MIDLANDS STATE UNIVERSITY

FACULTY OF EDUCATION

DEPARTMENT OF APPLIED EDUCATION

PERCEPTIONS OF TEACHERS AND LEARNERS ON THE NEW ORDINARY LEVEL TEXTILE TECHNOLOGY AND DESIGN CURRICULUM IN THE NTABAZINDUNA CLUSTER IN UMGUZA DISTRICT IN MATABELELAND NORTH PROVINCE, ZIMBABWE

BY

SITHOLE RWADZISO

R161079R

A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF APPLIED EDUCATION IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE BACHELOR OF EDUCATION DEGREE IN FASHION AND TEXTILES

GWERU

ZIMBABWE

NOVEMBER 2018

DECLARATION

I, **Sithole Rwadziso** declare that this is my original work and affirm that it has never been submitted to this or any other university as fulfilment of the award of any degree or qualification.

Signature:.. Date: …………………………………..

Supervisor:... Date: ....

DEDICATIONS

This research project is dedicated to my husband Mr Daniel R. Sithole, and our three sons, Chikomborero, Daniel Sithole, Tatenda Leeroy Sithole and Fungai Nestor Sithole

ACKNOWLEDGEMENTS

ABSTRACT

This research set out to identify and understand teachers and learners' perceptions towards Textile Technology and Design (TTD) in the Ntabazinduna cluster of Matabeleland North province's Umguza district. The study identified factors which influenced teachers and learners' attitudes and perceptions. Scholarly viewpoints from African and Zimbabwean perspectives were employed to discuss the issue of TTD curricula under different settings. Scholarly views were given to discuss TTD. The Gestalt and Cognitive approaches were used in understanding the general perceptions about the learning of practical subjects and factors influencing perceptions were discussed. The research used a descriptive survey design and a population of 205 teachers and learners was used. A sample of 30 learners and 5 teachers was used. Purposive sampling was used to select the learners. Questionnaires, Participant Observations and interviews were selected as the data collection instruments. The research findings were presented in tables, pie charts and summative analytic descriptions according to the research questions. The research concluded that the the Textile Technology and Design (TTD) teachers and learners in the Ntabazinduna cluster understood what the subject entailed and that they were aware that the subject was more inclined and suited to address the 21st century educational needs of using ICTs. The research also concluded that the attitudes and perceptions that teachers and learners expressed were mostly negative owing to issues such as poor consultations by the government prior to introduction of the curriculum, techno-phobia by some of the teachers and learners who were not conversant with the tools that were needed to make the curriculum function effectively as well as the inability by the community, peers, teachers and parents to motivate the learners towards a more optimistic outlook. The perceptions of teachers and learners in the Ntabazinduna cluster were an indication of the greater macro-economic environment in which they operate in. The perceptions and attitudes were more related to the socio-economic systems failures of the whole nation than those specific to the subject and its characteristics. Some of the recommendations made were that Textile Technology and Design teachers should be retrained in the use of ICT related to their subjects and that dialogue and consultations between the Ministry of Primary and Secondary Education (MoPSE) , the Curriculum Development Unit (CDU) and teachers' unions should be more holistic in approach to ensure that every view was heard and every credible point was pursued to come up with a TTD curriculum that addressed most of the stakeholder needs.

TABLE OF CONTENTS

CHAPTER 1: RESEARCH PROBLEM

CHAPTER 2: REVIEW OF RELATED LITERATURE

CHAPTER 3: RESEARCH METHODOLOGY

CHAPTER 4: DATA PRESENTATION, ANALYSIS AND DISCUSSION

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMMENDATIONS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

THE RESEARCH PROBLEM

1.1 Introduction

The educational landscape in Zimbabwe is constantly being transformed to find a point which effectively addresses the economic needs of the nation in line with the resources that the country has. Many endeavours have been made to ensure that the school curricula address this educational need, seeing that the country inherited a British system of education after independence in 1980. This chapter focuses on the background to the study, statement of the problem, research questions, and significance of the study, limitations, delimitations and definition of key terms. The purpose of the study is also stated.

1.2 Background to the study

The word curriculum is derived from its Latin origin and means race course (Kelly, 2006). Gogo (2002) says that every race has obstacles and impediments that make the race difficult, it can only be assumed that whoever engages in a race has to bear the brunt associated with it. In a school situation, a curriculum denotes the totality of selected subjects that learners will accomplish within their school life (Keane, 2008). It refers to the combination of activities that the learners will engage in (Manwa and Motsi, 2000). Considering the length of activity execution, it is logical to state that the curriculum implementation will be accompanied by challenges (Holme, 2009). This is particularly true when a new curriculum is in place. These challenges can either shape the perceptions and attitudes of both teachers and students towards adoption of the set principles or towards modification of the same. (Lewis, 1993)

