CHAPTER 1: INTRODUCTION

STATEMENT OF THE PROBLEM

Countries worldwide consist of different communities with different ways of living. In their endeavour to make life easier, they make use of technology. Ankiwietcz (undated) defines technology as “the innate spirit and ability of humans to innovate within the natural world”. Technology has improved the lives of individuals and societies dramatically. If you consider technological advances such as computers and the internet, telephone and cell phones, you will realize how far mankind has come with innovations and inventions. On the other hand, societies experience problems with technological advances, as they bring with them problems of pollution, and highly sophisticated crimes that are perpetuated in robberies and fraud.

Innovation and invention are continuous processes, and in many fields technology has become sophisticated. South Africa is no exception, especially since its incorporation into the competitive global society. It has had its share of technological advances, in innovations and inventions, alongside the rest of the world. Technologies change rapidly, making redundant many methods that were employed years ago. In industry, which is the engine of the economy of the country, new machinery is introduced that maximizes production. According to Pula and Goff (1972:45), “In industry new machines have been invented to handle volumes which older ones could not.” These changes pose new challenges for our society, especially in the workplace. Workplaces are in constant need
of skilled labour to accommodate these demands, such as people who can operate sophisticated machinery. The education system is therefore challenged to respond to new demands created by the increasingly sophisticated use of technology.

The purpose of introducing the National Skills Development Strategy (2001) is to:

- Develop skills of the South African labour force;
- Improve the quality of life of workers;
- Use the workplace as a learning environment;
- Assist employees to acquire new skills;
- Enable new entrants to gain work experience; and
- Employ an individual who might otherwise find it difficult to find employment

The government’s National Skills Strategy Development strategy (2001) acknowledges that labour is poorly educated, and largely unskilled. The education and training system is not sufficiently responsive to the needs of the society. The document states that people lack needed skills, and that that is why they are unemployable.

It is important for adult education to respond directly to the needs of the society (Longstreet and Shane: 1993). A curriculum should empower and equip learners to become citizens who contribute to the economy of the country. One of the government institutions that should empower learners with skills is the Further Education and Training (FET) College. The aim of this study is to assess whether the curriculum in these Further Education and Training Colleges is relevant and responsive to the needs of the workplace. The research will focus particularly on the electrical trade curriculum.
RESEARCH AIM

The aim of this study is to establish whether or not the electrical trade curriculum at Further Education and Training (FET) colleges is relevant and responsive to the needs of the workplace. The focus is on how the curriculum empowers learners so that they may thrive in the world of work, and whether it has changed to keep abreast of the latest technological changes.

RESEARCH QUESTIONS

The study seeks to address the following research question and sub-questions:

Is the electrical trade curriculum relevant and responsive to the needs of the workplace?

1. In what ways has the curriculum changed in the last five years?

2. From the perspective of the employer, does the curriculum equip FET graduates to cope with these demands?

3. Do FET graduates feel that they have been appropriately equipped through their studies to cope with the technological demands of the workplace?

4. Does the teaching staff employed at FET colleges consider the curriculum to be relevant and current?
RATIONALE

Up to 1992, I was a student at Manu Technical College (later known as Dobsonville College). I studied at this Technical College up to N4 level, and then pursued a teaching career. In 1998 I got a job at Johannesburg Technical College (now known as Central Johannesburg College for Further Education and Training) where I have been lecturing for the past seven years. I could not help noticing the stagnation in the curriculum. I had studied under that curriculum, unchanged from that followed by the current learners, seven years later. Indeed, the curriculum appears not to have changed over the past fourteen years. This implies that societies and technologies remain unchanged, which is clearly not the case. I, therefore, am assuming that the FET college curriculum does not reflect the changing world of the workplace, and that it therefore is not relevant to the needs of our society. If indeed this is the case, FET colleges are jeopardizing the careers and futures of learners.

This assumption has prompted me to wish to carry out the study. I believe that education should develop an individual personally and socially, which means equipping him / her with skills that are necessary for life. If education is divorced from reality, then the whole exercise becomes trivial. The repercussions of that will be an increased rate of unemployment, which is already a serious problem.
RESEARCHER’S PHILOSOPHY OF EDUCATION

I align my philosophy of education with the progressive and humanistic paradigm. Progressive philosophy focuses on the development of society while humanistic philosophy looks more at the development of an individual. I believe that education should develop individuals as well as societies.

A constructivist perspective influences my philosophy of education. The constructivist perspective argues that meaning is socially constructed. “The meaning making of an individual does not take place in isolation but in a context that is shaped by societal influences” (Gravett, 2001). Theorists such as Piaget and Vygotsky, who believe that meaning is socially constructed have influenced me. According to Piaget, people will always be confronted with new information from the environment, and accommodate this new information in the mind, where the re-arrangement of schemata must take place in order to accommodate that new information. On the other hand, Vygotsky (in Gravett, 2001) argues that development occurs from the outside. Cognitive development takes place through social relationships, and the role of the teacher is to mediate between personal and public knowledge. The learner does not just accept information, but interacts and grapples with it in order to construct meaning. Meanings will always change since they are socially constructed. They change with time, and when people from different social contexts interact, new meanings will emerge.
In my work as a lecturer, the interactions that occur in the process of teaching and learning result in the construction of new meaning. If FET Colleges could forge links with workplaces and empower learners with skills that can be applied in the workplace setting, then the gap between education and practice will be narrowed.

RESEARCH METHOD

The research methods are discussed in depth in chapter 3; however, the study used a combination of interviews, questionnaires and document analysis to obtain answers to the research questions. Three educators, five learners, and three training personnel at workplaces were interviewed. One learner, one trainer and an education specialist in FET colleges were sent questionnaires. Furthermore, past question papers (five years back from 2004) were studied.

REMAINDER OF THE STUDY

In this first chapter, the problem statement, research aim and questions, rationale, and research method serve as prelude. The second chapter looks at the review of related literature. This is followed by the research methodology in the third chapter. The fourth chapter presents the findings. In the final chapter the research results are discussed, and I present conclusions and recommendations.