a greater demand for, for instance, structure.

It might also be beneficial for the profession to consider a period of “internship” for nursing students once they have completed their period of education and training.

### **8.4.3 Hypothesis 8: differences between college A and college B**

#### **8.4.3.1 Conclusions**

The more behaviouristic orientation of college A as compared to college B indicates that a successful paradigm shift from behaviourism to a humanistic-educative-caring approach has not yet been made by college A and that college B is more successful, whether intentionally or not, in this aspect.

#### **8.4.3.2 Implications**

This situation stems mainly from the fact that the majority of tutors themselves have been educated in an educational milieu where they have been unaccustomed and even afraid of

moving from the known to the unknown. Behaviourism is thus self-impregnating, the way the humanistic-educative-caring paradigm needs to become.

Firstly, tutors will have to realise that rigidity and limitations are self imposed. Secondly, this paradigm shift requires the tutor to make a deliberate and decisive choice. This choice will require a great deal of courage and self-assertiveness. The tutor will have to create a new role for herself as a resource person and facilitator of the learning process rather than an authority figure (Boshoff 1997:354).

#### **8.4.3.3 Recommendations**

In order to facilitate this paradigm shift, it is recommended that the research study undertaken by Waterson et al (2006(a)) be replicated in college A and B simultaneously (see sections 7.4.2, 7.4.5.5.2). Such a comparative approach may result in current findings indicating differences between the two colleges that might account for the difference in humanistic-educative-caring orientations.

#### **8.4.4 Hypothesis 9: gender versus Curriculum Focus**

##### **8.4.4.1 Conclusions**

The finding that male respondents (students) tend to be more behaviouristic in their curriculum focus might be due to cultural issues including a paternalistic and chauvinistic position of males in society. Males finding themselves in a female dominated profession, such as nursing, might experience the situation to some extent as untenable and reacting by viewing the dynamics of the situation as oppressive and consequently, as more behaviouristic.

##### **8.4.4.2 Implications**

A possible implication that this situation might have is that resentment might grow within male students, relatively increasing their perception of the educational field as behaviouristic, that is, restrictive, autocratic and oppressive. This might have dire consequences for a profession aiming at attracting males to the profession and keeping them in the profession.

##### **8.4.4.3 Recommendations**

Special life skills and personal asset assessment (Ebersöhn & Eloff 2003) modules directed at male students need to be designed and implemented in the educational setting. Such modules

need to be based on research conducted on male students' perception of their position within the formal management hierarchy in the educational and clinical fields. Thus, it is also recommended that the lived experience in the clinical and educational fields of male nursing students be investigated and researched. Additionally, Teacher-Student Interactions must at all times be characterised by positive, open, non-defensive and two directional communication.

#### **8.4.5 Hypothesis 1: respondents' preferences relating to the conceptual continuums**

##### **8.4.5.1 Correlations where a Pearson $r > 0.5$ was identified**

###### **8.4.5.1.1 Conclusions**

In line with the researcher's informed expectations based on theory (conceptual framework), respondents' preferences with regard to three conceptual continuums correlated in a slight expected way with others namely:

- Typology of Learning
- Criteria for Teacher-Student Interactions
- Criteria for Selecting and Devising Learning Experiences.

The other 3 continuums were not indicated as related to the other continuums, thus,  $r < 0.5$ .

###### **8.4.5.1.2 Implications**

The implications are that:

- respondents do not relate to the subject matter of the other 3 continuums themselves
- respondents do relate to the content of these continuums but do not relate these continuums (contents) to one another
- the instrument does not clearly discriminate amongst continuums as indicated by the low Cronbach alphas.

The latter seems more likely as the conceptual continuums which indicate a slight correlation with others all have a Cronbach  $\alpha = 0.5$  or  $\alpha > 0.5$ .

###### **8.4.5.1.3 Recommendations**

The research instrument needs to be refined and tested with heterogeneous groups of students within the health care arena.

## **8.4.5.2 Continuums among which no significant correlations exist**

### **8.4.5.2.1 Conclusions**

Three conceptual continuums were not correlated to any of the other continuums.

### **8.4.5.2.2 Implications**

As per 8.4.5.1.2.

### **8.4.5.2.3 Recommendations**

As per 8.4.5.1.3.

## **8.4.6 Hypothesis 2: respondents' perceptions regarding the tutor/college relating to the conceptual continuums**

### **8.4.6.1 Correlations where a Pearson $r > 0.6$ was identified**

#### **8.4.6.1.1 Conclusions**

In line with the researcher's informed expectations based on theory (conceptual framework), respondents' perceptions of the tutor/college with regard to four conceptual continuums correlated in a slight expected way namely:

- Learner Maturity Continuum
- Teacher-student relationship
- Criteria for Teacher-Student Interactions
- Criteria for Selecting and Devising Learning Experiences.

In comparison with the previous hypothesis, respondents seem to have a clearer perception of the tutor/college than they have about their own preferences as these relate to the conceptual continuums.

#### **8.4.6.1.2 Implications**

In comparison with hypothesis one, this may imply that respondents (students):

- are more at ease reflecting on others than on self
- are more focussed on external issues than on internal issues
- have more of an external locus of control than an internal locus of control

In addition, the continuums with  $r < 0.7$  may imply problems inherent to the instrument.

#### **8.4.6.1.3 Recommendations**

It is recommended that:

- the perception of the locus of control of students be investigated
- the continuums with a stronger correlation be capitalised upon and be reaffirmed in the educational setting.

In addition, the research instrument needs to be refined with regards to the problem continuums and needs to be tested with heterogeneous groups of students within the health care arena.

#### **8.4.6.2 Continuums among which no significant correlations exist with regard to respondents' perceptions of the tutor/college**

##### **8.4.6.2.1 Conclusions**

The only two continuums which do not correlate with any other continuum at  $r = 0.6$  or  $r > 0.6$  are:

- Typology of Learning
- Teacher-student structure.

##### **8.4.6.2.2 Implications**

The low Pearson  $r$ 's for the Teacher-student structure continuum of  $r < 0.3$  is especially of concern. This might imply:

- a true student perception of the Teacher-student structure which is totally different from the nature of the other continuums
- a discrepancy between the theoretical definition of the structure and the structure perceived by students.

Taking into consideration the relatively high correlations between the other four continuums, it is concluded that the theoretical definition for the structure involved and the perceived and empirically propagated structure are not congruent.

With regard to the Typology of Learning it may also be that the concept and continuum are theoretically somewhat abstract and divorced from the empirical.

#### **8.4.6.2.3 Recommendations**

Teacher-student structure and Typology of Learning are two conceptual continuums that should be given special attention during future development and testing of the instrument.

### **8.4.7 Hypothesis 3: respondents' preferences versus their perceptions**

#### **8.4.7.1 Conclusions**

With regard to the conceptual continuums, most aspects of the educational environment were found to be humanistic in nature except the TUTOR: Teacher-student structure which has a behaviouristic orientation. The latter finding is supported by Mouton (1997:244-247), de Villiers (1996 17) and Waterson et al (2006(a):56, 59).

A possible explanation for this behaviourist perception may be due to the *permissiveness* and freedom of self-study, which is more humanistic and which contrasts sharply with more traditional didactics. Therefore, respondents tend to perceive the tutor and the college as more behaviouristic.

In addition, the possibility of respondents being more focussed on external than internal issues is reiterated.

#### **8.4.7.2 Implications**

The finding per se implies a hampering element in the guidance of students towards professional independence. Teacher-student structure encompasses most aspects relating to the educational setting and teacher-student relationships and is as such, most influential in the educational setting.

#### **8.4.7.3 Recommendations**

As teacher-student structure encompasses most aspects relating to the educational setting and teacher-student relationships, this issue deserves serious attention.

In order to reverse the behaviouristic trends (including those of the fourth year students), a paradigm shift must occur with regards to the Curriculum Focus. A Humanistic-Educative-Caring Curriculum Paradigm must be promoted and the Behaviouristic Curriculum Paradigm be rendered obsolete for the benefit of both the students and the tutor. Today's highly

technological health care service demands a nurse who views the patient as a human being and is educated, caring, motivated, dedicated and analytically minded. The shift from the behaviouristic curriculum paradigm will take a concerted effort from both the tutor and the student who must be involved in the entire re-curriculating process. An action research endeavour for the development and implementation of such a paradigm and paradigm shift is recommended.

#### **8.4.8 Summary of general recommendations for education**

Across findings of the present research, the following aspects are recommended in addition to the specific recommendations as stated in the previous sections.

##### **8.4.8.1 Monitor implementation of research done in college A**

In order to promote the humanistic-educative-caring paradigm, the implementation of the recommendations of the research study by Waterson et al (2006(a): 64), must be monitored to ascertain if the academic performance of students and the tutors has moved to a more humanistic-educative-caring paradigm.

Additionally, a follow-up of the Waterson et al (2006(a):64) study must be undertaken to assess if, and to what extent, change has been effected in the educational environment. The implementation of recommendations, such as teaching and learning based on adult learning principles and cooperative learning, will assist tutors to monitor and change the behaviouristic orientation of the 4th year students to one of caring and education.

As college A displayed a more behaviouristic orientation and for the reasons stated in the previous paragraphs, it is recommended that the study undertaken by Waterson et al (2006(a)) regarding strategies to improve the performance of learners in a nursing college be undertaken at college B. The results of the suggested study would enable comparisons to be made and valuable findings may be implemented at college A to enable a shift to be made from behaviourism to humanism, caring and education.

#### **8.4.8.2 Paradigm shift**

As stated in section 8.4.3.3, in order to facilitate a paradigm shift from a behaviouristic to a humanistic orientation, it is recommended that the research study undertaken by Waterson et al (2006(a)) be replicated in college B (see sections 7.4.2, 7.4.5.5.2). Depending on the results, the criteria for the Bevis and Watson conceptual continuums and this newly developed instrument, if refined, could then be applied to assist the tutor and the student to adopt a humanistic-educative-caring paradigm. Additionally, as indicated in section 8.4.7.3, action research should be undertaken to shift the curriculum focus in college A. It is essential that both students and tutors be involved in this re-curriculating process to ensure that humanistic-educative-caring teacher-student interactions are the focal point of the curriculum.

### **8.5 LIMITATIONS OF THE STUDY**

Limitations applicable to this study pertain to the Hawthorne effect, population and the sample.

#### **8.5.1 The Hawthorne effect**

The Hawthorne effect is defined as the effect on the dependent variable caused by the respondents' awareness that they are participants under study. However, this effect is difficult to control (Burns & Grove 1999:465; Mouton & Marais 1990:86; Polit & Beck 2004:180, 218-219, 719; Polit & Hungler 1999:184-185, 703; Wilson 1993:10).

Therefore, although it was assumed that respondents would answer questions with honesty and integrity during the completion of the questionnaire, the mere fact that respondents knew that they were being studied may have induced them to answer questions in a manner which they perceived as being more polite and not really as they felt about, or perceived them. They may even have given the answers they thought the researcher expected.

#### **8.5.2 Population**

The population and sample was too small and homogenous as it was limited by the participation of student nurses from only two colleges. The latter aspect raises the question as to what effect the inclusion of more students and colleges would have had on the results obtained in this study.

The inclusion of more colleges and students from nursing degree programmes, from across South Africa, will increase the sample size and provide a greater variety of respondents. To further increase the heterogeneity, the instrument must be tested amongst other health related disciplines such as physiotherapists. During this testing, special attention must be paid to the problem conceptual continuums so that the validity, reliability, discrimination and sensitivity of the instrument are enhanced (Burns & Grove 2005:357-8).

## **8.6 ATTAINMENT OF RESEARCH OBJECTIVES**

With regards to the research question “*What is the educational focus of a nursing college when viewed within Bevis and Watson’s Humanistic- Educative-Caring Curriculum Paradigm versus a Stimulus-Response Curriculum Paradigm?*” the predominant orientation is humanistic with a behaviouristic orientation only in the TUTOR: Teacher-student structure with regard to language and gender of respondents. The purpose and objectives of the study were attained as an instrument was developed and tested. However, it is important to note that this is only the beginning of the development of the instrument and as such, a great deal of refinement is still required to enhance validity and reliability.

## **8.7 CONCLUSION**

The new democratic South Africa has many new policies regarding national- and nursing education and the manner in which health care should be delivered. This poses numerous questions for student nurses and tutors, especially regarding whether nurses are trained or educated within a caring milieu.

During this study, the question relating to a trained or educated, caring nurse was addressed by identifying the educational focus of two colleges. This was achieved by developing and testing an instrument within the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm versus a Stimulus-Response/Behaviouristic Curriculum Paradigm.

In this current, every changing and evolving health care delivery system it is essential facilitate a paradigm change to ensure that nurses are indeed educated to serve the community by providing quality nursing care in a humane and *caring* manner.