In Zimbabwe, the Ministry of Primary and Secondary Education (MoPSE) changed the school curriculum from the more academic-oriented curriculum which had been in place since independence, to adopt the more vocational and practical-oriented approach which embraced the skill set that learners had. According to (MoPSE, 2015) the government made stakeholder consultations which spanned a period of two years, 2014-15. MoPSE (2015) goes on to say that the government took into account the findings which had been reached by the 1999 Nziramasanga Commission of inquiry into the Zimbabwean education system. The constitution concluded that, there is need to transform the structure and curriculum of the

country's education system in order to adequately meet the evolving development aspirations. This should see greater focus being placed on the teaching and learning of science, technology, engineering and mathematics, including…entrepreneurship (Mawere, 2013: 1085)

It is out of the Nziramasanga inquiry that the MoPSE decided to change the educational curriculum taught in schools. Among the subjects that underwent a transformation was Textile Technology and Design which was formerly known as Fashion and Fabrics. Martin (2003:54) defined Design and Technology as a study of the utilization of tools, resources and systems in problem solving and enhance control over the natural and manmade environment in an endeavour to improve the human condition.

Technology education (now called Design and Technology) was introduced in education in the late nineteenth century as manual training. The basis for manual training was to prepare males for work in industry (Woodward, 1890). In the early 1900s manual training programs began facing challenges of future direction (Phillips, 1985). According to Barlex (2007:11) our understanding is that whereas most, but not all, design activities will generally include technology and most technological activities will include design, there is not always total correspondence. Our use of design and technology as a unitary concept, to be spoken in one breath as it were, does not, therefore, embody redundancy. It is intended to emphasize the intimate connection between the two activities as well as imply a concept which is broader than either design or technology individually and the whole of which we believe is educationally important

The change from manual systems to technological systems continued with design and technology tagging at each other until they were united and understood as one.

Today, design and technology education is no longer just about preparing learners for work in industry but is engaging learners in a wide variety of content and skills such as thinking critically to solve technological problems, engineering and science concepts, as well as communication technologies (Clover, 2005). These are competencies that learners can take into the technologically advanced world of today. According to the International Technology Education Association (ITEA, 2007), technology education is where students gain the knowledge to become technologically literate. For Textile Technology and Design, technology offers the hope of creating simulations of what one wants to create before actually

making it, an ability to spot potential flaws in the fabric or design (Arubayi and Obunadike, 2011). Technology helps one to come up with solutions for the problems that textile designers have always encountered in the past (McQuaid, 2017).

Looking at the subject background internationally, a good example of a country that has embraced technology in the textile design, is Italy (Grant and Lewin, 2015). In Italy, an important sub-sector in the manufacturing industry is the textile design industry, which boasts of the world's best-known fashion designer labels, such as Valentino, Armani, Versace, Gianfranco Ferré and Krizia (Grant and Lewin, 2015). According to Keane, (2008), textile and clothing manufacturing is now Italy's third largest business after engineering and construction. Almost one million workers are employed in this sector. Italy is a leading exporter of clothes and shoes in the world with most producers operating on small or medium-scale (Italian Republic-Country overview, 2015). Everybody needs a variety of clothing for daily use and wherever there are human beings, textiles products are used in one way or the other (Keane, 2008). Clothing and textiles products will, therefore, be always needed and will continue to create jobs for its learners. Hence, these industries have a wide range of technologies to meet this need and that is where Textile Design and Technology comes in (McQuaid, 2017).

According to Hughes (2003), the textile industry has been around for centuries owing to the agrarian and industrial revolutions which ushered in the need to have different types of fabrics based on the needs of the society. As industry changed, so did the types of fabrics and their use (Sims et al, 2010). In the process, new technologies were being brought into the manufacturing industry, making the textile industry to improve (Steeg, 2003)

To emphasize the change, Gawith et al (2007) states that design and technology is both an old and a new subject. They go on to say that design and technology is an old subject because it is associated with notions of craft and vocational preparation and as a new subject, a greater emphasis is being placed on technology in a critical social context. This dual nature of design and technology has resulted in diverse views about its place in the curriculum. According to Sims et al, (2010) perceptions about the value, and the role, of technology education in the 21st century are also divided. The contention seems to be in the conflict of interest between design and technology. Some textile manufacturers have the view that as an experience-based or handicraft-based education, design still has a part in our society as handy work is still done

despite technological advancements. On the other hand, other textile manufacturers state that as a new emerging technological education it is vital that all textile manufacturers and designers become technologically literate in this emerging technological world which has no place for handy work (Steeg, 2003).

In Zimbabwe, the researcher has noted that most of what we know about Textile design and technology is derived from England. As a nation, Zimbabwe adopted most of its textile understanding from the machinery, technology and knowledge which was brought in by the colonial residents in the country who were mostly from England (Sims et al 2016). Traditionally speaking, Zimbabweans did not produce textiles for the purposes of making clothing or fabrics, instead the textiles were imported from India. According to Beach, (1988), the traditional Rozvi, Mutapa and later Ndebele, traded with Portuguese who brought in the fabrics from Delagoa Bay. As such textiles were foreign to us.

