Towards a conceptual framework for the design of a qualification in Music Technology at post-secondary institutions in South Africa

by

Chatradari Devroop

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Supervisor: Prof C van Niekerk
Co-supervisors: Prof H H van der Mescht
Dr J P Jacobs

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ABSTRACT

This study examines the implications of education policy in South Africa on a transformational qualification design for Music Technology as a field of study. The study constructs a conceptual framework that informs the design of a qualification in Music Technology at post-secondary school level, using the knowledge and trends in the field of Music Technology and taking into account the requirements of South African education policy. An exemplar of the qualification, a Certificate in Music Technology at National Qualifications Framework Level 5, as required in the South African education framework, is presented.

The main research question that this study addresses is:

- How does the nature of the field of Music Technology and current South African education policy contribute to the development of a conceptual framework that informs the design of a qualification in Music Technology?

This research question is broken down into two specific sub-questions:

- What is the current nature of Music Technology internationally and as an emerging field of study in South Africa?
- What are the implications of current South African education policy for transformational qualification design?

The findings that emerge from the investigation of the research questions are:

- Music Technology is a vast, dynamic and constantly evolving field. Internationally as well as in South Africa, knowledge production in Music Technology is interdisciplinary in nature.
- Literature on Music Technology and technology–based education internationally shows no clear consensus with regard to qualification outcomes in Music Technology.
- The transformational agenda of South African education policy requires qualifications to integrate education and training, address the imbalances of the

past education practices and contribute towards the life performance roles of learners.

- South African education policy provides a qualification framework based on learning outcomes comprising of a combination of theory and practice. This serves the life performance roles of learners that guide the construction of a qualification in Music Technology.

Training in Music Technology internationally produces graduates with diverse specialties. Often these graduates do not meet national employment requirements in areas of music industry and education in countries where such requirements are established. This research addresses the gap that exists in South African education policy with regard to Music Technology as an emerging field of study in South Africa, to guide providers of education and to address national employment requirements.

The research is predominantly a qualitative study that uses literature survey, an overview of international trends in Music Technology, a critical analysis of existing South African programmes, interviews and Internet surveys.

Keywords:

Music Technology, Music Technology instruction, qualification design, outcomes-based education, South African education policy, interdisciplinary study, conceptual framework, curriculum development, post-secondary qualification, Certificate in Music Technology.

DEDICATION

I dedicate this work to my late parents, Devroop and Chaiterwanthee Ramnunan, who instilled in our family the value of education and who under very difficult circumstances made it their life's goal to give me, my brothers and sister a decent education.

Though we have made great strides
in reconstructing South Africa's education system,
a great deal more needs to be done.
(Mandela 1999: 5)

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CONTENTS

ABBREVIATIONS AND ACRONYMS

ABSA	Amalgamated Banks of South Africa
AC	Assessment Criteria
ANC	African National Congress
AT	Audio Technology
ATKV	Afrikaanse Taal- en Kultuurvereniging
C2005	Curriculum 2005
CBE/I/T	Computer-based Education/Instruction/Training
CCO(s)	Critical Cross-field Outcomes
CD(R)(RW)(ROM)	Compact Disk (Recordable)(Rewritable)(Read Only Memory)
CISLM	Computers, Information Systems and Laboratory Management
CM	Computer Music
CMI	Computer Music Instrument
COTEP	Committee on Teacher Education Policy
DAT	Digital Audio Tape
DCC	Digital Compact Cassette
DoE	Department of Education
DVD	Digital Versatile Disk
ELO(s)	Exit Level Outcomes
EMI(s)	Electronic Musical Instrument(s)
ETQA(s)	Education and Training Quality Assurer(s)
FET(B/C)	Further Education and Training (Band/Certificate)
FM	Frequency Modulation
GET(B/C)	General Education and Training (Band/Certificate)
HET(B/C)	Higher Education and Training (Band/Certificate)
HSRC	Human Sciences Research Council
IRC	Internet Relay Chat
IRCAM	*Institut de Recherche et Coordination Acoustique/Musique* (Institute for Research and Coordination of Acoustics and Music) (Paris, France)
ISME	International Society of Music Educators
IT	Internet and Telecommunications
IUPUI	Indiana University-Purdue University, Indianapolis, Indiana, USA