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**APPENDIX A(i): PERMISSION REQUESTED FROM THE GAUTENG  
PROVINCIAL GOVERNMENT TO UNDERTAKE THE  
PILOT STUDY**

Tel/Fax No XXXXXXXXXXXX

P.O. Box 8496

**EDLEEN**

1625

21 August 2000

The Director  
Professional Services  
Bank of Lisbon  
Corner of Sauer and Market Streets  
JOHANNESBURG  
2001

Fax: (011) 838-1607

For attention: Ms. M.G. Msimango

**PERMISSION TO UNDERTAKE A RESEARCH PROJECT**

I am registered for a DLitt et Phil degree at the University of South Africa. My promoter is Dr. D. van der Wal and the joint promoter is Professor G. Bester. I hereby request permission to undertake a research project at XXX XXXXX, XXX XXXXX and XXXXXX. The following information is supplied regarding the proposed study:

**1. TITLE**

The development of an Instrument for determining the Educational Focus of tutors and students at a Nursing College.

**2. RESEARCH QUESTION**

Can the concepts comprising the Bevis and Watson Model provide a scientific base to enable tutors and students to determine the Educational focus of a Nursing College?

### **3. PURPOSE OF THE STUDY**

The purpose of this study is to develop an instrument based on Bevis and Watson's four mini-models, namely the Learner Maturity Continuum, Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences.

### **4. OBJECTIVES**

The objectives of this study are:

#### **During the Developmental Phase**

- the definition of the construct or behaviour to be measured by means of a literature review
- the formulation of criteria for the four mini-models, namely the Learner Maturity Continuum, the Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences, comprising the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm and the Stimulus-Response (Behaviourist) Curriculum Paradigm, by means of a literature review
- refinement of the criteria for the four mini-models comprising the Bevis and Watson Humanistic-Educative-Caring Curriculum Paradigm and the Stimulus-Response (Behaviourist) Curriculum Paradigm, by means of a literature review
- refinement of the Training-Education Continuum by means of a literature review
- development of a scale and instructions for respondents and users by means of a literature review
- validation of the refined criteria for the four mini-models, the Training-Education Continuum, the scale and the instructions for respondents by means of the Delphi technique
- incorporation of the validated criteria, Training-Education Continuum, the scale and instructions for respondents in an instrument

#### **During the Testing Phase**

- pretest the newly developed instrument for validity and reliability by means of a pilot study
- test the validity, reliability and characteristics of the instrument by implementing it at three Nursing Colleges in order to determine the Humanistic-Educative-Caring or the Stimulus-Response (Behaviourist) orientation of nursing.

## **5. SIGNIFICANCE OF THE STUDY**

Nursing is a caring profession and caring demands special teaching such as a caring-educative environment as indicated in the findings of the researcher's Master's Degree (Mouton 1997:164-165, 235, 240). Implementation of the instrument could indicate whether a paradigm shift is necessary and perhaps to what extent or in which regions of the four mini-models. Thus, the diagnosis could guide the tutor to more effective curriculum implementation, add to the existing scientific body of nursing knowledge, provide direct benefits to both the tutor and student and indirectly to the patient, through improvement in nursing practice and the quality of nursing care.

### **5.1 Scientific foundation**

Nursing, as a profession, is obligated to develop, maintain and add to a body of scientifically obtained knowledge. As this knowledge must be free of any speculation and empirically grounded, this study will provide a scientifically formulated and validated instrument to determine the educational focus of the tutors and students at a Nursing College.

### **5.2 Direction and focus**

Implementation of the constructed instrument will provide direction and focus regarding the present educational perspective held by the tutor and the student. Both tutor and student may, individually or in partnership, implement the instrument to determine the position of the learner on the Learner Maturity Continuum, the type of learning displayed by the student and the teacher-student interactions and learning experiences which are presently being implemented. If a training perspective is diagnosed and the tutor and student wish to rectify the situation in order to produce an educated, professional nurse, the instrument could provide baseline data to facilitate a paradigm shift from a training to an educative perspective. Thus, in reality, the diagnosis could indicate the student's progression towards independent, self-directed, professional maturity.

### **5.3 Curriculum refocus**

An important benefit emanating from this study is the refocusing of attention on the curriculum and the fact that nursing is a caring profession and as such, is allied to the Human and not exclusively to the Natural Science Approach (Ford & Profetto-McGrath 1994:341-342).

This highlights the fact that the instrument could indicate that a curriculum paradigm shift may be necessary which will produce an educated, caring nurse as opposed to a nurse who has only been trained, that is, only possesses skills and fragmented knowledge and has not learned the process of how to learn and care (Mashaba & Brink 1994:279). This caring aspect is of paramount importance in the present highly technological environment of health care that the patient finds himself in and the onus is now on the nurse to create a therapeutic environment, where the patient is treated as a *whole* human being and not as a mere object (Bevis & Watson 1989:1).

Consequently, if a tutor wishes to add a caring or educative component to the curriculum, she may utilise the instrument during a situational analysis, to ascertain her educative-caring perspective, prior to curriculum development.

Additionally, if tutors at a Nursing College intend to initiate a paradigm shift from behaviourism to education, the instrument could provide a means to determine the general “air” at the College. Thus, the instrument could provide baseline data regarding the Behaviourist or educative perspective from which the tutor has to depart. Additionally, it could also indicate specific aspects of the four mini-models that require change and remedial action.

## **6. RESEARCH METHODOLOGY**

### **6.1 Research Design**

A non-experimental research design namely a methodological study will be undertaken using a combination of methods from the qualitative and quantitative paradigms. The study will consist of a developmental and testing phase. During the developmental phase, an instrument will be developed by means of a literature review and the Delphi-technique. The instrument will be empirically tested during the testing phase (Wilson 1993:223).

### **6.2 Sampling Design**

A non-probability sampling design using a purposive sample will be implemented during the developmental phase and a probability sampling design, using a simple, random sample will be utilised during the testing phase.

### **6.2.1 Population**

During the developmental phase, the accessible population will comprise registered tutors at XXX XXXXX, XXX XXXXX and XXX XXXXX. During the testing phase the population will consist of tutors and students at XXX XXXXX, XXX XXXXX and XXX XXXXX..

### **6.2.2 Pilot Study**

A pilot study will be conducted during the developmental and testing phases in order to detect any problems that may be encountered during the study, to introduce modifications where required and to pretest the instrument.

### **6.3 Data Collection Methods**

During the developmental phase, data will be collected from tutors (respondents) by means of the Delphi Technique using questionnaires. A fieldworker will be used to distribute and collect the questionnaires. During the testing phase, the researcher will personally collect data by administering the newly developed instrument to respondents, tutors and students, in the three Nursing Colleges. Prior to data collection the researcher will ensure that consent is obtained from the Heads of the participating Nursing Colleges, informed consent from all respondents and that all the necessary arrangements are made to ensure minimal disruption of tutor and student activities.

### **6.4 Data Analysis Methods**

Data analysis will be done by means of descriptive and inferential methods and computer programmes. A statistician will be consulted during data collection and analysis.

### **6.5 Ethical considerations**

Informed consent will be obtained from all respondents. Privacy, anonymity and confidentiality will be maintained at all times.

## **7. COMPLETION DATE**

30 November 2001.

Mrs. C. Mouton

**APPENDIX A(ii): PERMISSION REQUESTED FROM THE GAUTENG  
PROVINCIAL GOVERNMENT TO UNDERTAKE  
THE STUDY**

Tel/Fax No. XXXXXXXXXX

P.O. Box 8496

**EDLEEN**

1625

26 July 2005

The Director  
Professional Services  
Bank of Lisbon  
Corner of Sauer and Market Streets  
JOHANNESBURG  
2001  
Fax: (011) 355 3439

For attention: **Ms. M.G. Msimango**

**PERMISSION TO UNDERTAKE A RESEARCH PROJECT**

The letter, dated the 28th of August 2000, granting permission to undertake a pilot study, refers.

I am registered for a DLitt et Phil degree at the University of South Africa entitled “**The development of a measuring instrument to determine the educative and behavioural climate at an educational institution**”. My promoter is Dr. D. van der Wal and the joint promoter is Professor G. Bester. As I have completed the pilot study, I hereby request permission to complete my research study. Attached is the piloted instrument (questionnaire) that will be administered to respondents at XXX XXXXX, XXX XXXXX and XXX XXXXX.

Mrs. C. Mouton  
(Researcher)

**APPENDIX B(i): PERMISSION GRANTED BY GAUTENG PROVINCIAL  
GOVERNMENT TO UNDERTAKE A PILOT STUDY**

**DUE TO ETHICAL CONSIDERATIONS THE ORIGINAL  
DOCUMENT WILL BE PRODUCED ON REQUEST**

**APPENDIX B(ii): PERMISSION GRANTED BY GAUTENG PROVINCIAL  
GOVERNMENT TO UNDERTAKE THE STUDY**

**DUE TO ETHICAL CONSIDERATIONS THE ORIGINAL  
DOCUMENT WILL BE PRODUCED ON REQUEST**

**APPENDIX C(i): PERMISSION REQUESTED FROM PARTICIPATING  
COLLEGE A TO UNDERTAKE THE STUDY**

P.O. Box 8496

**EDLEEN**

1625

22 November 2004

The College Head

XXX XXXXX

XXXX XXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXX

**FOR ATTENTION: XXXXXXXXXXXX**

**PERMISSION TO UNDERTAKE A RESEARCH PROJECT**

The attached copy of the correspondence dated the 28th of November 2000 refers.

I am registered for a DLitt et Phil degree at the University of South Africa. My promoter is Dr. D. van der Wal and the joint promoter is Professor G. Bester. I hereby request permission to undertake a research project at the XXXXXXXXXXXX. The request entails the following:

1. During a Pilot Study, time to administer a questionnaire to twenty (20) respondents comprising five (5) respondents from the first, second, third and fourth year of the Four-Year Diploma Course (D4 Course) according to Regulation R425 leading to registration a Nurse (General-, Psychiatric- and Community) and Midwife.
2. During the actual study, time to administer a questionnaire to 80% of respondents from the first, second, third and fourth year of the Four-Year Diploma Course (D4 Course) according to Regulation R425 leading to registration a Nurse (General-, Psychiatric- and Community) and Midwife.

The following section details information regarding the proposed study:

### **TITLE**

The development of a measuring instrument to determine the educative and behavioural climate at an educational institution.

### **RESEARCH QUESTION**

“What is the educational focus of students at a Nursing College, when viewed within Bevis and Watson’s Humanistic-Educative-Caring Curriculum Paradigm versus a Stimulus-Response Curriculum Paradigm?”

### **PURPOSE OF THE STUDY**

The purpose of the study is to develop and test a quantitative measurement instrument, based on the Bevis and Watson versus the Stimulus-Response Curriculum Paradigm, to determine student status with regards to the four mini-models contained in the Bevis and Watson model namely: Learner Maturity Continuum, Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences.

### **RESEARCH METHODOLOGY**

A quantitative approach, using a non-experimental research design will be undertaken to formulate and test the measuring instrument (questionnaire) designed during this study. The study consists of a *developmental* and *testing phase*. During the testing phase, a probability sampling design will be utilised. The sampling method will be a proportional, stratified, simple, random sample. The target population will consist of all the students registered for the Four-Year Diploma Course at Colleges of Nursing in the Gauteng region. The accessible population will consist of students registered for the Four-Year Diploma Course at three state Colleges of Nursing in the Gauteng region. A pilot study will be conducted during the testing phase. During the developmental phase, data will be collected by means of a literature review and during the testing phase, by means of the newly developed instrument. During the developmental phase, data will be analysed by means of descriptive techniques such as content analysis and during the testing phase, by means of computer programmes such as the “Statistical Package for Social Sciences (SPSS)”. Informed consent will be obtained from all respondents. Privacy, anonymity and confidentiality will be maintained at all times.

**The completion date of the study is November 2005.**

Mrs. C. Mouton

**APPENDIX C(ii): PERMISSION REQUESTED FROM PARTICIPATING  
COLLEGE B TO UNDERTAKE THE STUDY**

P.O. Box 8496

**EDLEEN**

1625

13 September 2005

XXXXXXXXXXXXX

XXXXXXXXXXXXX

XXXXXXXXXXXXX

XXXXXXXXXX

XXXXXXXXXX

XXXX

Fax.: XXXXXXXXXXX

**PERMISSION TO UNDERTAKE A RESEARCH PROJECT**

The attached copy of the correspondence dated the 27th of July 2005 refers.

I am registered for a DLitt et Phil degree at the University of South Africa. My promoter is Dr. D. van der Wal and the joint promoter is Professor G. Bester. I hereby request permission to undertake a research project at the XXXXXXXXXXXXX. The request entails the following:

1. Time to administer the attached questionnaire to 40 respondents from the first, second, third and fourth year of the Four-Year Diploma Course (D4 Course) according to Regulation R425 leading to registration as a Nurse (General-, Psychiatric- and Community) and Midwife. Therefore, the total sample will be 160 respondents.
2. Approximately, one hour is required to explain the study and administer the attached instrument.
3. The researcher will personally administer the instrument.
4. Permission to negotiate the exact dates and time to administer the instrument with the Head of Student Affairs.

The following section details information regarding the proposed study:

**TITLE**

The development of a measuring instrument to determine the educative and behavioural climate at an educational institution.

**QUESTION**

“What is the educational focus of students at a Nursing College, when viewed within Bevis and Watson’s Humanistic-Educative-Caring Curriculum Paradigm versus a Stimulus-Response Curriculum Paradigm?”