It is only at the turn of the century that the country has begun to diversify its knowledge and understanding of the importance of the textile industry (Smith-Hohn, 2010). Through bilateral trade with Asia, Europe and the Americas new designs, fashion consciousness and new cultures are being exposed to the local industry. As the country has begun to embrace technology since the turn of the 2000s, the need to extend this technology into schools and the teaching and learning processes continues to grow (Chiweshe et al, 2013).

Before independence in 1980, the Rhodesian government under Ian Smith saw the emancipation of the black men as a threat to the education and security of the white man (Zvobgo, 1994). In order to contain this aspect, the education curriculum was described in a way that the Black majority could not concentrate on the academic subjects but on the practical subjects whereby they would not thrive in key sectors of the economy but would concentrate on the more physical side of education (Dzikite et al, 2013). In the process of academic segregation, the Vocational and Technical subjects were emphasised. Fashion and Fabrics was considered as one of the Vocational and Technical subjects which were seen as inferior (Munikwa and Chinamasa, 2010).

The researcher has noted that embracing technological changes may change the perspectives that the people have on the practical subjects. The uptake of technology may speed up the way Zimbabweans understand the subject and remove the perceptions brought by the colonial period that the subject was for those who were not academically gifted.

The researcher has also observed that it is not every Zimbabwean citizen who is comfortable with technology. Most people, especially the elderly may have a phobia for technology (Harris, 2002). Considering that most of the teachers, especially those teaching the former Fashion and Fabrics subject were not conversant with the technological aspect of the subject, it is interesting to know how they perceive the new curriculum and how they apply or reject it in the teaching and learning processes. Considering that the Ntabazinduna cluster is demographically composed of more than 200 TTD learners who come from a community that is predominantly rural, it was interesting to know how both teachers and learners perceived the new TTD O level curriculum and its demands.

1.3 Statement of the problem

Textile Technology and Design is a new incoming area which was introduced as a subject in 2016 by the Curriculum Development Unit (CDU) under the Ministry of Primary and Secondary Education. The Textile Technology and Design subject is a rebranding of the Fashion and Fabrics curriculum but it has embraced technology and innovation into it. As such, little is known by the teachers and learners as to how the subject will fair out. Learners have no subject reference point while the teachers have no teaching reference point. It was, therefore, of interest to find out how teachers and learners in the Ntabazinduna cluster of Umguza district perceived the subject at Ordinary level.

1.4 Research Questions

The study sought to answer the following questions:

- What do teachers and learners in the Ntabazinduna cluster in Umguza district conceptualise by the term Textile Technology and Design?
- What perceptions and attitudes do learners and teachers in the Ntabazinduna cluster have towards the Textile Technology and Design syllabus?
- What factors influence the attitudes and perceptions of teachers and learners in the Ntabazinduna cluster towards Textile Technology and Design syllabus?
- What recommendations can be made to positively influence the perceptions of teachers and learners of Textiles Technology and Design in the Ntabazinduna cluster

1.5 Purpose of the Study

The research objectives were to:

- Find out teachers' and learners' perspectives of Textile Technology and Design in the Ntabazinduna cluster
- Establish the factors which influence the attitudes and perceptions of teachers and learners towards Textile Technology and Design in the Ntabazinduna cluster
- Suggest recommendations that can be made to influence the perceptions of teachers and learners of Textiles Technology and Design in the Ntabazinduna cluster

1.6 Significance of the study

The significance of the study is to establish:

1.5.1 Conceptualisation of TTD by teachers and learners

The researcher believed that this study would benefit learners and teachers to better understand what Design and Technology was and how it would be applied in the modern-day world where technology is at the centre of development and learning.

The use of technology in the day to day teaching and learning would assist both teachers and learners to have a more personal understanding and usage of technological tools and devices. This usage and application of technology not only prepares them for the demand of the 21st century industrialisation demands but it also makes them more aware and perceptive of new technological trends

1.5.2. Prescribe remedies for better teaching and learning

The study sought to benefit teachers and learners' attitudes to the different prescribed remedies which would have emanated from this study. The new information made available by the study would be useful to the education system for the purpose of prescribing remedies towards improving the subject content, delivery methods and the development of different tools needed for the uptake of the subject.

1.5.3 Curriculum Designing

Understanding teachers' attitudes and learner's attitudes and perceptions towards TTD will provide evidence-based options to policy makers on how to develop educational strategies.

Research brings forth evidence from the different users of TTD as a subject. It brings different ideas and perceptions which would be helpful in formulation on new subject systems. In particular, the Curriculum Development Unit (CDU) would have a benchmark on which to assess the schools' perceptions of the implemented curriculum and then make informed curriculum adjustments.