MAC	Apple Macintosh Computer
MDM	Multimedia and Digitized Media
MENC	Music Educators National Conference (USA)
MEUSSA	Music Education Unit Standards for Southern Africa
MIDI	Musical Instrument Digital Interface
MIT	Massachusetts Institute of Technology (USA)
MMCP	Manhattanville Music Curriculum Project
MN	Music Notation
MP3/MPEG 3	Motion Picture Expert Group, Layer 3
MS	MIDI Sequencing
NGO(s)	Non-Governmental Organization(s)
NQF	National Qualifications Framework
NSB	National Standards Body
OBE(T)	Outcomes-based Education (and Training)
ORTSTEP	ORT-Science and Technology Education Project
PBL	Problem-based learning
PC	Personal computer
PROTEC	Programme for Technological Careers
R	Research in Music Technology
RCA	Radio Corporation of America
RPL	Recognition of Prior Learning
RS(s)	Range Statements
SA	South Africa
SANLAM	Suid-Afrikaanse Lewensassuransiemaatskappy
SAQA	South African Qualifications Authority
SASOL	Suid-Afrikaanse Steenkool-,Olie- en Gaskorporasie
SGB	Standards Generating Body
SO(s)	Specific outcomes
UK	United Kingdom
UP	University of Pretoria
USA	United States of America
UNISA	University of South Africa
WWW	World Wide Web

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NOTES TO THE READER

1. The abbreviations CBE, CBI, CBT will be collectively referred to as CBE unless otherwise stipulated.
2. David Elliot's (1995: 12-13) four basic meanings regarding music education, "education in music", "education about music", "education for music", and "education by means of music", will underpin the use of the term "music education" in this study.
3. The term "Music Technology" refers to the course/subject/field of study, as opposed to the term "music technology", which refers to the technology/activity in music. Likewise the use of the upper case "M" in Music refers to the discipline whereas lower case "m" for music implies the generic use of the term.
4. The use of the upper case in "Field" refers to the Organizing Field classification of the National Standards Body 02.
5. To prevent confusion between the National Standards Body's "Field" (Organizing Field) and Music Technology as "field" (which is actually an area within the music sub-field), I shall refer to Music Technology as "a field of study".
6. The use of the term "component" in this study refers to a designated area of study within Music Technology that I have classified on the basis of its content. Such components will be indicated by the use of the upper case, for example Music Notation.
7. The areas of Sound Engineering, Audio Engineering and aspects relating to sound recording, manipulation and/or audio recording, will collectively be referred to as Audio Technology.
8. Several authors use the term "definition" loosely. When referring to definitions other than mine, for the sake of correct citation I adopted these authors' loose usage of the term as suggested in their literature.
9. In cases where part of a quotation has been used, I chose to indicate the omitted part(s) by means of three dots (...), preceding or following the quotation, depending on the part of the quotation being cited.
10. The use of the terms "historically advantaged" or "historically disadvantaged" within the South African context has political connotations. "Historically advantaged" refers to those sectors of the South African population that were granted a privileged status by virtue of their race (White in this case, or of European descent) with regard to social status, funding and education by the apartheid government prior to the 1994

democratic elections in South Africa. "Historically disadvantaged" refers to sectors of the population (Black, Indian and Coloured citizens) that were deprived of the earlier mentioned privileges. Therefore a "historically advantaged" institution would refer to a "white" institution.

11. It has been the request of the respondents to the Questionnaires (Appendix A and B) to remain anonymous. Their confidentiality will therefore be maintained throughout this study.
12. The term "post-secondary" is used in this study to include all education institutions that offer qualifications beyond NQF Level 4, which include colleges, private providers of education, technikons and universities.
13. The institutions included in the survey in Chapter 3.3 were chosen arbitrarily, based on the notion that they offered some or other programme in Music Technology. Their research expertise, depth of their programme, historical advantage in terms of how early in the 20th century their programme came into existence or inter-departmental research correlation were not factors. Therefore the data presented in this section does not lend itself towards generalizations as the only truth.
14. In government documents there are sometimes grammatical and/or spelling mistakes. Instead of repeatedly identifying these mistakes, [*sic*] will only be used once after citation of these documents.
15. For the sake of consistency with South African Qualifications Authority literature, the terms "Organizing Field" and "NQF Level" or "Level" (when referring specifically to the level descriptor pegging), will be used with the upper case.