



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

EXPANDING MUSIC TEACHERS' PERCEPTIONS OF LEARNING STRATEGIES IN THE 21ST CENTURY

by

Albertha Elizabeth le Roux

Thesis submitted in partial fulfilment of the degree

Doctor Musicae

in the

Department of Music

School of the Arts

Faculty of Humanities

University of Pretoria

Promoter: Prof. Caroline van Niekerk

Abstract

This study was prompted by the need the author experienced for the rethinking of many practices in music teaching and her interest in achieving transformation in individual music teaching and learning.

An eclectic approach was adopted for the research. Despite much existing ‘fuzzy’ terminology, ‘broader’ or ‘less fixed’ meanings were sought of terms including Holism, intelligence, learning, Modernism, perception, personality, Postmodernism, teaching, temperament and whole-brain learning. The reader is presented with a palette of ideas, open for further exploration, in order to stimulate creativity and different viewpoints in music teaching and learning. The study has a student-centred approach, taking into account different types of learners and how to adapt teaching styles to connect with students in their learning environment.

Challenges teachers may encounter are how the meanings of many terms relate with music teaching practice, themselves and their pupils. The research explores the interaction and relation of terms with one another in order to reconsider and expand teaching methods. Inter, intra and multidisciplinary aspects of teaching are touched upon as being valuable in cutting across several traditional fields of study and also referring to knowledge seen as a coherent whole within one subject area. Experiences of ‘flow’ and transformative learning are explored in order to challenge students’ and teachers’ ‘fixed’ thinking methods.

The whole-brain model is considered where the brain is seen in four quadrants, each quadrant displaying distinctive strengths of value in music teaching. The importance of Emotional Intelligence in developing other intelligences is investigated and its link with Inter and Intrapersonal Intelligences in order to equip teachers to connect effectively with pupils in a learning context.



There is no “one size fits all” teaching strategy, learning style or framework that can apply to the myriad needs of individual music teachers and pupils. The research, however, demonstrates the importance for music teachers to be receptive in enlarging their thinking patterns. In so doing a path can be set for shifting focus in teaching strategies to a ‘moving forward’ ideal in perception and understanding of teaching and learning in the 21st century.

Key words

Brain Profiles

Learning Strategies

Postmodernism

Eclectic

Multiple Intelligences

Whole-Brain learning

Holism

Perception

Individual Music Teaching

Personality Types

Acknowledgements

I wish to acknowledge with deepest gratitude my supervisor Professor Caroline van Niekerk for her encouragement, support, academic empowerment, expert guidance, inspiration and endless advice while walking the doctoral road.

I wish also to express my thanks to the following people who contributed in various valuable ways:

Dr Colin Finucane for listening, encouragement, inspiration and expert computer assistance;

Tertia Jacobs for reassurance and being a locum teacher at my studio on numerous occasions;

My friends Inette Swart, Lizelle Roets and Janette Zowitsky for continuous commitment and support throughout the entire duration of the study;

All my music students who were my greatest teachers;

The University of Pretoria, Dr Pien Froeling and Mrs Marie le Roux for financial assistance;

Isobel Rycroft from the Music library for research assistance.

Pretoria, June 2010



If you were a student, would you want *yourself* as a teacher?

Marshall (2003)