Finally, the researcher hoped that through this study, individual teachers would become attuned professionals with an enhanced personal knowledge base in technology education. It was hoped that the implementation of the research recommendations would enhance subject learning and inspire teachers to enhance the research on perceptions and attitudes towards TTD. This would help the CDU to create a curriculum which is more relevant to the 21st century.

1.7 Limitations of the study

The research focused on sampling five schools in the Ntabazinduna Cluster. However, sample might not have been large enough to make conclusive generalisations. Some of the learners selected to be part of the respondents may not be willing to provide information solicited for by the research for fear of victimisation or other fears associated with schools such as exposing the school culture or the undertones of a school's system.

Another limitation was that the researcher is quite knowledgeable of the area under study and this could have an influence on the objectivity and the findings as the learners and teachers in the Ntabazinduna cluster knew the researcher and that she taught TTD. This limitation was however reduced by the use of interviews and questionnaires which reduced bias and allowed the researcher to focus on the questions than on her knowledge of the respondents or their background.

Financial challenges made it difficult for the researcher to move from one school to another to conduct the study. The imminent cash shortages in banks made it hard for the researcher to meet scheduled appointments, prompting foreseeable numerous postponements. Nonetheless, the researcher used her own vehicle and fellow teachers' vehicles to go for appointments with respondents. The researcher took advantage of workshops and meetings to conduct the research. The researcher is employed by the Ministry of Primary and Secondary Education (MoPSE), hence the advantage.

1.8 Delimitations of the study

The study was confined to the learners and teachers in Ntabazinduna Cluster. The study focused on TTD and the emphasis was on perceptions and attitudes of learners and teachers towards TTD in the Ntabazinduna cluster. The research was time bound. There was a time limit beyond the researcher's control. Therefore, any information that appeared after the study was concluded was not considered. However, material collected prior to the study was considered as helpful and was utilized for guidelines.

1.9 Assumptions

The researcher assumes that

- the Information Technology applications and learning materials used in the schools under study were similar and adherent to the curriculum introduced by the Ministry of Primary and Secondary Education (MoPSE)
- the teachers and the learners of the Ntabazinduna cluster had the same interpretation of the TTD curriculum

1.10 Definition of terms

Attitude: The manner in which learners behave and respond to learning instructions

Perceptions: Are the views and opinions the teachers and the learners have towards Textile Technology and Design (TTD)

Technological Literacy: The ability to use, manage, understand, and assess technology

1.11 Summary

The chapter has looked at the background to the study showing that Textile Technology and Design is a fairly new subject emerging from an old range of subjects but modified to meet today's technical needs of embedding technology into the day to day life. The statement of the problem, assumptions, delimitations, limitations, significance of the study and finally the definition of terms were highlighted. The next chapter reviews literature most related to the study by roping in scholarly arguments and viewpoints on teachers' and learners' perceptions towards a subject.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 Introduction

Learning to sew garments can be an enjoyable, fun and creative process. The ability to create something from a piece of clothing has been described as empowering and further builds awareness of the importance and meaning of textiles. However, when this experience is suddenly dropped at one's feet it is not so easy to see the upside. On this note, this chapter reviews literature on what researchers and scholars have looked into perceptions of teachers and learners about a subject. The literature is reviewed under headings such as theoretical framework, textile technology and design and the learning of practical subjects in secondary schools. The general perceptions about learning practical subjects, factors influencing the teaching and learning of textile technology and design and attitudes and perceptions of learners regarding implementation of textile technology and design, are also subheadings used to discuss related literature.

2.2 Theoretical framework

The theoretical frameworks that were taken for the research are the Gestalt approach and the Empirical Approach.

2.2.1 Gestalt Approach

Gestalt is a German term translated to mean perception (Dabbagh,1999). The Gestalt approach began in Germany around 1912 after the publishing of a paper in visual illusions by the founders of the approach, Max Wertheimer, Kurt Koffka and Wolfgang Kohler, who believed that perception was determined by the interaction between the physical properties of external stimulus and innately determined psychological principles of law (Schiffman, 1990). On the other hand, Li Yun (2016) says the main concept of gestalt theory is perceiving the whole part, and that attention should be paid to all parts that constitute the whole. In other words, perceptions about the new curriculum should be viewed both at a macro and micro level to determine the direction that it is taking in education.

Another perspective offered by Woldt (2009:139) postulates that:

Gestalt pedagogy is based on the belief that people are by nature health seeking and capable of both self-direction and creatively adjusting to life's challenges. Viewed from the perspective of Gestalt pedagogy, learning is an organismic, self-regulating process that involves the learners' whole being with self-determined boundaries and contacting processes in response to the field conditions. Knowing that true learning entails more than what is demanded in traditional classrooms. Teaching from a Gestalt therapy perspective regularly encompasses creativity, innovation, experience, and experimentation.