**PURPOSE OF THE STUDY**

The purpose of the study is to develop and test a quantitative measurement instrument, based on the Bevis and Watson versus the Stimulus-Response Curriculum Paradigm, to determine student status with regards to the four mini-models contained in the Bevis and Watson model namely: Learner Maturity Continuum, Typology of Learning, Criteria for Teacher-Student Interactions and the Criteria for Selecting and Devising Learning Experiences.

**RESEARCH METHODOLOGY**

A quantitative approach, using a non-experimental research design, will be undertaken to formulate and test the measuring instrument (questionnaire) designed during this study. The study consists of a *developmental* and *testing phase*. During the testing phase, a probability sampling design will be utilised. The sampling method will be a proportional, stratified, simple, random sample. The target population will consist of all the students registered for the Four-Year Diploma Course at Colleges of Nursing in the Gauteng region. The accessible population will consist of students registered for the Four-Year Diploma Course at three state Colleges of Nursing in the Gauteng region. A pilot study will be conducted during the testing phase. During the developmental phase, data will be collected by means of a literature review and during the testing phase, by means of the newly developed instrument. During the developmental phase, data will be analysed by means of descriptive techniques such as content analysis and during the testing phase, by means of computer programmes such as the “Statistical Package for Social Sciences (SPSS)”. Informed consent will be obtained from all respondents. Privacy, anonymity and confidentiality will be maintained at all times.

**The completion date of the study is 30 November 2005.**

Mrs. C. Mouton

**APPENDIX C(iii): PERMISSION REQUESTED FROM PARTICIPATING  
COLLEGE B TO UNDERTAKE THE STUDY AT A  
LATER DATE**

P.O. Box 8496

**EDLEEN**

1625

12 December 2005

XXXXXXXXXX

XXXXXXXXXX

XXXXXXXXXX

**XXXXXXXXXX**

XXXXXXXXXX

XXXX

Fax.: XXXX XXXXXXXX

**PERMISSION TO UNDERTAKE A RESEARCH PROJECT**

Your letter dated the 29th of September 2005, refers.

I acknowledge that it is not possible to accommodate my request to administer my questionnaire during 2005.

Consequently, I request permission to negotiate, with the Head of Student Affairs, the exact dates and time to administer the instrument, during January 2006. Your permission in this regard will be highly appreciated.

Mrs. C. Mouton

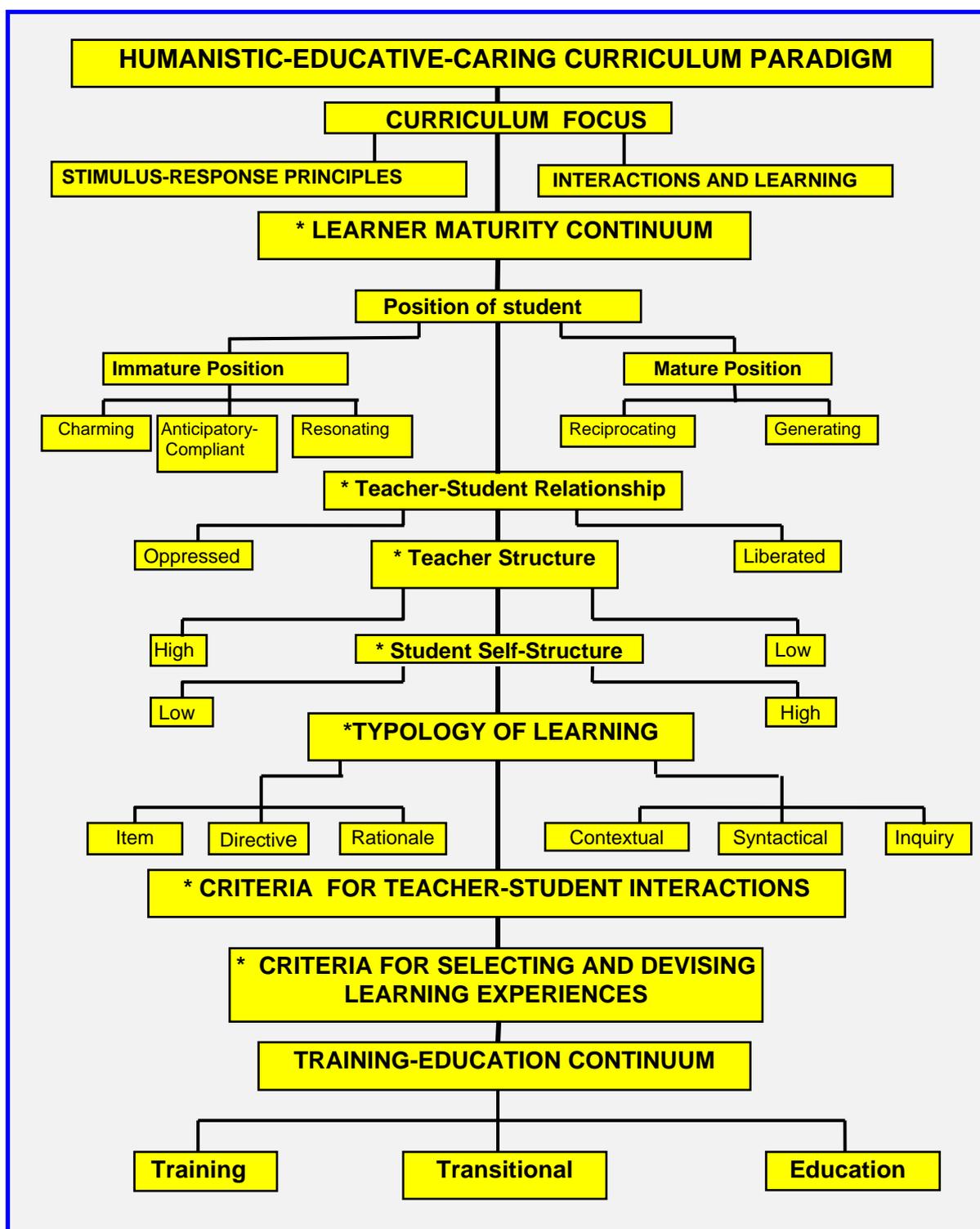
**APPENDIX D(i): PERMISSION GRANTED FROM PARTICIPATING  
COLLEGE A TO UNDERTAKE THE STUDY**

**DUE TO ETHICAL CONSIDERATIONS THE ORIGINAL  
DOCUMENT WILL BE PRODUCED ON REQUEST**

**APPENDIX D(ii): REPLY: PERMISSION GRANTED FROM PARTICIPATING  
COLLEGE B TO UNDERTAKE THE STUDY**

**DUE TO ETHICAL CONSIDERATIONS THE ORIGINAL  
DOCUMENT WILL BE PRODUCED ON REQUEST**

**APPENDIX E: CONCEPTUAL FRAMEWORK:  
TRAINING-EDUCATION CONTINUUM**



\* *Equals six conceptual continuums.* Teacher structure and Student self-structure are combined to form the Teacher-student structure (Adapted from Bevis & Watson 1989:83, 88, 97, 206).

## APPENDIX F(i): POST-PRETEST QUESTIONNAIRE FOR THE VAS

### ASSESSMENT OF THE QUESTIONNAIRE–POST-PRETEST STUDY

Please complete the following questions so that any problems encountered by you may be used to improve the research study by adding, refining and introducing modifications as and where required.

**Do you have any suggestions regarding the following aspects?**

<b>1. The research study</b>				
<b>1.1</b>	<b>Are you satisfied with the way in which the following aspects were explained to you?</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
1.1.1	Aim / Purpose			
1.1.2	Methodology			
1.1.3	Ethical considerations such as acceptability of the instrument, informed consent and guarantee of privacy which entails the principles of anonymity and confidentiality			
1.1.4	The contract			

<b>2. The questionnaire</b>				
<b>2.1</b>	<b>Generally, are you satisfied with the way in which the questionnaire was explained to you?</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
2.1.1	The aim / Purpose			
2.1.2	Ethical considerations			
2.1.3	The administration of the instrument, for example, the environment in which it was completed			

<b>2.2</b>	<b>Technical presentation of the questionnaire</b>			
2.2.1	Layout of the questionnaire			
2.2.2	Quality of paper			
2.2.3	Quality of printing			
<b>2.3</b>	<b>Instructions for the Ranking Scale</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
2.3.1	Were the instructions clear?			
<b>2.4</b>	<b>Instructions for the Visual Analogue Scale</b>			
2.4.1	Were the instructions clear?			
<b>2.5</b>	<b>Time required to complete the questionnaire</b>			
2.5.1	Too long			
2.5.2	Too short			
2.5.3	Was it easy to complete the questions?			
<b>2.6</b>	<b>Formulation of the questions</b>			
2.6.1	Did you understand the meaning of the questions?			
2.6.2	Were the questions clearly stated?			
2.6.3	Were the questions relevant?			

3	Please add any additional comments			

**Thank you for your willingness to complete this questionnaire.**

**APPENDIX F(ii): POST-PRETEST QUESTIONNAIRE FOR THE TWO-CHOICE  
COMPARATIVE-VALUE-STATEMENT ITEMS**

**ASSESSMENT OF THE QUESTIONNAIRE – POST-PRETEST STUDY**

Please complete the following questions so that any problems encountered by you may be used to improve the research study by adding, refining and introducing modifications as and where required.

**Do you have any suggestions regarding the following aspects?**

<b>1. THE RESEARCH STUDY</b>				
<b>1.1</b>	<b>Are you satisfied with the way in which the following aspects were explained to you?</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
1.1.1	Aim / Purpose			
1.1.2	Methodology			
1.1.3	Ethical considerations such as acceptability of the instrument, informed consent and guarantee of privacy which entails the principles of anonymity and confidentiality			
1.1.4	The contract			
<b>2. THE QUESTIONNAIRE</b>				
<b>2.1</b>	<b>Explanation of the questionnaire</b>			
<b>2.1.1</b>	<b>In General, are you satisfied with the way in which the following aspects of the questionnaire were explained to you?</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
2.1.1.1	The Aim / Purpose			
2.1.1.2	Ethical considerations			
2.1.1.3	The administration of the instrument, for example, the environment in which it was completed			

<b>2.2</b>	<b>Technical aspects of the questionnaire</b>			
2.2.1	Are you satisfied with the following technical aspects of the questionnaire?			
2.2.1.1	Layout of the questionnaire			
2.2.1.2	Quality of paper			
2.2.1.3	Quality of printing			

<b>2.3</b>	<b>Instructions for completing the questionnaire</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
2.3.1	Were the instructions clear?			
<b>2.4</b>	<b>Time required to complete the questionnaire</b>			
2.4.1	Was sufficient time allowed to complete the questionnaire?			
<b>2.5</b>	<b>Formulation of the questions</b>			
2.5.1	Did you understand the meaning of the questions?			
2.5.2	Were the questions clearly stated?			
2.5.3	Were the questions relevant?			
<b>3</b>	<b>Difference in scales</b>			
3.1	Was it easier to complete the answers using the Visual Analogue Scale or this Two-Choice Comparative-Value-Statement Items			
<b>4</b>	<b>Please add any additional comments</b>			

**Thank you for your willingness to complete this questionnaire.**

## **APPENDIX G: CRITERIA FOR THE HUMANISTIC-EDUCATIVE-CARING PARADIGM**

**TABLE G.1: CRITERIA FOR POSITIONS ON LEARNER MATURITY CONTINUUM**

### **A. IMMATURE POSITIONS**

#### **1. CHARMING**

##### **1.1 Position of student**

- Most immature position

##### **1.2 Goal of student**

- To please the teacher and obtain good grades (Kohlberg 1981:17)

##### **1.3 Teacher-student relationship**

- Parent-child adaptive, that is, teacher is authority-parent, the power figure (Kohlberg 1981:17)
- Relationship of teacher-student in educational environment: oppressed

##### **1.4 Learner characteristics**

- Students adopt seductive and manipulative stance or position:
  - ◇ vies for teacher attention and teacher liking them (Kohlberg 1981:17)
  - ◇ "teacher's pet" idea
  - ◇ dupes or deceives teacher into seeing them as special, being more forgiving and liking them
  - ◇ sums teacher up and takes a chance
  - ◇ message to teacher is "I'm cute, you are wonderful"
  - ◇ in nursing, the student adopts a more submissive role where the teacher is viewed as the authority figure, more an attitude of thank you for teaching me
- Forms of seductive and manipulative behaviour in lieu of serious scholarly activity are bringing gifts, cartoons and paying compliments
- Manipulation can be intentional or unintentional
- Difference is distinguished by the fact that:
  - ◇ in this position the afore-mentioned activities are the focus of the student's energy and her ultimate goal
  - ◇ careful not to brand student as Charming just because she enjoys occasional time-out moments with teacher or pays a compliment (Bevis & Watson 1989:83-84)

