

CHAPTER 3: Research Design

In this chapter I will discuss the research problem and research questions that are critical to the focus of the study.

Research Problem

The study is evaluative in nature. It focuses on adjudicating the worth of a curriculum. The study is not about design and development which focuses on planning and implementation, but is about having an in-depth understanding of the curriculum through the views of participants as “insiders” who experience the programmes, and to seek for “matches” and “mismatches” between what actually happens and the intended. The main focus of the study is to adjudicate if the Learning Area of Mathematics is taught as intended in C2005 or if it remains much as before as a subject discipline that is content and examination focused.

Research Questions

The research questions of the study focuses on establishing at the level of the classroom if the teaching and learning in the Learning Area of Mathematics are being followed in classrooms as intended in C2005. The study has two research questions which are stated as follows:

1. How should the concept of ‘percentages’ in Grade 7 Algebra, as discipline of Mathematics as Learning Area, be taught in classrooms?

With respect to Research Question 1, this question seeks to establish how Mathematics as OBE curriculum of C2005 and designed in OBE texts and documents of C2005 Mathematics Learning Area, show teachers how to teach ‘percentage’ as outcomes entailing skills and localized content. This is essentially to establish: what to teach [skills, problem solving, and localized content] and how percentages are to be taught; that is the pedagogy [learner-centeredness, group work as opposed to teaching to the text and testing]. This will be established following a Grade 7 Mathematics textbook called “On Track with Maths” by Barry and Dugmore together with National Curriculum Statements documents.

2. How do teachers actually teach ‘percentages’ in Grade 7 Algebra, to establish if it is taught to outcomes as intended?

With respect to Research Question 2, this question seeks to establish what actually happens in the learning milieu, how teachers actually teach ‘percentages’ in Grade 7 Algebra in OBE Mathematics classrooms. It refers to how teachers translate into practice the educational policy of OBE with respect to mathematics teaching. It seeks to establish if teachers’ practices to teaching ‘percentages’ in Grade 7 Algebra is as intended in outcomes of C2005 guided by the text “On Track with Maths” by Barry and Dugmore (1998).