The implications drawn from this analysis is that teachers and learners make perceptions about the new TTD curriculum based the innate need to find a point that best preserves their interests and that the process is self-regulating. Both teachers and learners make perceptions out of the need to make relevancy of the world they live in.

According to Li Yun (2012:42):

Gestalt principles are mainly divided into four types and they are discussed as follows: The first one is principle of proximity, namely there is a small distance between the individuals so that they can be perceived as a gestalt. The second is similarity principle, which means that two similar individuals can be perceived as a gestalt. The third one is closed principle, namely several outline contoured individuals are generally perceived as one gestalt. The last principle is continuity principle, which means that a continuous individual who cannot be interrupted can be perceived as one gestalt.

From the information derived above, perceptions are made because of the nature of relationships people have with each other. The closeness that people, in this case teachers and learners, have with each other and their surroundings implores them to have informed viewpoints about the TTD curriculum.

Woldt (2009:141), goes on to argue that:

Through the practice of enhancing conditions for learning, it has been consistently revealed that students are more prone to respond positively to an invitation to learn than if they are ordered, coerced, or paid to learn. Learning from desire and from internal motivation is far superior to mandated and forced learning, and to studying that is based on fear. Gestalt pedagogy, ideally, involves a statement of trust in the

inherent ability of the organism/student to know his or her own needs, the way to go about satisfying these needs, and the order in which they should be dealt with.

In relation to perceptions, this statement means that teachers and learners are aware of their needs and are more sceptical of information that is handed down to them than of information that they are active participants in. Whether perceptions on TTD emanate from lack of consultations on teachers and learners alike or from adequacy of such consultations, is something that this research will find out.

According to Reber (1993) there is a distinction between implicit and explicit learning, and claims that the former occurs far more frequently, it also being the dominant mode in evolutionary history. Looking at the issue of perceptions, the implication derived from the statement is that both teachers and learners have perceptions of the new curriculum based on subconscious information they gather from interactions with others. In the process, the begin to make opinions of their own through a synthesis of the entirety of their surroundings.

Reber (1993) continues to argue that "when people are presented with an environment that is structured, they learn to exploit that structure" (35). In other words, the mind subconsciously picks up underlying structures when repeatedly exposed to phenomena. It is always the case, moreover, that this understanding occurs before it is able to be articulated. Yet the learner has the definite sense that s/he has learned something. "Subjects know they know something; they simply do not know what it is they know" (136).

Polanyi (2009) asserts that instruction does not and cannot consist of passing along information. Rather, the learner tries to catch a "hidden" meaning through the teacher's instruction. Take the simple case of explaining a word. The teacher is not actually explaining the word to the student; the teacher is pointing toward a referent which the student must somehow grasp. The teacher can merely point toward various particulars so that the student can reach a comprehensive tacit meaning. Secondly, and consequently, learning—and especially discovery—involves a sort of indwelling on the part of the learner. It is, remarks Polanyi, an "existential choice" (80).

Therefore according to the Gestalt position it is the interaction between external stimulus and internal psychological principles that determine what an individual perceives.

Perception = external stimulus + innate Psychological principles

Therefore, a person imposes a kind of psychological order on the input they receive from the world (Dabbagh, 1999). In this case, teachers' and learners' perceptions are all influenced by the internal processes they go through as well as the external environmental factors such as economic, politics, social relations and religion among many other stimuli.

2.2.2   The Empirical/ Cognitive Approach

The empirical approach puts more emphasis on learning or nurturing more than nature. Here there is a reliance on observation and experimental data more than on theory or innate nature. Therefore, perception is based more on two independent factors which are present sensations and mental images from the past in form of experiences (Connel and Phillipchalk, 1992).

<p align="center">Perceptions= sensory inputs + previous memories</p>

Therefore, all the information we currently know and have come to consider as a norm is in actual facts learnt. From empirical observations did we learn that coins are round, the sun is hot so on and so forth (DeWalt and DeWalt, 2002).

According to Williams (2009) the empirical, data processing or cognitive approach was put forth by George A. Miller (1920-) grounding on Edward C. Tolman's (1886-1959) sign and latent learning theories, that claims that learning is a complex and internal process occurring with some mental processes, and that is based on cognitive approach. Theory of data processing accepts information as the basic means of learning and explains learning in terms of memory system. It focuses on how information goes into the memory, how it is stored there and how it is retrieved in case of need (Seels, 1998). Driscoll (2004:54) argues that:

> In the theory of data processing, the process starts with receiving the stimulus coming from outside through sense organs, and goes on with describing and storing of these stimuli. This stored information can be retrieved and used when necessary. This system is compared to computer systems and it is shown with a model expressed as the model of data processing.