**Continued on next page**

**TABLE G.1: Continued**

<p><b>1.5 Teacher structure: high</b></p> <ul style="list-style-type: none"> <li>• Teacher structure refers to the extent of the involvement of the teacher in the learning process</li> <li>• During a high teacher structure, the teacher manipulates and controls the learning environment (Bevis &amp; Watson 1989:88)</li> </ul> <p><b>1.6 Student self-structure: low</b></p> <ul style="list-style-type: none"> <li>• Student self-structure refers to the extent of the involvement of the student in the learning process</li> <li>• During a low student self-structure, the student does not take responsibility for her own learning but expects all input to come from the teacher (Bevis &amp; Watson 1989:83, 88)</li> </ul> <p><b>1.7 Flip side</b></p> <ul style="list-style-type: none"> <li>• The flip side of Charming is <b>HOSTILE</b></li> </ul> <p><b>1.7.1 Learner characteristics</b></p> <ul style="list-style-type: none"> <li>• Student appears to bristle</li> <li>• Hostility radiates from the student even though she may be silent, not saying much to either other students or the teacher</li> <li>• In the clinical situation the student is hostile towards the, patient situation and tutor.</li> <li>• Student does not want to be in this situation, but adopts the attitude “I am in it and must do the best I can in the circumstances”. She feels forced or compelled to do it</li> <li>• Student displays little interest in the course or its activities and usually gives the teacher a poor evaluation</li> <li>• The student does the work assigned to her and does it well</li> <li>• The student may even challenge the teacher with "<i>you can't teach me anything</i>" throws the ball back into the tutor's court and sits there hostile not learning anything just to prove herself right (Bevis &amp; Watson 1989:85)</li> </ul>
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**Continued on next page**

**TABLE G.1: Continued****2. ANTICIPATORY-COMPLIANT****2.1 Position of student**

- Second most immature position

**2.2 Goal of student**

- To pre-guess teacher, obtain good grades (Kohlberg 1981:17)

**2.3 Teacher-student relationship**

- Parent-child adaptive relationship, that is, teacher is authority-parent, the power figure (Kohlberg 1981:17)
- Relationship of teacher-student in educational environment: oppressed

**2.4 Learner characteristics**

- Student is anticipatory, that is, her energy is spent on trying to "figure or psych-out" what the teacher requires and
- Compliant by studying only what she anticipates the teacher wants learned
- Focus of learner is on what satisfies her own needs (Kohlberg 1981:17), her focus is on obtaining good grades and not on learning
- Students do not take responsibility for success or failure personally, but place it on their ability to second-guess the teacher in this position (Kohlberg 1981:17; Weiner 1979:3)
- Activities characterised by following statements
  - ◇ *"I always make a low grade on the first test"*
  - ◇ *"It takes me at least until mid term to 'psych' out the teacher and learn what it is that she wants"*. Thus, the student's locus of control is external (Bevis & Watson 1989:84; Rotter in Quinn 1988:84-85; Weiner 1979:6)

**2.5 Teacher structure: high**

- ◇ Teacher structure refers to the extent of the involvement of the teacher in the learning process
- ◇ During a high teacher structure, the teacher manipulates and controls the learning environment (Bevis & Watson 1989:88)

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**TABLE G.1: Continued**

<p><b>2.6 Student self-structure: low</b></p> <ul style="list-style-type: none"> <li>• Student self-structure refers to the extent of the involvement of the student in the learning process</li> <li>• During a low student self-structure, the student does not take responsibility for her own learning but expects all input to come from the teacher (Bevis &amp; Watson 1989:84, 88)</li> </ul> <p><b>2.7 Flip side</b></p> <p>The flip side of Anticipatory-Compliant is <b>PASSIVE- AGGRESSIVE</b></p> <p><b>2.7.1 Learner characteristics</b></p> <ul style="list-style-type: none"> <li>• The student is resistant to suggestions regarding what the teacher thinks is adequate scholarship</li> <li>• Indirect ways of displaying resistance are misunderstanding directions, forgetting homework, assignments, procrastination, terribly tired, exhausted, being slow, or becoming stubborn</li> <li>• This student can be more difficult to work with than the overtly hostile person and may be likened to working with steam which you can see and feel, but which is hard to hold and can blow at any unsuspecting moment (Bevis &amp; Watson 1989:86)</li> </ul> <p><b>3. RESONATING</b></p> <p><b>3.1 Position of student</b></p> <ul style="list-style-type: none"> <li>• Centre position on continuum</li> </ul> <p><b>3.2 Goal of student</b></p> <ul style="list-style-type: none"> <li>• To be like the teacher. Use the teacher as a role model</li> </ul> <p><b>3.3 Teacher-student relationship</b></p> <ul style="list-style-type: none"> <li>• Teacher is the authority figure, that is, still in control</li> <li>• Relationships of the teacher-student in educational environment: oppressed</li> </ul>
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**TABLE G.1: Continued****3.4 Learner characteristics**

- Tutor uses charismatic leadership by force of her personality
- Student finds teacher attractive
- Student perceives teacher as
  - ◊ charismatic
  - ◊ stimulating
  - ◊ admirable
  - ◊ enjoyable
- Student highly motivated, characterised by
  - ◊ read and
  - ◊ prepare for class
  - ◊ does not want to miss any part of the experience
  - ◊ is over eager recipient of teacher's wit, information and wisdom
- Displays great respect and admiration for the teacher
- Student still primarily passive with teacher in control doing frontal teaching
  - ◊ conducting discussions that are alternating from tutor to student and student to tutor
- Most productive of oppressed positions
- Danger here is that the charismatic leadership of the teacher can dominate in an oppressive way (Bevis & Watson 1989:84)

**3.5 Teacher Structure: high**

- Teacher structure refers to the extent of the involvement of the teacher in the learning process
- During a high teacher structure, the teacher manipulates and controls the learning environment (Bevis & Watson 1989:88)

**3.6 Student self-structure: low**

- Student self-structure refers to the extent of the involvement of the student in the learning process
- During a low student self-structure, the student does not take responsibility for her own learning but expects all input to come from the teacher (Bevis & Watson 1989:84-85, 88)

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**TABLE G.1: Continued****3.7 Flip side**

- The flip side of resonating is **CRITICAL**

**3.7.1 Learner characteristics**

- It is impossible to please the student who is a master of the double bind for example,
  - ◇ if you give thorough directions about a paper or an activity, you are too rigid
  - ◇ if you give too much leeway and few instructions, you are too unstructured and disorganised
  - ◇ if you make jokes, you are not serious enough, if you do not you are too serious and need to loosen up
  - ◇ the tests are too hard or too easy, the room is too cold or too hot, the subject is never interesting and the teacher is always dull
  - ◇ teacher receives tremendous, unconstructive criticism
- The critical part of this student is in gear all of the time  
(Bevis & Watson 1989:86)

**B. MATURE POSITIONS****4. RECIPROCATING****4.1 Position of student**

- Next to most mature position

**4.2 Goal of student**

- Take active part in learning

**4.3 Teacher-student relationship**

- Teacher-student relationship one of adult to adult, mutual respect and exciting exchanges
- Educational environment is liberating

**Continued on next page**

**TABLE G.1: Continued****4.4 Learner characteristics**

- Student takes responsibility for learning
- Students exchanges ideas
  - ◊ challenge each other and the teacher
  - ◊ take the dialogue in directions that meet their needs
- Students have reciprocal relationships with each other and with the teacher
- Students actively look for patterns
  - ◊ express insights and puzzlements
  - ◊ finds meanings
  - ◊ have egalitarian/collegial relationships with both peers and teachers
- Teachers supply information, cues, models, paradigms only when asked and
  - ◊ when student is stymied (hindered, obstructed) in working with a problem, issue or client
- Teacher-student relationship revolves around transactions that meet the criteria for educative teacher-student relationships and
  - ◊ are involved in learning episodes that meet the criteria for educative learning activities  
(Bevis & Watson 1989:86)

**4.5 Teacher structure: low**

- Teacher structure refers to the extent of the involvement of the teacher in the learning process
- During a low teacher structure, the teacher is a facilitator providing guidelines and support for the student (Bevis & Watson 1989:88)

**4.6 Student self-structure: high**

- Student self-structure refers to the extent of the involvement of the student in the learning process
- During a high student self-structure, the student takes responsibility for her own learning and is actively involved in the learning process (Bevis & Watson 1989:86, 88)

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**TABLE G.1: Continued****5. GENERATING****5.1 Position of student:**

- Most mature position
- Creative position

**5.2 Goal of student**

- Student takes full responsibility for learning

**5.3 Teacher-student relationship**

- Teacher-student relationship one of adult to adult, mutual respect and exciting exchanges
- Educational environment is liberating

**5.4 Learner characteristics**

- Student is actively involved in the learning process  
(Knowles 1990:86; Rogers in Quinn 1988:43)
- Student initiative is high
- Passivity low to non-existent
- Student initiates problems, is a self-initiating learner  
(Rogers & Freiberg 1994:167) and
  - ◊ introduces topics, content, issues
- Students move in new directions
- Explore ideas relevant to their goals and directions
  - ◊ are searching and inquiring
  - ◊ hypercritical thoughts, analyses every question down to finest detail, concerned about facts that seemingly have no answer or explanation, for example, how do we explain physics and the Bible, ethical dilemmas
- Teachers are used as true consultants and as expert learners
  - ◊ content experts
  - ◊ as strategy or methodological experts
  - ◊ as respected colleagues with whom students bounce ideas around  
(Rogers & Freiberg 1994:156)

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**TABLE G.1: Continued**

- Teacher is facilitator of learning (Knowles 1990:41, 77; Rogers & Freiberg 1994:170; Rogers in Quinn 1988:44) which means:
  - ◇ Teacher shares her feelings as well as her knowledge with the student (Knowles 1990:41, 79; Knowles in Quinn 1988:44; Rogers & Freiberg 1994:154)
  - ◇ Teacher is viewed as genuine, real person by the students (Quinn 1988:44; Rogers & Freiberg 1994:154)
  - ◇ Teacher sets the climate for a safe learning environment by allowing the student freedom to make mistakes (Pruitt 1989:53).  
The teacher minimises threats (Knowles 1990:42; Quinn 1988:46; Rogers in Knowles 1990:78, 85). This the teacher does by accepting and trusting students to whom she is empathic, sympathetic and understanding (Quinn 1988:44; Rogers & Freiberg 1994:156-157)
  - ◇ The teacher encourages mutual trust and respect, collaboration, supportiveness, openness and a climate of pleasure and humanness (Galbraith 1992:11; Knowles 1990:85-87; Knowles in Quinn 1988:46)
  - ◇ The teacher emphasises the process of acquiring knowledge by providing resources so that the student is able to teach herself (Quinn 1988:48; Rogers & Freiberg 1994:186).  
This helps the student to develop self-direction, readiness and intrinsic motivation during the acquisition of knowledge (Knowles in Quinn 1988:48)
- Student is the novice learner and the teacher is the expert learner
- Teachers relinquish their agenda and support the agenda of the student, for example, legitimate to have dialogue or debate about the agenda, but not legitimate for teacher to insist on an agenda
- Evaluation for grades is replaced by criticism
- Trust is the hallmark (Rogers & Freiberg 1994:156)
- Creativity and inquiry the motif and the outstanding feature
- Student empowered to take full responsibility for own learning
  - ◇ “I’m in charge” slogan (Bevis & Watson 1989:86-87)

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**TABLE G.1: Continued****5.5 Teacher structure: low**

- Teacher structure refers to the extent of the involvement of the teacher in the learning process
- During a low teacher structure, the teacher is a facilitator providing guidelines and support for the student (Bevis & Watson 1989:88)

**5.6 Student self-structure: high**

- Student self-structure refers to the extent of the involvement of the student in the learning process
- During a high student self-structure, the student takes responsibility for her own learning and is actively involved in the learning process (Bevis & Watson 1989:86, 88).