Table of Contents

Abstract
Key words
Acknowledgements
List of Figuresxii

Chapter 1

Introduction 1

1.1 Justification for the study 1

1.2 Research questions..... 4

1.3 Aims of the study..... 4

1.4 Research methods 6

1.5 Methods for data collection..... 6

 1.5.1 Literature review..... 6

 1.5.2 Developmental research 6

 1.5.3 Grounded theory research..... 7

 1.5.4 Auto-ethnographic research 7

1.6 Theoretical orientation of the study..... 8

1.7 Layout of the study 11

1.8 Delimitations of the study 12

1.9 Notes to the reader..... 13

Chapter 2

Literature survey 15

2.1 Introduction 15

2.2 Shifts in thought relevant to music teachers in the 21st century..... 16

 2.2.1 Shifts in humanistic trends..... 17

 2.2.2 Shifts in cognitive trends 17

 2.2.3 Philosophical trends that influence teachers' current world views and
teaching 18

2.2.4	Relevant views on perception.....	19
2.2.5	Biological and aesthetic concepts.....	20
2.3	Examining learning and teaching styles.....	20
2.3.1	Learning styles	21
2.3.2	Teaching styles	22
2.3.3	The integration of learning and teaching styles.....	23
2.4	Exploring brain profiles and personality types.....	24
2.5	Perspectives relevant to Multiple Intelligences	26
2.6	Transformative learning.....	28
2.7	Flow	29
Chapter 3		
Trends in thought, frameworks and concepts relevant to music teachers in the 21st century.....		
31		
3.1	Introduction	31
3.2	Relevant psychological developments.....	32
3.2.1	Humanistic trends	33
3.2.1.1	The concept of Holism in teaching and learning	34
3.2.1.2	The shift from the parts to the whole	35
3.2.1.3	The shift from analysis to context	35
3.2.1.4	The shift from objects to relationships	36
3.2.1.5	The shift from hierarchies to networks.....	36
3.2.1.6	Understanding Holism in relation to Postmodernism	37
3.2.2	Cognitive trends	37
3.2.2.1	Cognitive behavioural trends.....	38
3.2.2.2	Cognitive orientation to learning.....	38
3.2.2.3	Gestalt psychology	40
3.3	Relevant philosophical developments.....	41
3.3.1	The modern world view	42
3.3.2	Modernism and its influence on methods of music teaching.....	46
3.3.3	Postmodernism and its influence on methods of music teaching.....	47
3.3.4	Tendencies describing Modernism and Postmodernism.....	49



3.4	Relevant developments in perception.....	49
3.4.1	Views on perception.....	50
3.4.2	What is perception?.....	50
3.4.3	What influences perception?	53
3.4.4	Perception from a psychological and philosophical perspective, applied to music teaching	55
3.5	The challenges of learning and teaching in the 21 st century	56
3.5.1	How to keep students interested in music	56
3.5.2	How to keep up, as teacher, with new developments in a high-paced society.....	57
3.5.3	General considerations concerning the challenges of music teaching in the 21 st century.....	58
3.5.3.1	The Adaptor	59
3.5.3.2	The Communicator.....	60
3.5.3.3	The Learner.....	60
3.5.3.4	The Visionary	60
3.5.3.5	The Leader.....	60
3.5.3.6	The Model.....	61
3.5.3.7	The Collaborator	61
3.5.3.8	The Risk taker	61
3.6	Biological concepts relevant to music teaching.....	63
3.6.1	Creativity	63
3.6.2	Preference	67
3.6.3	Self image.....	68
3.6.4	Emotion.....	69
 Chapter 4		
Learning and teaching styles.....		73
4.1	Introduction	73
4.2	What are learning styles?	74
4.3	Aspects influencing learning and teaching styles.....	76
4.4	Types of learners.....	77
4.4.1	The Visual Learner	79



4.4.2	The Aural Learner	79
4.4.3	The Kinesthetic Learner	80
4.5	Learning types considered in the music teaching context	81
4.6	Learning style models	82
4.6.1	Herrmann Brain Dominance Instrument (HBDI).....	85
4.6.2	Using the whole-brain in teaching and learning	87
4.7	Flow experiences in learning, teaching and motivation	88
4.8	Transformative learning theory	90
4.9	Motivation.....	91
4.9.1	Defining motivation.....	92
4.9.1.1	Intrinsic motivation.....	93
4.9.1.2	Extrinsic motivation	93
4.9.2	Theories that influence motivation	94
4.9.2.1	Entity theories	94
4.9.2.2	Incremental theories.....	94
4.9.2.3	Social cognitive theories.....	94
4.9.3	Aspects that influence pupils' motivation positively or negatively.....	95
4.9.4	Addressing the unmotivated student	97
4.9.4.1	Recognizing poor motivation	98
4.9.4.2	Addressing poor motivation	98
4.9.4.3	Limitation of activities at an early age.....	102
4.9.5	The validity of motivation in teaching and learning music in the 21 st century	102