Blosser (2007:87) notes that:

> The first step of gaining information and the first unit of memory system is sensory record. An individual is always under the effect of stimuli coming from around. An individual is exposed to a lot of information at one time by means of seeing, hearing, touching, tasting and smelling.

2.3 Textile Technology and Design (TTD)

As stated in the syllabus for textile technology and design is an applied science that deals with the construction, manufacturing and maintenance of textile articles made to meet an individual's needs or a family or community's diverse needs. The main focus is on studying fibres and fabrics, construction of garments, crafts and soft furnishings. The main outcome after taking the subject they should develop knowledge in problem solving, design thinking, communication, technological, management, creativity and innovation, self-reliance and enterprising skills. (McQuaid, 2017)

The general assumptions that accompany the syllabus are that all genders can sew and are familiar with various textile materials. It assumes that learners have basic knowledge on equipment used in textile technology and design such as irons, scissors and sawing machines as well as had some encounter or experience with each. Lastly the social and cultural aspects of various textile products should be present. In effect,

2.4 Overview of learning Practical Subjects in Secondary Schools: An African Perspective

According to Bergmann (2003), the curriculum in many colonies in Africa contained gardening and agriculture for both boys and girls, Art and Craft for boys and Domestic Science for girls. In the same light, Zvobgo (1994) stated that, racist philosophy behind technical subjects like craft and art for boys and domestic science for girls stigmatised practical subjects, therefore attracting public resentment. During the colonial Africa practical subjects offered to blacks were rudimentary subjects were meant for whites and had strong scientific foundations whilst practical subjects were offered to black learners (Mungazi, 1990). Owing to the conditioning that had been achieved by the colonialists that the practical subjects were for the poor majority, Africans began to reject and resent practical subject. Gogo (2002) stipulates that, after attaining political independence most Francophone colonies abandoned the teaching of practical subjects after attaining political independence whereas in the Anglophone colonies the curriculum was reformed. Zimbabwe and a majority of Southern African countries which were under the British rule decided to transform their education systems and made practical subjects more relevant to the needs of their people.

Ever since the formal western education type of education was introduced in developing countries, there have been complaints that the education system was too academic and did not

prepare children for the life they were going to lead after school as stated by Bergmann cited in Chiweshe et al (2013). In opposition to this viewpoint, Maravanyika as cited in Chiweshe et al (2013) that practical subjects were rejected within various sectors of the society with students and parents alike preferring a traditional academic education over a more practical and vocational curriculum. In support of the practical subjects, Mupinga et al (2005) says that many countries have introduced vocational education as part of the formal school system particularly at the secondary school level. Mupinga, Burnett and Redman (2005) postulated that education particularly vocational education (career and technical education) has been seen as a tool for servicing the development needs of a society. In sync with the previous argument, Sharpe (2012) asserted that practical work has become a well-established part of Secondary School education.

Developing Skills for Vocation (2012) by former Minister of Education, Sports, Arts and Culture David Coltart acknowledged that the rapidly changing socio-economic environment globally brings in to focus the need to reform the education to prepare learners for the challenges of changing times and uncertain future through provision of diverse skills. The Zimbabwean government policy towards the provision of practical skills to the learners is not far-fetched as highlighted by the former minister. The evolving socio-economic conditions globally require the reformation of the education system to match new developments (Munikwa, 2011). It is however the biggest challenge for governments especially in Zimbabwe to psych parents and learners towards such a realisation (Maravanyika, 2011).

Arubayi and Obunadike (2011) citing Arubayi (2003) stated that the aim of Clothing and Textiles was to help learners acquire knowledge, skills and techniques for meeting personal and societal clothing needs. It is also the view of Mberengwa (2004) that Clothing and Textiles in schools curricula also provided students with an apprenticeship in Clothing, Textile and Fashion, which if properly carried out would equip them with strategies for earning income in the future. From the above arguments, there is a confluence of views amongst scholars regarding the importance of practical subjects to learners and society.

2.5 General perceptions about the learning of practical subjects

Technical and vocational education was introduced before independence in Zimbabwe in former F2 technical secondary schools (Mupinga et al 2005). According to Zvobgo (1994) technical subjects were for the less academically minded pupils who could not gain a place in a regular secondary school. Mungazi (1990) stated that the F2 secondary school curriculum

which was considered to discriminate against the blacks from whites became unpopular with the blacks and the schools were subsequently abolished. The stigma associated with doing practical subjects such as Fashion and Fabrics now Textile Technology and Design got its roots from that period and currently these subjects are viewed lowly by both parents and learners. This is contrary to the importance that the technical subjects are now having in the new economic and social situation in the country where those with practical skills are driving the economy of the country. The ZIMASSET economic blueprint currently emphasizes the need for Zimbabweans to be innovative through self-reliance and application of practical skills.