**TABLE G2: CRITERIA FOR LEARNING TYPOLOGY**

ITEM	DIRECTIVE	RATIONALE	CONTEXTUAL	SYNTACTICAL	INQUIRY
<ul style="list-style-type: none"> <li>• Pieces of information</li> <li>• Individual factors (Marton &amp; Svensson 1982 and Marton &amp; Saljo 1984 in Leino-Kilpi 1989:62-63)</li> <li>• Lists</li> <li>• Procedures/ Demonstrations</li> <li>• Using tools and materials</li> <li>• Simple relationships between items</li> <li>• Task centred</li> <li>• Mechanical</li> <li>• Descriptions</li> <li>• Summaries</li> <li>• Modelling</li> </ul>	<ul style="list-style-type: none"> <li>• Rules</li> <li>• Injunctions</li> <li>• Do's and don'ts</li> <li>• Expectations</li> <li>• Instructions</li> <li>• Directions</li> <li>• Objectives</li> <li>• Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Underlying theory</li> <li>• Sequencing items and directives</li> <li>• Why's</li> <li>• Use of formal properties</li> <li>• Relationships of skills and interventions to items and directions</li> <li>• Applying research to practice</li> </ul>	<ul style="list-style-type: none"> <li>• Caring and concern</li> <li>• Nursing culture, mores and folkways</li> <li>• Language jargon</li> <li>• Nursing Language</li> <li>• Perceive world as a nurse</li> <li>• Politics</li> <li>• Power</li> <li>• Aesthetics</li> <li>• Work-role relationships</li> <li>• Nursing Philosophy</li> <li>• Professional activities</li> <li>• Professional identification</li> </ul>	<ul style="list-style-type: none"> <li>• Grounded in practice</li> <li>• <i>Wholes</i> (Marton &amp; Svensson 1982 and Marton &amp; Saljo 1984 in Leino-Kilpi 1989:62-63; Rogers &amp; Freiberg 1994:205)</li> <li>• Broad relationships</li> <li>• Setting aside rules and generating personal rules and guides</li> <li>• Individualised care</li> <li>• Using personal guides</li> <li>• Acknowledging personal paradigm experiences</li> <li>• Consequential reasoning</li> <li>• Insights</li> </ul>	<ul style="list-style-type: none"> <li>• Creativity (Rogers &amp; Freiberg 1994:176-178; Searle et al 1986:106)</li> <li>• Investigating (Bruner in Woolfolk 1987:276; Rogers &amp; Freiberg 1994:205)</li> <li>• Theorising (Bruner in Woolfolk 1987:276)</li> <li>• Strategizing</li> <li>• Researching (Bruner in Woolfolk 1987:275)</li> <li>• Idea generating (Bruner in Woolfolk 1987:276; Rogers &amp; Freiberg 1994:205)</li> </ul>

(Adapted from Bevis &amp; Watson 1989:92)

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**TABLE G2: Continued**

ITEM	DIRECTIVE	RATIONALE	CONTEXTUAL	SYNTACTICAL	INQUIRY
				<ul style="list-style-type: none"> <li>• Meanings (Rogers &amp; Freiberg 1994:186)</li> <li>• Interpretations</li> <li>• Significance</li> <li>• Comparisons</li> <li>• Patterns</li> <li>• Using informal properties</li> <li>• Deeper structures of the field</li> <li>• Praxis (Galbraith 1992:11)</li> </ul>	<ul style="list-style-type: none"> <li>• Visualising</li> <li>• Determining assumptions and implications</li> <li>• Scholarly feelings, standards, activities</li> <li>• Questioning (Bruner in Woolfolk 1987:275)</li> <li>• Intuitive leaps (Bruner in Woolfolk 1987:276)</li> <li>• Analysing (Bruner in Woolfolk 1987:276; Searle et al 1986:106)</li> <li>• Synthesising</li> <li>• Criticism</li> <li>• Self-discovery (Rogers &amp; Freiberg 1994:143, 205)</li> <li>• Self-exploration</li> </ul>

(Adapted from Bevis &amp; Watson 1989:92)

**TABLE G3: CRITERIA FOR TEACHER-STUDENT INTERACTIONS****DEFINITION OF TEACHER-STUDENT INTERACTIONS**

- Principles of procedure used as guides for teaching
- Principles of teaching
- Guiding the ways teachers relate to students
- Character and quality of teacher-student interactions
- Teaching strategies
- Criteria for guiding teaching modalities (Bevis & Watson 1989:100-101)

**TABLE G3.1: CRITERIA FOR EDUCATIVE TEACHER-STUDENT INTERACTIONS****A. CREATIVITY**

1. Teacher accepts and encourages the student to develop creative approaches to the subject matter (Hicks 1979; Torrance 1981), for example, students may organise their own curriculum by having a dialogue with the teacher and obtaining consensus on what should be learned (Diekelmann 1989:36)
2. Teacher acknowledges student's creative contributions to the class, to the subject matter and to the discipline (Torrance 1981)
3. Teacher exhibits the general attitude that all students can show creativity (Torrance 1981) by allowing them freedom to learn in ways that are important to them (Rogers & Freiberg 1994:176)
  - Teacher allows the student to be self-directing (Knowles & Associates 1984:9; Knowles 1990:212)
4. Teacher uses self as a positive force to produce an atmosphere that fosters creativity (Krupey 1982; Stenhouse 1975; Torrance 1981)
  - Teacher creates an atmosphere of mutual respect, trust and freedom of expression (Galbraith 1992:11; Knowles 1990:85; Rogers & Freiberg 1994:132, 178)
  - Teacher is tolerant, humble, accepts annoying, oddball questions and wild, unusual thoughts and perceptions (Bevis & Watson 1989:379; Rogers & Freiberg 1994:177)

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**TABLE G3.1: Continued****B. STYLE OF PRESENCE**

5. Teacher is accessible for the purpose of an interactive critique of the student's work (Jacobson 1983; Potamianos & Crilly 1980; Stenhouse 1975)
6. Teacher demonstrates enthusiasm and a positive attitude toward student and subject matter (Krupey 1982; Potamianos & Crilly 1980)
7. Teacher is open and non-defensive with student (Miron 1983; Potamianos & Crilly 1980)
8. Teacher displays an appropriate sense of humour (Gravett 1995(b):8; Miron 1983; Potamianos & Crilly 1980) which means that depending on the nature of the teacher, she uses humour as a means to initiate and sustain the learning process, while simultaneously ensuring that humour does not dominate the interaction. The teacher thus ensures that the learning process takes precedence over all other aspects
9. Teaching style encourages student participation (Bevis & Watson 1989:379; Chickering 1989; Torrance 1981). Style is one of facilitator of learning, Teacher adapts teaching style to learning style of student
10. Teacher asks many questions and interacts with the student around the answers while preserving the student's dignity (Noddings 1984; Rogers & Freiberg 1994:132, 178; Sandefur & Adams 1976; Torrance 1981)
11. Teacher shares student's feelings of excitement, joy, frustration (Noddings 1984; Torrance 1981)
12. Teacher takes an active interest and provides encouragement to student (Meredith & Ogasawara 1981). Teacher makes the interaction pleasurable by making the interaction an adventure, spiced with the excitement of discovery (Knowles & Associates 1984:16)
13. Teacher assists students to feel comfortable with their differences (Bevis & Watson 1989:379-380; Torrance 1981)

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**TABLE G3.1: Continued**

<b>C. RECIPROCAL INTERACTIONS</b>	
14.	Teacher-student interactions provide teacher and student with intellectual stimulation that requires disciplined thinking about the subject area (Jacobson 1983; Krupeny 1982; Noddings 1984; Stenhouse 1975)
15.	Teacher-student interactions are frequent and friendly (Chickering 1969; Meredith & Ogasawara 1981) <ul style="list-style-type: none"> <li>• Teacher takes cultural differences of students into account and in the clinical situation cultural differences of patients. The background knowledge and life experiences brought to the learning situation varies from student to student. For example, at a basic learning level some students struggle with basic motor skills. Additionally, according to the basic skills they have, the speed at which they learn is affected and the teaching method they prefer when being taught varies, for example, some students prefer the lecture method</li> </ul>
16.	Teacher-student interactions occur in diverse situations which call for varied roles (Beirs 1986; Chickering 1969)
17.	Teacher-student interactions require responsibility on the part of student and teacher to maintain a relationship conducive to learning (Noddings 1984)
18.	Teacher provides a climate that communicates a valuing of caring and concern as the moral imperative of nursing (Bevis 1988; Griffith & Bakanauska 1983; Noddings 1984; Watson 1985) <ul style="list-style-type: none"> <li>• Teacher provides an emotional climate for the student evidenced by warmth and caring, aware of her needs, wants her to do well, supports her in a crisis.</li> <li>• The teacher treats the student with respect, does not criticise, gives her the right to voice her opinion, gives encouragement (Bevis &amp; Watson 1989:380)</li> </ul>

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**TABLE G3.1: Continued****D. CONTEXTUAL, SYNTACTICAL AND INQUIRY LEARNING**

19. Teacher engages student in activities that develop cognitive structures and positive affective responses (Doll 1979; Low 1980; Rosner & Howey 1982)
20. Teacher provides a positive milieu that is conducive to activities that promote learning, such as discussion, small group work, confrontation, role playing and case studies (Knowles 1990:86; Sandefur & Adams 1976; Vaughan 1990:932-933)
21. Teacher readily demonstrates expertise in the subject matter (Krupey 1982; Mueller & Roach & Malone 1971; Potamianos & Crilly 1980; Scheck & Bizio 1977)
22. Teacher helps student to develop own meaningful ways of knowing and thinking processes (Eisner 1985; Hicks 1979-1980; Oermann 1994:218)
  - Use of self, use of own personal life experiences
23. Teacher and student select goals that are important and may not be behaviourally measured, for example insight, portrayed by the student (Peters 1973; Raths 1971; Stenhouse 1975)
24. Teacher and student share responsibility for critiquing student's work which is more valued than the assigning of grades (Stenhouse 1975)
25. Teacher-student interactions assist student in deriving meanings from the learning experiences (Bevis & Watson 1989:380; Eisner 1985; Noddings 1984)
  - Teacher encourages peer interaction to guide student towards constructing meaning and the development of intellectual independence (Gravett 1995(b) :16-17)
26. Teacher-student interactions raise issues and questions about the subject matter that require the student to use a variety of heuristics (Boktkin & Elmandjra & Malitza 1979; Hagland 1994:693; Oermann 1994:218; Stenhouse 1975)
27. Teacher listens to a range of views carefully and uses questions to elicit amplification of issues, rather than arguing against opponents or attempting to resolve differences (Noddings 1984; Stenhouse 1975)
28. Teacher encourages student to reflect upon professional life experiences in relation to the subject matter (Benner 1984; Botkin & Elmandjra & Malitza 1979; Hagland 1994:693; Noddings 1984)
29. Teacher reacts in a constructively critical manner to the student's work, refining and developing standards and stressing a sense of scholarliness (Bevis & Watson 1989:381; Raths 1971; Stenhouse 1975)

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**TABLE G3.1: Continued**

- |     |   |
|-----|---|
| 30. | Teacher focuses on fostering the continuing process of learning<br>(Rogers & Freiberg 1994:213)                 |
| 31  | Student obtains personal goals through self-discipline<br>(Bevis & Watson 1989:381; Rogers & Freiberg 1994:213) |

**TABLE G3.2: CRITERIA FOR STIMULUS-RESPONSE  
TEACHER-STUDENT INTERACTIONS**

**Curriculum**

1. The curriculum is viewed as a scientific document
2. The emphasis is on pre-selected:
  - scientifically validated content (Tyler 1949:1)
  - behavioural objectives in theory (Tyler 1949:1) and the clinical situation
  - skills (Pendleton & Myles 1991:12-13)

**Interactions**

3. The student passively absorbs information while the teacher actively imparts information by lecturing (Rogers & Freiberg 1994:210)
  - Tutor props knowledge into student
  - Tutor bombards student with knowledge
4. The teacher maintains strict control (Rogers & Freiberg 1994:210)
  - Teacher has power impact
  - Student given a great deal of structure and strict boundaries within which to function, for example, assignments, objectives, do this now and do that now
  - Not allowed to deviate, to use own initiative, to think, to explore, to experiment
5. One way communication
  - Student demotivated
  - Strongly dependent on teacher
  - Requires direction and guidance from tutor
6. Insufficient interactions
  - Interactions kept strictly on a non-personal basis, confined to classroom
7. Evaluation: Generally
  - Rigid evaluation system
  - Based on attainment of behavioural objectives, not principles
  - Learning demonstrated by change in behaviour
  - Everything is measurable
  - Quantity evaluated not quality
  - Teacher's responsibility
  - Grades assigned
  - Emphasises competitive grades and relative rankings
  - Compares students
  - Compares results of students to students of other Colleges
  - Effort is rewarded not ability

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**TABLE G3.2: Continued**

<b>8</b>	Classroom evaluation <ul style="list-style-type: none"><li>▪ Content delimited</li><li>▪ Content or book knowledge evaluated</li><li>▪ Bloom's Taxonomy applied (Bloom 1956:18)</li><li>▪ Low cognitive levels evaluated, for example, list, name, state signs and symptoms, describe, discuss</li><li>▪ Purely memorisation of knowledge, facts</li><li>▪ At evaluation, regurgitates exactly what is given by tutor or in the book and is credited</li><li>▪ Higher cognitive structures, for example, insight not evaluated</li></ul>
<b>9</b>	Clinical evaluation <ul style="list-style-type: none"><li>• Rigid evaluation, instrument implemented, for example checklist</li><li>• Task either performed correctly or incorrectly</li><li>• Rigid method of how to do a procedure is evaluated, not allowed to deviate from it or to use own initiative</li></ul>

