

# CHAPTER 1: INTRODUCTION

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Evaluation of curriculum reform is necessary at all stages of curriculum innovation. It can be undertaken at the beginning and the end of a curriculum in order to determine whether goals are being achieved and that a programme remains relevant and does what it set itself to do. A study was undertaken in the early 1990s in the School of Oral Health Sciences (SOHS), University of the Witwatersrand, to review the then curriculum with the view of reforming it. This decision was “forced” by both the British General Dental Council (BGDC) and the then Medical and Dental Council [currently known as the Health Professions Council of South Africa – HPCSA] (BGDC, 1997). A decision was taken to reform the curriculum and implement a hybrid problem based learning (PBL) curriculum. This study, undertaken following the implementation of the curriculum innovation, evaluated an aspect of part of the overall curriculum and looked at whether what was planned in the discipline of prosthodontics was been realised in line with the objectives of the hybrid problem based learning curriculum.

Evaluation ... has to do with adjudications of worth, in curriculum ... (Worthen and Sanders, 1987: 3), how adjudications are arrived at, where professional judgments are made by evaluators about the worth of programmes and whether such live up to expectations or are doing what they set out to do (Hamilton, 1976; Stenhouse, 1976). Broadly speaking, there are two paradigms that inform evaluative studies: quantitative and qualitative approaches. Within the qualitative paradigm is illuminative evaluation which informed the present study. The decision to undertake the study using illuminative evaluation principles as the conceptual framework was based on the finding that there was an absence of literature in the oral health education field informed by qualitative evaluative paradigm. Much of the evaluative literature in dental education is underpinned by a quantitative paradigm. Illuminative evaluation was also chosen as the evaluation method to describe the prosthodontic programme in its own terms and to provide a description of how the curriculum was being realised through observing classroom practices and recording the ‘voices’ of the stakeholders, i.e., the students and teachers of the programme.

Illuminative evaluation, using anthropological tools seeks to ... “describe, interpret and takes account of the contexts in which educational innovation must function” ... (Parlett and Hamilton, 1976: 89). It focuses attention on the importance of classroom practice (learning milieu) and its description by looking for ‘matches’ and ‘mismatches’ between the learning milieu and the planned curriculum (i.e., the instructional system, comprising all that is planned and written down as curriculum). The planned curriculum is essentially a set of documents that delineate the programme’s ... “aims and objectives, content, teacher pedagogy and assessment practices” ... (SAIDE, 1999: 10). As such, the evaluative process seeks not only to look for relationships between phenomena. It asks the question ‘why’ these relationships exist. This is important for programme modification due to the increased responsibilities and resources that are now allocated to education and all its related activities. Evaluation thus, is used for accountability.

Before implementation of the hybrid problem based learning curriculum, the School of Oral Health Sciences had a traditional, content driven, lecturer centred and lecture based pedagogy. The curriculum was neither contextualised in nor responsive to the South African context. It consisted of separate subjects which were stratified into an initial block of four years of basic and medical sciences, followed by another two and a half years of clinical dentistry. Assessment consisted of midyear and end of year examinations, with use of a limited variety of assessment tools.

A hybrid problem based learning curriculum fashioned against the Adelaide model was introduced to the SOHS in 2001, in every department (Townsend, Winning, Wetherell, and Mullins, 1997). Inherent within this was the transformation of teaching and learning strategies wherein integrated, interactive learning was to take place in small, student centred problem based learning groups and integrated learning sessions and assessment was to be continuous, utilising a variety of assessment tools. The change from traditional curricular globally was prompted by several changes that the profession was undergoing worldwide driven primarily by reform in medical education (ADA, 1994; DePaola and Slavkin, 2004; Kersten, Vervoorn, Zijlstra, Snyders Blok and van Eijden, 2007; Aldred, Aldred, Walsh and Dick, 1998).

The aim of this study was to adjudicate the worth of this innovation in as much as it related to the prosthodontic programme at the SOHS using illuminative evaluation as the conceptual framework. The study was to evaluate how the prosthodontic department had managed to move from a traditional, teacher centred, lecture based pedagogy towards more interactive, student centred, small group focused and contextualised learning and teaching strategies and if it had been able to equip dental students adequately in the field of prosthodontics. It sought to reveal how the programme operated in its own terms, and how well it lived up to its intentions and whether these intentions were realised. Additionally, the study was cognisant of any ‘emergent’ issues that arose during the undertaking of the study. Unfortunately most of these issues could not be progressively focused upon due to limitations and challenges of time and resources. However, these issues were made available for discussion by the department to assist in its teaching and learning activities in order to better understand, develop and refine the programme under review (Parlett and Hamilton, 1976).

Naturalistic observations of the “learning milieu” (a description of what actually happens in classrooms) was undertaken, followed by in - depth follow up interviews which probed and helped clarify issues that arose from the observations, in order to describe and interpret what was being observed (Spradley, 1979, Parlett and Hamilton, 1976). These were matched against the instructional system (i.e., the programme documents) to check for any ‘matches’ and ‘mismatches’ between the learning milieu and the instructional system (Parlett and Hamilton, 1976). The data collection was undertaken over a five month period, whereby a purposive sample of students undertaking small group problem based learning and integrated learning activities in the prosthodontic programme together with their facilitators were observed and recorded.

The study asked the following questions:

- i) In what ways were the intentions of the prosthodontic programme within the hybrid problem based learning curriculum being realised (or not)?

The aim being to establish whether what was planned was actually happening and to establish whether there were any “matches” and “mismatches” between what the curriculum documents stipulated and what was in reality actually being practiced.

- ii) What, if any, issues emerged during the observation phase?

Some of these were focused on and inquired into further for the purpose of advancing the refining of the programme. As stated earlier it was not possible to focus on all the emergent issues. These issues were foreshadowed in the programme. To a certain extent, these issues, in addition to strengthening the prosthodontic programme, some were found to weaken it to some degree.

This report consists of seven chapters, a list of references and a number of appendices. The topics discussed in each chapter are briefly outlined below.

#### Chapter 1

Introduces the reasons why the topic was chosen for study (as part of the requirements for completing the degree of Master of Education in the field of curriculum studies, in the University of the Witwatersrand). It also gives a brief overview of the study.

#### Chapter 2

Literature reviewed here relates to the nature and use of illuminative evaluation and studies in oral health education. It also highlighted the lack of qualitative evaluation studies in the field of oral health science (dentistry) and helped argue for the case of using illuminative evaluation as the conceptual framework to underpin the present study.

#### Chapter 3

Outlines the research design of the study and discusses the research problem and research questions that are critical to the focus of the study.

#### Chapter 4

Describes the methodology used and the data sources employed. Following Parlett and Hamilton (1976), methods used in this study included selecting a purposive sample of participants to ensure a sample that was most likely to yield fruitful data in order to allow for

an in-depth study the problem. Naturalistic observations and with follow-up interviews to describe what actually happened in the classroom were done. The plan, which was derived from document analysis was held up against the reality of what actually happened to establish if there were any matches and mismatches between the two. This assisted in arriving at an adjudication of the curriculum.

#### Chapter 5

Provides a description of the instructional system, and from document analysis, principles that are key to the curriculum innovation are discussed. Primarily principles underpinning pedagogy inherent in hybrid problem based learning and integrated curriculum are argued.

#### Chapter 6

Explores the findings derived from observation of the learning milieu and provides a description and evaluation of the prosthodontic programme. It also highlights the recommendations that were brought to bear and given as feedback to the relevant department.

#### Chapter 7

This chapter presents a discussion of the findings, recommendations and conclusions drawn from the outcomes of data analysis.