Burnett, Harrison and Miller cited in Mupinga et al (2005) opined that training received in high school vocational education programmes provided the skills and competencies necessary for gainful employment upon completion of the program. It is also the view of Brand (1992) that the demand for a workforce that is multi-skilled and capable of learning new skills more rapidly has changed the traditional purpose and implementation of vocational education. The need to equip learners with practical skills that would enable them to integrate into the contemporary socio-economic world has been the focus of most curriculums in Africa. Azubuike (2011) asserts that vocational/ technical education is among the vital tools an individual can use to be developed. It is argued that technical education is useful for employment in trade, industries, agriculture, business and home making with the emphasis being on preparing one for self-reliance. Mujaji (2012) further argues that vocational training contributes to the production of good citizens by developing their physical, social, civic, cultural and economic competences. Kanyongo (2005) says practical subjects are an important cog in the socio-economic development of a learner and the society at large.

Arubayi and Obunadike (2011) asserted that the aim of Clothing and Textile curricula at the secondary school was to teach the learners how to strategically plan and use available resources in his or her environment to improve his or her family, home and society. Mupinga et al (2005) points out that Zimbabwe follows a 7-4-2-3 system, which is 7 years primary education, 4 years secondary learning, 2 years high school and 3 years college or university. In this system technical education is offered in the last two years of primary learning up to university level. Fashion and Fabrics now TTD is among the technical subjects offered at primary school.

2.6 Factors influencing the teaching and learning of Textile Technology and Design

With the incessant emergence of many different problems in our society, there is a need to constantly be updating and improving the curriculum. According to the Nziramasanga Report (1999) the government of Zimbabwe has realised that the economy of Zimbabwe needs more hands on technical jobs, causing the implementation of a new curriculum which came with Textile Technology and Design.

The first factor that affects the successful implementation of TTD curriculum is the school itself. If the school administration shows visible strength and support for TTD then its implementation will be a success (Desforges and Abouchaar (2003)). Currently the school administrations are also trying to catch up to the curriculum and its many requirements. They are not actively participating in the implementation due to the shortage of funds to do so fully. Where the school tone is rather bland towards TTD, the incoming learners such as Form 1 and new comers will also become apathetic to the subject because the school tone will be negative (Chiweshe, et al 2013). Kim and Kim (2012) stated that, in particular, teacher-student relationship was found to shape students' satisfaction with school life both at individual and school level. This is even worse in a boarding school like David Livingstone where the learners live in the same environment with their teachers and there is little influence from their parents on a day to day basis.

Second, the community also plays a big factor in the implementation and introduction of new systems in schools (Mupinga et al, 2014). Mohamood et al (2012) revealed that parents are important predictors of children's academic and social development especially in making decisions for their education. However, that is not the case with the Zimbabwean community with regards to the implementation of TTD. According to UNICEF, (2017) the parents have grievances on how the curriculum was rashly implemented. They expressed concerns that there were inadequate consultations from different stakeholders. As such parents were rather reluctant to buy the necessary equipment and stationery needed for learning TTD. Mupfumira and Rubaya (2014) purports that there must be a change of attitudes by parents, policy makers and educators towards practical subjects. Some parents even go as far as forcing their children to abandon practical skills training in favour of academics.

According to Chimwayange (2005) the root of change is the learning of new ways of thinking and doing things. In a Zimbabwean setup, this means that staff development of teachers is of great importance in the implementation of the curriculum to full effect. There is

need for initial service training followed by monitoring and evaluation of the skills that the teachers have acquired in line with the technological advancements. However, this is not happening because schools cite developmental expenses and lack of resources to ensure that trainings are done adequately. (Gaidzanwa, 2012) and Puyate (2008) noted that effective teaching of vocational subjects cannot take place without the adequate provision of learning facilities. This means that the shortages of textbooks, sewing machines and other things required for the learning of TTD make it hard for the learners to like the subject as they know that they will face difficulties in doing their work. As such the lack of learning provisions makes it hard for the learners to concentrate in their studies. Mupfumira and Rubaya (2014) in their studies on the performance of rural and urban school children agreed that parents of low socio-economic status do not value education. This therefore means that the learners will in turn have an attitude towards their studies. Coupled with the failure of schools to prioritise the learning of the subject, the situation is worsened.

The above argument is substantiated by Mandina (2012), although he researched on Food and Nutrition, he goes on to say that the majority of schools in Zimbabwe are located in poor socioeconomic rural environments hence they cannot raise adequate funds through levies and tuition fees to fund the implementation of the food and nutrition curriculum. Such is the same with TTD. The result is that poor pass rates translate to low learner interest in the subject. In the case of TTD, there is little information on the technological side of it and no reference point from which the teachers and the learners can draw experiences from. In effect, the new curriculum is testing waters.

For implementation to be a success the necessary resources should be present. In the long and short run resources can be considered as the health of the implementation process. Their absence can lead to the complete death of implementation efforts and the curriculum itself. Particularly if the subject affected is more resource based and activity oriented (Desforges and Abouchaar (2003)).