**TABLE G4: CRITERIA FOR SELECTING AND DEVISING LEARNING EXPERIENCES**

**TABLE G4:1 CRITERIA FOR SELECTING AND DEVISING EDUCATIVE LEARNING EXPERIENCES**

**A. INTRODUCTION**

1. Teacher establishes a climate conducive to learning by ensuring a safe, physical and psychological environment (Cheng 1994:237; Gravett 1995(b):1, 8; Knowles 1990:120, 124)
  - **Physical Environment**  
Teacher provides physical conditions that ensure comfort such as adequate seating, temperature, ventilation, lighting, good acoustics, access to adequate material and human resources, refreshments and rest rooms (Cheng 1994:221, 233, 237; Knowles 1990:85, 121-122)
  - **Psychological Environment**  
Teacher promotes a psychological environment where good interpersonal relationships are fostered by mutual trust, respect, helpfulness, support, freedom of expression, acceptance of differences, especially cultural differences, caring and understanding of others (Cheng 1994:234, 236-237; Knowles 1990: 85, 122-123; Redmond & Sorrell 1996:27; Sedlack 1997:11)
2. Requires the student be actively involved in learning (Dewey 1902; Hattie & Watkins 1988:349; Raths 1971)
3. Necessitates that the student becomes responsible for own learning (Dewey 1902; Hattie & Watkins 1988:349; Sandefur & Adams 1976)
  - Student develops her own programme of learning by drawing up a contract, alone or in co-operation with the teacher and others (Gettly 1997:13, 19; Hagland 1994:694; Knowles 1990:87, 139-140, 212-217; Rogers & Freiberg 1994:213)
4. Structures for training or educative goals are appropriate to the subject matter inherent in the experience (Botkin & Elmandjra & Malitza 1979; Broudy 1982; Peters 1973; Stenhouse 1975)
5. Identifies the type of encounter the student is to have with the subject matter (Burton 1982; Eisner 1985)
  - Teacher ensures that a variety of learning experiences are provided (Rogers & Freiberg 1994:177, 213)
6. Requires an exploration of the context in which problems and issues exist and are understood (Benner 1984; Bevis 1988; Broudy 1982)
7. Makes clear the critique of the student's work is the valued part of the learning process (Bevis & Watson 1989:381; Stenhouse 1975)

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**TABLE G4.1: Continued**

<b>B. WORKING PHASE</b>	
8.	Creates a cognitive dissonance (discord, jarring, clashing) that requires the student to engage in educative heuristics such as reflection, incubation, dialogue, debate, imagining and hypothesising to approach the resolution of the dissonance (Bevis 1988; Dewey 1933; Eisner 1985; Metcalf 1963; Stenhouse 1975)
9.	Requires the student to practice creative approaches to the subject matter (Hicks 1979-1980; Torrance 1981)
10.	Uses writing to encourage students to perceive, create, reflect, represent and inquire (Torrance 1981; Wiemer 1988)
11.	Structures activities so that the student discovers solutions, alternatives and consequences for herself (Galbraith 1992:11; Hanley & Whitla & Moo & Walter 1970; Raths 1971; Rogers & Freiberg 1994:205)
12.	Requires the student to use a variety of methods of inquiry in order to find or create information, raise questions (Hanley & Whitla & Moo & Walter 1970; Stenhouse 1975)
13.	Requires the student to use a variety of theoretical frameworks from which to view issues or problems (Hanley & Whitla & Moo & Walter 1970; Stenhouse 1975)
14.	Engages the student in intellectual or higher thinking modes such as analysing, critiquing, identifying and evaluating assumptions, inquiring into the nature of things, predicting, searching for patterns, engaging in praxis, viewing <i>wholes</i> , (Benner 1984; Bevis 1988; Galbraith 1992:11; Krishnamurti 1953; MacDonald 1974; Wang & Blumberg 1983) <ul style="list-style-type: none"> <li>• Encourages higher thinking thought processes by posing questions that require students to show understanding, interpret, evaluate, hypothesise, formulate and justify opinions, to solve problems and to link important concepts with reality (Gravett 1995(b):19)</li> </ul>
15.	Makes clear that the student's ideas are dynamic and will evolve over time (Bevis & Watson 1989:381-382; Raths 1971)

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**TABLE G4.1: Continued**

<b>C. CULMINATION</b>	
16.	Requires student to support and defend formulated propositions, postulates and hypotheses (Hanley & Whitla & Moo & Walter 1970; Stenhouse 1975)
17.	Allows for interaction between the teacher and the student around the many possible outcomes of the experience (Belenky & Clincky & Goldberg & Tarule 1986; Raths 1971) <ul style="list-style-type: none"> <li>• Teacher and student are co-learners (Rogers &amp; Freiberg 1994:167) and in the spirit of mutual inquiry the teacher exposes her own feelings and contributes her resources (Galbraith 1992:11; Knowles 1990:86)</li> </ul>
18.	Promotes encounters with the artistic aspects of nursing such as meanings, relationships, context, patterns and new insights (Benner 1984; Eisner 1985; MacDonald 1974; Torrance 1981)
19.	Requires the student to use a variety of sources and rationales as evidence from which to draw conclusions (Bevis & Watson 1989:382; Hanley & Whitla & Moo & Walter 1970; Stenhouse 1975) <ul style="list-style-type: none"> <li>• Teacher provides a variety of resources and ensures that they are available and accessible to the students (Rogers &amp; Freiberg 1994:186-187)</li> <li>• The resources provided by the teacher include resources within herself and her own experience (Galbraith 1992:11; Rogers &amp; Freiberg 1994:213)</li> </ul>
<b>D. RESOLUTION</b>	
20.	Provides an impetus that encourages student to synthesise what has been learned (Torrance 1981; Wang & Blumberg 1983) <ul style="list-style-type: none"> <li>• In the clinical situation, the student is required to have a sound knowledge (theoretical) base in order to successfully correlate theory and practice, so that the patient is viewed as a <i>whole</i> person and nursed in totality</li> </ul>
21.	Ensures that the interpretation of the quality of the student's work is guided by the teacher's understanding of the subject matter and is judged qualitatively in light of appropriate criteria (Bevis 1988; Stenhouse 1975) <ul style="list-style-type: none"> <li>• Student evaluates her own learning (Knowles 1990:87; Rogers &amp; Freiberg 1994:213)</li> <li>• Additionally, critique is given by student and teacher</li> </ul>

**Continued on next page**

**TABLE G4.1: Continued**

22. Guides explorations of how experience may enrich future career goals (Dewey 1902; Galbraith 1992:10; Torrance 1981)
  - Teacher and student work collaboratively to acquire mutual goals within a caring, warm, supportive environment (Hughes 1992:60-61; Rogers & Freiberg 1994:7)
23. Allows for dialogue around finding meanings in experiences, such as making errors, acknowledging paradigm experiences, discovering diversity (Benner 1984; Bevis 1988; Diekelmann 1986)
  - Learners must feel free to make mistakes and to voice their misconceptions (Galbraith 1992:11; Gravett 1995(b):12)
24. Allows the student to actively reflect upon the manner, quality and patterns of change in their own intellectual growth (Bevis 1988; Dewey 1938; Galbraith 1992:11; Metcalf 1963; Noddings 1984; Raths 1971; Stenhouse 1975)
  - Fosters reflective awareness by encouraging students to write about what they are learning and to engage in dialogue to explain and defend their views. Through verbalisation thoughts become an object for reflection (Bevis & Watson 1989:382; Galbraith 1992:11; Prawat in Gravett 1995(b):16)

**TABLE G4.2: CRITERIA FOR SELECTING AND DEVSING STIMULUS-RESPONSE LEARNING EXPERIENCES.**

1. The tutor is the authority figure (Rogers & Freiberg 1994: 210) and manipulates the learner and the learning environment to promote attainment of learning objectives
  - Tutor decides what content to use
  - Student exposed to fragmented pieces of information and thus a fragmented curriculum
  - Tutor decides what teaching strategy to use
2. Theory and practice viewed as separate entities
  - The emphasis is on skills training (Pendleton & Myles 1991: 12)
  - and low cognitive knowledge
3. Product line thinking is the outcome (Knowles 1990: 6; Marsh 1992: 109; Richardson 1995: 1044)
  - Focuses on the product of training
4. Methods of learning are repetition, reinforcement (Knowles 1990: 18; Quinn 1988: 38), assimilation, reproduction, memorisation, regurgitation.

**APPENDIX H: THE INSTRUMENT USING THE TWO-CHOICE  
COMPARATIVE-VALUE-STATEMENT ITEMS**

P.O. Box 8496

**EDLEEN**

1625

30 September 2005

Dear Respondent

**PARTICIPATION IN A RESEARCH STUDY**

I am registered for a DLitt et Phil degree at the University of South Africa. My promoter is Dr. D. van der Wal and my joint promoter is Professor G. Bester. Permission to undertake this study has been granted by the Gauteng Department of Health:Central Office.

The title of my research study is “The development of a measuring instrument (questionnaire) to determine the educative and behavioural climate at an educational institution”. The research methodology comprises a quantitative approach, using a non-experimental research design. The sampling method is a proportional, stratified, simple, random sample. The population consists of students registered for the Four-Year Diploma Programme at Colleges of Nursing in the Gauteng Region. Descriptive techniques and computer programmes will be used to analyse data collected by means of the attached instrument (questionnaire). Informed, written, voluntary consent will be obtained from all respondents (students). Privacy, anonymity and confidentiality will be maintained at all times.

The purpose, of the attached questionnaire, is to ascertain the Educational Focus of the College, that is, whether the student nurse is being trained or educated. If a student is being trained, the questionnaire will indicate, by means of baseline criteria, how a student may progress to an educated, independent, caring, self-directed and mature professional.

Your participation will involve completing the attached questionnaire and agreement, after the study has been explained to you in detail. The explanation and completion of the questionnaire will take approximately 45 minutes. During distribution of this questionnaire, I will personally be available to answer any questions emanating from the completion of this questionnaire.

The completion date of the study is November 2006. On request, the results of the study will be made available to respondents.

Thank you for your willingness to complete this questionnaire.

Mrs. C Mouton

Researcher

## QUESTIONNAIRE

**Title:** A measuring instrument for determining the educational focus of Students at a Nursing College

**Aim:** To measure the educational orientation of students at colleges.

**Instruction:** Indicate your preference by writing the appropriate numeral in the relevant square.

<b>Year Group:</b>	First = 1	Second = 2	Third = 3	Fourth = 4		C1	
<b>College Block:</b>	1A = 1	1B = 2	1C = 3	1D = 4		C2	
<b>Mother Tongue:</b>	African = 1	English = 2	Afrikaans = 3	Other = 4		C3	
<b>Nursing College:</b>	Ann Latsky = 1	C. Hani Baragwanath = 2	S.G. Lourens = 3			C4	
<b>Gender:</b>	Male = 1	Female = 2					C5
<b>Candidate:</b>	Internal = 1	External = 2					C6
<b>Age:</b>						C7/ C8	
<b>For Office Use</b>					0 0	C9/ C10	

**Instructions:**

- (1) For each item, in this questionnaire, please indicate the extent to which you as a student experience the stated aspects in your learning environment
- (2) Please remember that there are no **right** or **wrong** answers; only your personal preferences are requested
- (3) Please indicate your preference by writing either, **(1)** or **(2)**, in the relevant **square**, for example, if you prefer **(2)** in the following question, then the complete question would appear as follows:

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
1	(1) I like lectures	2	
	(2) I do not like lectures		

- (4) Please complete all the questions
- (5) Do not write in the **“For Office Use Only”** section
- (6) This questionnaire consists of 14 pages

**Thank you for your willingness to complete this questionnaire**

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Item Numbers	ITEM	Indicate Choice (1) or (2)	For office Use only
1.	(1) The grade allocated to my work depends on the quality of my work (2) I need to please tutors to obtain good grades	<input type="checkbox"/>	C11
2.	(1) Obtaining good grades is important to me (2) Gaining practical knowledge is important to me	<input type="checkbox"/>	C12
3.	(1) I learn all the applicable work when preparing for a test (2) I spot when preparing for a test	<input type="checkbox"/>	C13
4.	(1) I study what I think is important to tutors (2) I study what I consider important for me to know	<input type="checkbox"/>	C14
5.	(1) Tests and assignments are either too easy or too difficult (2) Tests and assignments match the level of my academic development	<input type="checkbox"/>	C15
6.	(1) I accept what tutors tell me as the truth (2) I question what tutors tell me	<input type="checkbox"/>	C16
7.	(1) The opinions that others have of me are important to me (2) The opinions that others have of me do not really bother me	<input type="checkbox"/>	C17
8.	(1) I find learning experiences stimulating (2) I find learning experiences boring	<input type="checkbox"/>	C18
9.	(1) I have great admiration for tutors (2) To me, tutors are just like any other nursing staff	<input type="checkbox"/>	C19
10.	(1) I like to give tutors a hard time (2) I like to co-operate with tutors	<input type="checkbox"/>	C20
11.	(1) I ignore/disregard what tutors have to say (2) I listen attentively to what tutors have to say	<input type="checkbox"/>	C21
12.	(1) I do not do my homework/assignments regularly (2) I always do my homework/assignments	<input type="checkbox"/>	C22
13.	(1) I communicate freely with tutors (2) I am anxious when communicating with tutors	<input type="checkbox"/>	C23
14.	(1) I learn a great deal from tutors (2) The tutors cannot teach me much	<input type="checkbox"/>	C24
15.	(1) I prefer to keep my ideas to myself (2) I share my ideas with tutors	<input type="checkbox"/>	C25
16.	(1) I challenge the ideas of tutors (2) I accept the ideas of tutors	<input type="checkbox"/>	C26