Chapter 5

Brain profiles and personality types..... 103

5.1	Introduction	103
5.2	Overview of different areas of the human brain relevant to learning	105
5.2.1	Cerebrum	105
5.2.2	Cortexes in the brain	107
5.2.3	Limbic system	109
5.2.4	The internal structures of the brain	110
5.2.4.1	The Hindbrain.....	110



5.2.4.2	The Neocortex.....	111	
5.3	Whole-brain learning and teaching	112	
5.4	Out-of-the-box thinking and teaching.....	113	
5.5	Personality types	114	
5.5.1	Understanding the terminology.....	114	
5.5.2	Carl Jung's eight personality types	115	
5.5.3	The importance of personality type towards understanding transformative learning	116	
5.6	Myers-Briggs Type Indicator.....	118	
5.6.1	The preferences	119	
5.6.2	Type dynamics	120	
5.7	Personality and temperament.....	121	
5.8	Temperament and its subdivisions explained	124	
5.9	Role dynamics.....	125	
5.10	Understanding the influences of brain profiles and personality types on teaching music in the 21 st century.....	126	
Chapter 6			
Multiple intelligences.....			128
6.1	Introduction	128	
6.2	Theories of intelligence.....	129	
6.2.1	Charles Spearman: General intelligence	129	
6.2.2	Louis Thurstone: Primary mental abilities	130	
6.2.3	Robert Sternberg: Triarchic theory of intelligence.....	130	
6.3	The characteristics of intelligence.....	131	
6.4	Intelligence and its subdivisions explained	131	
6.5	Implementing the Theory of Multiple Intelligences in music teaching.....	140	
6.5.1	Multiple Intelligences and music teachers	141	
6.5.2	Multiple Intelligences: teachers and pupils	142	
6.5.3	Using technology to teach to the Multiple Intelligences.....	144	
6.6	Defining Emotional Intelligence	145	

6.7	The important role of Emotional Intelligence in helping develop other intelligences	145
6.8	Key points in Multiple Intelligence Theory.....	148
Chapter 7		
Conclusions & recommendations		150
7.1	Introduction	150
7.2	Answering the research questions.....	150
7.2.1	How can the understanding of aspects related to learning strategies in music expand teachers' perceptions?	150
7.2.2	In selecting appropriate learning strategies for individual music pupils, how important are trends in thought, frameworks and concepts relevant to teaching music?	154
7.2.3	How relevant is the study of brain profiles, personality types and Multiple Intelligences in influencing teaching and learning styles in music?	155
7.2.4	How can intrinsic motivation be expanded in music teaching?	157
7.3	Strategies in addressing limitations in individual music teaching	158
7.4	Suggestions for rethinking and revisioning current teaching methods.....	158
7.5	Recommendations for dissemination of this research.....	161
7.6	Concluding remarks	163
List of References		164

List of Figures

Figure 1: Three orientations to learning	39
Figure 2: Kanizsa figure	51
Figure 3: The Ponzo illusion.....	53
Figure 4: Characteristics of the 21 st century music teacher	59
Figure 5: Plutchik’s wheel of emotions	71
Figure 6: Plutchik’s list of basic emotions with opposites	72
Figure 7: Learning styles and characteristics of Piano Students	82
Figure 8: A description and comparison of eight four-quadrant learning styles and models	83
Figure 9: The four quadrants by Ned Herrmann	86
Figure 10: Factors which have a positive or negative impact on pupils’ Motivation.....	97
Figure 11: The different processes of the human brain.....	103
Figure 12: Left and right hemisphere functions of the brain	104
Figure 13: The sub-regions of the cerebrum	106
Figure 14: The different cortexes within the brain	107
Figure 15: The cerebral hemispheres	109
Figure 16: The limbic system	110
Figure 17: The internal structures of the brain	111
Figure 18: The sixteen personality types of the MBTI instrument	121
Figure 19: Howard Gardner’s Multiple Intelligences	132
Figure 20: Howard Gardner’s intelligences expanded to nine different types	133
Figure 21: Howard Gardner’s Multiple Intelligences explained	137