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
17.	(1) I prefer to be treated as an individual (2) I prefer to be treated as one of the group	<input type="checkbox"/>	C27
18.	(1) I prefer tutors to be role models (2) I prefer tutors to be co-learners	<input type="checkbox"/>	C28
19.	(1) I prefer to be pampered (2) I prefer to be treated like an adult	<input type="checkbox"/>	C29
20.	(1) I prefer distance from tutors at times (2) I prefer the tutors' presence constantly	<input type="checkbox"/>	C30
21.	(1) It is the responsibility of tutors to teach me (2) It is my responsibility to learn	<input type="checkbox"/>	C31
22.	(1) I express my feelings freely (2) I am afraid to express my feelings	<input type="checkbox"/>	C32
23.	(1) I do my work because I am afraid of being punished (2) I do my work because I accept responsibility for my work	<input type="checkbox"/>	C33
24.	(1) When I pass a test it is due to my own doing (2) When I pass a test it is due to the tutors' doing	<input type="checkbox"/>	C34
25.	(1) When I fail a test it is due to my own doing (2) When I fail a test it is due to the tutors' doing	<input type="checkbox"/>	C35
26.	(1) My educational destiny lies within myself (2) My educational destiny lies in the hands of my tutors	<input type="checkbox"/>	C36
27.	(1) I prefer to share both knowledge and feelings (2) I prefer to share only knowledge	<input type="checkbox"/>	C37
28.	(1) I prefer to learn in ways that best suit me (2) I prefer to learn according to prescribed ways	<input type="checkbox"/>	C38
29.	(1) I feel safe to ask questions (2) I am afraid to ask questions	<input type="checkbox"/>	C39
30.	(1) I approve of tutors expressing their feelings (2) I object to tutors expressing their feelings	<input type="checkbox"/>	C40
31.	(1) I idealise tutors (2) I view tutors as my equals	<input type="checkbox"/>	C41
32.	(1) I prefer passively listening to tutors revealing factual content to me (2) I prefer to actively discover information about important phenomena	<input type="checkbox"/>	C42

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
33.	(1) I insist that tutors must “know it all” (2) I accept that tutors could make mistakes	<input type="checkbox"/>	C43
34.	(1) Learning how to learn is important to me (2) Learning factual content is important to me	<input type="checkbox"/>	C44
35.	(1) I prefer to plan my learning experiences with tutors (2) I prefer the tutors to plan my learning experiences	<input type="checkbox"/>	C45
36.	(1) I prefer to actively participate in the learning process (2) I prefer to sit passively listening to what tutors teach	<input type="checkbox"/>	C46
37.	(1) I prefer tutors to present me with the complete learning content (2) I prefer to discover things for myself	<input type="checkbox"/>	C47
38.	(1) I prefer to decide with tutors what I need to learn (2) I prefer tutors to tell me what to learn	<input type="checkbox"/>	C48
39.	(1) I prefer learning experiences that are structured and prescriptive (2) I prefer learning experiences that allow me to choose what and how I learn	<input type="checkbox"/>	C49
40.	(1) I prefer self-study activities (2) I prefer the lecture method	<input type="checkbox"/>	C50
41.	(1) My decisions and actions are spontaneous and sudden (2) I plan decisions and actions ahead of time	<input type="checkbox"/>	C51
42.	(1) I prefer tutors to facilitate my learning (2) I prefer tutors to actually teach me	<input type="checkbox"/>	C52
43.	(1) I prefer tutors to design the curriculum (2) I prefer to be involved when the curriculum is designed	<input type="checkbox"/>	C53
44.	(1) I need specific outcomes to guide my learning in the clinical practice (2) To me, all incidents in clinical practice are learning experiences	<input type="checkbox"/>	C54
45.	(1) I learn by giving holistic, individualised care to patients (2) I learn by doing fragmented tasks for my patients	<input type="checkbox"/>	C55
46.	(1) I do not reflect on my learning experiences (2) I learn from reflecting on my learning experiences	<input type="checkbox"/>	C56
47.	(1) I prefer studying according to stated outcomes (2) I prefer studying work as a whole	<input type="checkbox"/>	C57

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
48.	(1) I study learning material to answer specific questions (2) I study learning material to answer all possible questions	<input type="checkbox"/>	C58
49.	(1) I prefer to study factual content of a subject (2) I prefer to study the subject as a whole	<input type="checkbox"/>	C59
50.	(1) I learn by asking questions (2) I learn by following instructions	<input type="checkbox"/>	C60
51.	(1) I am satisfied with knowing only facts about important things (2) I prefer to be able to explain why things are the way they are	<input type="checkbox"/>	C61
52.	(1) I focus on the individual's response to illness (2) I focus on disease and pathology	<input type="checkbox"/>	C62
53.	(1) I prefer to learn only the content of nursing subjects (2) I prefer to integrate nursing knowledge with non-nursing subjects	<input type="checkbox"/>	C63
54.	(1) I learn by clarifying the meaning of concepts (2) I learn by memorizing facts.	<input type="checkbox"/>	C64
55.	(1) I prefer to be assessed on individual procedures (2) I prefer to be assessed for total patient care	<input type="checkbox"/>	C65
56.	(1) I prefer to be allocated to specific tasks during care of patients (2) I prefer to be allocated to care for a number of patients in totality	<input type="checkbox"/>	C66
57.	(1) I prefer examining case studies readily found in books and journals (2) I prefer learning by compiling case studies from my personal clinical experience	<input type="checkbox"/>	C67
58.	(1) I prefer being given all the relevant information to solve a problem (2) I prefer to gather information myself to solve a problem	<input type="checkbox"/>	C68
59.	(1) I treat patients strictly according to prescribed protocols (2) I treat patients according to their individual needs	<input type="checkbox"/>	C69
60.	(1) The theoretical knowledge I gain brings me closer to patients (2) The theoretical knowledge I gain distances me from patients	<input type="checkbox"/>	C70
61.	(1) I feel ashamed when I make a mistake during a learning experience (2) I accept that making mistakes is part of learning	<input type="checkbox"/>	C71
62.	(1) I am free to express my opinion about learning content (2) I am afraid to express my opinion about learning content	<input type="checkbox"/>	C72
63.	(1) I prefer to know the exact criteria to be used during assessment (2) I do not mind the specific criteria set for assessment	<input type="checkbox"/>	C73

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
64.	(1) I find learning fun (2) I find learning a serious business	<input type="checkbox"/>	C74
65.	(1) I prefer that tutors and I jointly assess my work (2) I prefer tutors to assess my work	<input type="checkbox"/>	C75
66.	(1) I am cautious and formal when involved in group activities (2) I express my feelings freely during group activities	<input type="checkbox"/>	C76
67.	(1) I experience theory and practice as two separate fields (2) I experience theory and practice as a complete whole	<input type="checkbox"/>	C77
68.	(1) I turn negative learning experiences into positive ones (2) Negative learning experiences tend to demotivate me	<input type="checkbox"/>	C78
69.	(1) I learn in order to develop my knowledge, skills and values (2) I learn in order to benefit my patients	<input type="checkbox"/>	C79
70.	(1) I learn more from theory than from practice (2) I learn more from practice than from theory	<input type="checkbox"/>	C80
71.	(1) My theoretical preparation makes clinical learning experiences meaningful (2) My clinical learning experiences would have been meaningful regardless of my theoretical preparation	<input type="checkbox"/>	C81
72.	(1) I see my academic development as a change in behaviour (2) I see my academic development as a change in knowledge, skills and values	<input type="checkbox"/>	C82
73.	(1) What I learn contributes meaning to my life (2) What I learn is not really significant to my life	<input type="checkbox"/>	C83
74.	(1) I prefer studying on my own (2) I prefer studying with peers in study groups	<input type="checkbox"/>	C84
75.	(1) I prefer an educational environment that is autocratic (2) I prefer an educational environment that is democratic	<input type="checkbox"/>	C85
76.	(1) I experience critique as threatening (2) I experience critique as an opportunity to learn	<input type="checkbox"/>	C86
77.	(1) I prefer that only medical and nursing subjects are included in the curriculum (2) I prefer that medical, nursing and social science subjects are included in the curriculum	<input type="checkbox"/>	C87

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
78.	(1) I prefer theoretical learning material that provides examples from diverse cultures (2) I prefer theoretical learning material that provides examples from my culture	<input type="checkbox"/>	C88
79.	(1) I prefer to be exposed to a variety of learning experiences (2) I prefer to be exposed to a limited number of teaching strategies	<input type="checkbox"/>	C89
80.	(1) I prefer learning material that is Eurocentric (2) I prefer learning material that is Afrocentric	<input type="checkbox"/>	C90
81.	(1) I prefer factual questions which directly relate to stated outcomes (2) I prefer questions that challenge me to apply knowledge, skills and values	<input type="checkbox"/>	C91
82.	(1) During clinical practice, I prefer to be closely observed (2) During clinical practice, I prefer to work on my own	<input type="checkbox"/>	C92
83.	(1) I prefer to observe when a procedure is being demonstrated (2) I prefer to demonstrate a procedure to other students	<input type="checkbox"/>	C93
84.	(1) I draw conclusions based on facts within a single subject (2) I draw conclusions by integrating content from different subjects	<input type="checkbox"/>	C94
85.	(1) I learn by doing things correctly (2) I learn from my mistakes	<input type="checkbox"/>	C95
86.	(1) I periodically reflect on my academic development (2) I never reflect on my academic development	<input type="checkbox"/>	C96
87.	(1) I prefer to study theory and practice separately (2) I prefer to integrate theory and practice	<input type="checkbox"/>	C97
88.	(1) I prefer assessment to be based on grades/marks/percentages (%) (2) I prefer assessment to be based on critique and discussion	<input type="checkbox"/>	C98
89.	(1) I prefer to be assessed continuously (2) I prefer to be assessed only at the end of the academic year	<input type="checkbox"/>	C99
90.	(1) The clinical experience I gain brings me closer to patients (2) The clinical experience I gain distances me from patients	<input type="checkbox"/>	C100
91.	(1) Tutors have a great deal to teach students (2) Tutors have little to teach students	<input type="checkbox"/>	C101
92.	(1) Tutors treat students like children (2) Tutors treat students like adults	<input type="checkbox"/>	C102

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
93.	(1) Tutors listen attentively to, and acknowledge, students (2) Tutors ignore/disregard what students have to say	<input type="checkbox"/>	C103
94.	(1) Tutors are generally cheerful (2) Tutors are generally grumpy	<input type="checkbox"/>	C104
95.	(1) Tutors assign too many self-study activities to students (2) Tutors employ too many formal teaching strategies	<input type="checkbox"/>	C105
96.	(1) Tutors do not allow students to choose how they learn (2) Tutors do not mind the way in which students learn	<input type="checkbox"/>	C106
97.	(1) Tutors allow students to choose what they need to learn (2) Tutors decide on what students need to learn	<input type="checkbox"/>	C107
98.	(1) Tutors encourage students to explore different ways to learn (2) Tutors direct and control the way students learn	<input type="checkbox"/>	C108
99.	(1) Tutors accept students as individuals (2) Tutors see a student as just one of the group	<input type="checkbox"/>	C109
100.	(1) Tutors are role models (2) Tutors are co-learners	<input type="checkbox"/>	C110
101.	(1) Tutors are either too strict or too lenient in their assessment (2) Tutors are fair in their assessment	<input type="checkbox"/>	C111
102.	(1) Tutors devise stimulating learning experiences (2) Tutors devise boring learning experiences	<input type="checkbox"/>	C112
103.	(1) Tutors demarcate the work to be learned for examinations (2) Tutors expect student to learn all the work for examinations	<input type="checkbox"/>	C113
104.	(1) Tutors view good grades as important (2) Tutors view understanding of content as important	<input type="checkbox"/>	C114
105.	(1) Tutors accept students questioning the truth of what they tell students (2) Tutors expect students to accept what they say as truth	<input type="checkbox"/>	C115
106.	(1) Tutors maintain open communication channels with students (2) Tutors have difficulty communicating with students	<input type="checkbox"/>	C116
107.	(1) Tutors allow students to challenge their ideas (2) Tutors expect students to accept their ideas	<input type="checkbox"/>	C117

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
108.	(1) Tutors expect students to grow professionally according to their individuality (2) Tutors mould students professionally in a preconceived way	<input type="checkbox"/>	C118
109.	(1) Tutors expect students to keep quiet, listen and do as they are told (2) Tutors expect students to participate, think and challenge tutors	<input type="checkbox"/>	C119
110.	(1) Tutors share both knowledge and feelings with students (2) Tutors share only knowledge with students	<input type="checkbox"/>	C120
111.	(1) Tutors do not allow students to make mistakes (2) Tutors allow students to make mistakes	<input type="checkbox"/>	C121
112.	(1) Students are free to communicate with the tutors (2) Students do not feel free to communicate with the tutors	<input type="checkbox"/>	C122
113.	(1) Tutors express their feelings towards students (2) Tutors do not express their feelings towards students	<input type="checkbox"/>	C123
114.	(1) Tutors compel students to learn according to pre-conceived ways (2) Tutors encourage students to learn in ways that best suit students	<input type="checkbox"/>	C124
115.	(1) Tutors allow students to express their feelings (2) Tutors do not allow students to express their feelings	<input type="checkbox"/>	C125
116.	(1) Students do their work because they are afraid of being punished (2) Students do their work because they accept responsibility for their work	<input type="checkbox"/>	C126
117.	(1) Students control their own educational destiny (2) Tutors control the educational destiny of students	<input type="checkbox"/>	C127
118.	(1) Tutors encourage students to ask questions (2) Students are not allowed to ask questions	<input type="checkbox"/>	C128
119.	(1) Tutors present factual content of different subjects (2) Tutors expect students to discover factual content themselves	<input type="checkbox"/>	C129
120.	(1) Students are guided during self-study activities (2) Students are left to their own devices during self-study activities	<input type="checkbox"/>	C130
121.	(1) Tutors expect students to learn how to learn (2) Tutors expect students to learn the what (content) of learning	<input type="checkbox"/>	C131
122.	(1) Tutors and students jointly plan learning experiences (2) Tutors plan learning experiences on their own	<input type="checkbox"/>	C132

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
123.	(1) Students actively participate in the learning process (2) Students sit passively listening to what tutors teach	<input type="checkbox"/>	C133
124.	(1) Tutors present students with complete learning content (2) Tutors expect students to discover things for themselves	<input type="checkbox"/>	C134
125.	(1) Tutors tell students what to learn (2) Tutors and students jointly decide what students have to learn	<input type="checkbox"/>	C135
126.	(1) Learning experiences are structured and prescriptive (2) Learning experiences allow students to choose what and how they learn	<input type="checkbox"/>	C136
127.	(1) Tutors prefer to use self-study activities (2) Tutors prefer to use the lecture method	<input type="checkbox"/>	C137
128.	(1) Tutors facilitate learning (2) Tutors teach	<input type="checkbox"/>	C138
129.	(1) Tutors design the curricula (2) Tutors and students are both involved in designing curricula	<input type="checkbox"/>	C139
130.	(1) Tutors provide specific outcomes to guide students' learning during clinical practice (2) Tutors view all incidents in clinical practice as learning experiences	<input type="checkbox"/>	C140
131.	(1) Tutors provide all relevant information during problem solving (2) Tutors expect students to gather information to solve a problem	<input type="checkbox"/>	C141
132.	(1) Tutors are focused on individual human responses to illness (2) Tutors are disease and pathology oriented	<input type="checkbox"/>	C142
133.	(1) Tutors are concerned about total patient care rendered by students (2) Tutors are interested in students' skill acquisition only	<input type="checkbox"/>	C143
134.	(1) During clinical placement, specific tasks are assigned to students (2) During clinical placement, a number of patients are assigned to students for total patient care	<input type="checkbox"/>	C144
135.	(1) Students are expected to treat patients strictly according to prescribed protocols (2) Students are expected to treat patients according to their individual needs	<input type="checkbox"/>	C145
136.	(1) Tutors expect students to examine case studies readily found in books and journals (2) Tutors expect students to compile case studies from students' personal experiences	<input type="checkbox"/>	C146

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
137.	(1) Tutors expect students to interpret and show understanding of information during examinations (2) Tutors expect students to repeat factual information during examinations	<input type="checkbox"/>	C147
138.	(1) Tutors assign individual procedures to students during clinical practice (2) Tutors assign students to total patient care during clinical practice	<input type="checkbox"/>	C148
139.	(1) Tutors expect students to study according to stated outcomes (2) Tutors expect students to study their work as a whole	<input type="checkbox"/>	C149
140.	(1) Tutors expect students to study learning material to answer specific questions (2) Tutors expect students to study learning material to answer all possible questions	<input type="checkbox"/>	C150
141.	(1) Tutors compile test and examination questions according to set outcomes for the work (2) Tutors compile test and examination questions covering the work as a whole	<input type="checkbox"/>	C151
142.	(1) Tutors are satisfied with students knowing facts only (2) Tutors expect students to explain why things are the way they are	<input type="checkbox"/>	C152
143.	(1) Tutors separate the content of nursing subjects from other subjects (2) Tutors integrate content from nursing subjects with that of other subjects	<input type="checkbox"/>	C153
144.	(1) Tutors expect students to discover the meaning of concepts (2) Tutors expect students to memorize facts.	<input type="checkbox"/>	C154
145.	(1) Tutors focus on learning how to learn (2) Tutors focus on the content students have to learn	<input type="checkbox"/>	C155
146.	(1) Tutors and students mutually respect one another's opinion (2) Tutors and students show no respect for one another's opinion	<input type="checkbox"/>	C156
147.	(1) Tutors and students trust one another (2) Trust is absent from the educational setting	<input type="checkbox"/>	C157
148.	(1) Tutors need as much support from students as students need from tutors (2) Tutors do not need support from students	<input type="checkbox"/>	C158
149.	(1) Tutors think they "know it all" (2) Tutors readily admit when they make a mistake	<input type="checkbox"/>	C159

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
150.	(1) Tutors are courteous towards students (2) Tutors are impolite towards students	<input type="checkbox"/>	C160
151.	(1) Tutors are patient (2) Tutors are impatient	<input type="checkbox"/>	C161
152.	(1) Tutors are available for consultation (2) Tutors are not available for consultation	<input type="checkbox"/>	C162
153.	(1) Tutors are rigid (2) Tutors are flexible	<input type="checkbox"/>	C163
154.	(1) Tutors are supportive (2) Tutors are not supportive	<input type="checkbox"/>	C164
155.	(1) Tutors are open to suggestions made during learning experiences (2) Tutors are defensive of suggestions made during learning experiences	<input type="checkbox"/>	C165
156.	(1) Tutors are superior to students (2) Tutors treat students as their equal	<input type="checkbox"/>	C166
157.	(1) Tutors assess the work of students (2) Tutors and students jointly assess students' work	<input type="checkbox"/>	C167
158.	(1) What students learn contributes meaning to their lives (2) What students learn does not really influence their lives	<input type="checkbox"/>	C167
159.	(1) Tutors blame students if students make a mistake (2) Tutors turn a negative learning experience into a positive experience	<input type="checkbox"/>	C168
160.	(1) Tutors make learning tedious (boring) (2) Tutors make learning fun	<input type="checkbox"/>	C169
161.	(1) The educational environment is oppressive (2) The educational environment is liberating	<input type="checkbox"/>	C170
162.	(1) The educational environment is stifling (2) The educational environment is open	<input type="checkbox"/>	C171
163.	(1) The educational environment is autocratic (2) The educational environment is democratic	<input type="checkbox"/>	C172
164.	(1) The educational environment is caring (2) The educational environment is uncaring	<input type="checkbox"/>	C173

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
165.	(1) The educational environment is warm (2) The educational environment is aloof	<input type="checkbox"/>	C174
166.	(1) During clinical placements, students are expected to gain experience according to prescribed outcomes (2) During clinical placements, students gain experience according to their personal learning needs	<input type="checkbox"/>	C175
167.	(1) Learning material is Eurocentric (2) Learning material is Afrocentric	<input type="checkbox"/>	C176
168.	(1) Tutors treat students according to students' individual cultures (2) Tutors treat students according to the dominant culture of the class	<input type="checkbox"/>	C177
169.	(1) Tutors tend to ask only questions which directly relate to stated outcomes (2) Tutors ask questions beyond (broader than) stated outcomes	<input type="checkbox"/>	C178
170.	(1) Tutors are clinically competent (2) Tutors are not clinically competent	<input type="checkbox"/>	C179
171.	(1) Tutors create learning experiences that relate directly to stated outcomes (2) Tutors create learning experiences outside of (broader than) stated outcomes	<input type="checkbox"/>	C180
172.	(1) During clinical practice, tutors observe most of what students do (2) During clinical practice, students are expected to work on their own	<input type="checkbox"/>	C181
173.	(1) Tutors integrate theory and clinical practice (2) Tutors are not able to integrate theory and clinical practice	<input type="checkbox"/>	C182
174.	(1) Tutors are up to date with the latest developments in clinical practice (2) Tutors are not up to date with the latest developments in clinical practice	<input type="checkbox"/>	C183
175.	(1) Learning outcomes challenge students to express their personal understanding of content (2) Learning outcomes restrict students to merely restate content	<input type="checkbox"/>	C184
176.	(1) Tutors base assessment of learning experiences on grades/marks/percentages (%) (2) Tutors base assessment of learning experiences on critique and discussion	<input type="checkbox"/>	C185
177.	(1) Tutors see learning as doing things correctly (2) Learning provides for learners to learn from their mistakes	<input type="checkbox"/>	C186

Item Numbers	ITEM	Indicate Choice (1) or (2)	For office use only
178.	(1) Tutors expect students to make their own decisions regarding learning (2) Tutors make all the decisions regarding learning	<input type="checkbox"/>	C187
179.	(1) Tutors only provide for students to observe when procedures are demonstrated (2) Tutors allows students to demonstrate procedures to other students	<input type="checkbox"/>	C188
180.	(1) Tutors require that students reflect on their development (2) It does not matter to tutors whether students reflect on their development	<input type="checkbox"/>	C189
181.	(1) Tutors assess students' academic development continuously (2) Tutors assess students' academic development only at the end of a training period	<input type="checkbox"/>	C190

**Thank you for your willingness to complete this questionnaire**

## AGREEMENT

**YEAR GROUP:** \_\_\_\_\_

**I,** \_\_\_\_\_ **on this the** \_\_\_\_\_ **day of** \_\_\_\_\_ **2005**

**hereby consent to:**

1. participating in the research study entitled "*The development of a measuring instrument to determine the educative and behavioural climate at an educational institution*"
2. completing the questionnaire entitled "*A measuring instrument for determining the educational focus of Student Nurses at a Nursing College*"
3. follow-up clarification sessions if necessary
4. the use of data, derived from the completed questionnaire, by the researcher, in the research report as she deems appropriate.

**I also understand that:**

1. I am free to terminate my participation in this research study at any time I feel like it
2. information obtained, up to the point of my termination as a respondent from this study, could, however, still be used by the researcher
3. privacy will be maintained by the researcher adhering to the principles of confidentiality and anonymity and that data will under no circumstances be reported in such a way as to reveal my identity
4. no reimbursement will be made by the researcher, for information given or for participation, in this project
5. by signing this agreement I undertake to give honest answers to reasonable questions and not to mislead the researcher
6. I will sign one agreement with all the other respondents in my year group
7. an unsigned copy of this agreement will be submitted to the College principal for my information.

**I hereby acknowledge that the researcher has:**

1. discussed the entire research study, and in particular the aims, objectives and completion of the questionnaire, with me
2. informed me about the contents of this agreement
3. pointed out the implications of signing this agreement.

**In co-signing this agreement the researcher undertakes to:**

1. maintain privacy by adhering to the principles of confidentiality and anonymity regarding the respondent's identity and information given by the respondent
2. pre-arrange a suitable time and venue for the administration of the questionnaire
3. safeguard the original, signed agreement.

**Signatures:**

-----  
(Researcher)

-----  
Date

-----  
(Witness)

-----  
Date

**AGREEMENT NAME LIST**

**COMPLETION DATE:** \_\_\_\_\_ **COLLEGE:** \_\_\_\_\_

**YEAR GROUP:** \_\_\_\_\_ **COLLEGE BLOCK:** \_\_\_\_\_

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## CURRICULUM VITAE

My name is Chautnette Mouton. I am 59 years old, married and have two sons and two beautiful grandchildren. I matriculated in 1965 and commenced my nursing career in 1966 at the Frere Hospital, East London. I have diplomas in General Nursing, Midwifery, Psychiatric Nursing Science and Nursing Education. I obtained the following degrees at Unisa:

- \* BA (Cur) Bachelor of Nursing Science majoring in Nursing Administration and Community Health Nursing, 1984
- \* BA (Cur) Honours majoring in Nursing Education, 1990
- \* MA (Cur) Cum Laude, 1997.

During 2005 I completed the Assessor's Course.

I was appointed to my present post as Head of Department: Student Affairs and Selection on the 1st of March 2002.

I have previously held the following positions:

- \* Professional Nurse in a ward responsible for clinical orientation and teaching of all students
- \* Teaching Sister doing Tutoring and Clinical accompaniment
- \* Chief Professional Nurse (Tutor) teaching all the nursing courses
- \* Academic Head of Department: Community Health Nursing Science.

I am presently a member of the following Committees/Work groups/Tasks teams:

- \* College Council
- \* College Senate
- \* Curriculum Committee
- \* Internal Disciplinary Committee
- \* College Appeals Committee
- \* First Year D4 Orientation Committee
- \* Gauteng Central Selection Centre Committee
- \* Work Group formulating Clinical Evaluation Instruments
- \* Task team for the revision of the Gauteng Student Selection Policy.

I have previously been Chairperson of the Curriculum-, College Appeals-, Gauteng Central Selection Centre Committees and a member of the Unisa Honor Society of Nursing (UHSN) Sigma Theta Tau International.

In collaboration with a colleague, I compiled the Disciplinary guidelines for the College which was adopted by all Gauteng Nursing Colleges.

I have received merit awards for quality service from 1989 to 2006. My hobbies are reading, walking and watching historical documentaries on the television.

I have published the following articles:

- \* Crous, JS, de Villiers, L, Mouton, C & Beyers, T. 1995. 'n Studie gerig op die benutting van simulاسie as onderrigstrategie in die kliniese onderrigafdeling by Ann Latsky Verplegingskollege. *Curationis*, 18(14):65-75.

Mouton, C & Labuschagne, JE. 1993. A conceptual framework for a Problem-Based Curriculum. **Nursing RSA Verpleging**, 8(4):29-3