2.7 Attitudes and perceptions of learners regarding implementation Textile Technology and Design

Attitudes were defined Barzon and Heisher et al in Manwa and Motsi (2010) as predisposition to act in a certain way. Learners' attitudes can be portrayed through their behaviour either positive or negative, hence as soon as a child develops an attitude towards a subject there are higher chances that he/she can love or hate it. Learners' attitudes are

influenced by several factors varying from parental guidance, school environment, peers and availability of resources. Keizer (1994) argued that attitudes can be favourable or unfavourable thus leading to a person to have preferences for certain things.

Werhan et al (2004) stated that a lot of stigma is present towards sewing. Students do not view sewing even as a handicraft. This is further cemented by Johnson and Watson (2005) who did not include sewing itself as a handicraft. When learners take elective learning areas such as TTD, they identify as an extension of home life where girls and boys conform to some norms and values (Katanda, 2010). According to Manwa and Motsi (2010), gender role socialisation play a pivotal role in creating attitudes towards the uptake of some subjects at school. There is a tendency of attachment of labels to learning areas like TTD that there are for girls only.

Further the students are not motivated to do the subject due to fear. They believe that they are incapable of sewing and designing, particularly the boys. They may feel like they lack the basic know-how regarding for TTD (Bandura, 1977). This in turn discourages them from performing well or even attending the class. The boys view TTD as a female subject not for males. A good example can be seen from Kenya when three men decided to take a degree program in home Economics. The three men were ridiculed until they finished the program and even after they were still stigmatized (Mugenda, 1995 cited in Mujaji, 2012). Most people believe that an academic life is the only route to secure a job and social prestige (UNICEF, 2014). Parkinson in Sharpe (2012) further observed that some learners see time for practicals as an opportunity to present to the general socialisation time rather than engaging in meaningful discussion. They do not take practical lesson seriously leading to failure to complete tasks in class.

Uwaifo and Uwaifo (2009) cited in Mandina (2012), have observed that some learners hate TTD as a learning area in the school, some have little interest in the learning area that they drop it half way into their studies mainly because of general societal attitudes that see vocational subjects as subjects for the under achievers and girls. The same goes for TTD where learners drop the subject and opt for more academic subjects

Considering that the entire curriculum is new, learners are not quite sure what is truly required of them. The textbooks are not so comprehensive while the teachers have no idea as well. As such the learning process is subdued as the learners cannot ask them for the much-needed assistance (Uwaifo and Uwaifo, 2009). This further discourages the students. At times

the learners may be enthusiastic, but the lack of basic equipment can lead to them having an attitude towards TTD. Some may even start seeing that attending lessons is pointless therefore they stop attending.

2.8 Attitudes and perceptions of teachers regarding implementation to Textile Technology and Design

There is a need to reconceptualise exactly what TTD is for the teachers and how they can learn and impart the knowledge to the students.

Werhan et al (2004) elaborates that some teachers view teaching things such as design and sewing is being outdated. They see it as a way to reinforce homemaking and further the traditional roles of women instead of advocating for gender equality being supported. On the other hand, Clover (2005) says most teachers view Textile Technology and Design as another Fashion and Fabrics subject with a different name. Such an approach is similar to that expressed by Uwaifo and Uwaifo (2009) cited in Mandina (2012), who argue that the subject is viewed as one that should be done by under achievers than by academics. In the same vein some teachers agree with this notion. As such, they end up not delivering the subject content to the best of their abilities, discouraging learners in the process.

Another issue of contention in the teaching of the TTD are the unavailability of resources. Teachers generally feel discouraged to teach subjects if there are inadequate resources to do so (Manwa, 2013). According to Franklin and Biber in Hendrickz (1994:12):

> Learning is an active process and knowledge is constructed rather than acquired, the child must be provided with an environment which furthers their natural tendency to act and with the objective to explore, to manipulate and experiment.

Without the necessary tools to enable the learners to experiment with fabrics and the use of different types of designing technologies, the learning becomes redundant and both the teacher and the learner are demotivated. Uwameiye (2015) says the classroom is the major component of the learning. A good learning environment allows easy acquisition of skills and techniques involved in practical subjects. Perhaps if the resources were made available to the teachers and the learners this may enhance their understanding of the subject and shape interests positively.

In the same breadth, the availability of resources has to be complimented by the presence of adequate staff. Chisaka and Vakalisa (2003) indicate that rural schools are made worse by

high teacher turnover and large classes which also pose a burden for both teachers and pupils. The source of a negative attitude here is the high teacher-learner ratio. Considering that Sojini, Nhlambabaloyi, and Madlelenyoni are rural schools, the likelihood of the ratios being too high are possible, discouraging the teacher who at this point in the curriculum would be trying to find their bearings and making sense of the subject they are meant to teach.

Building on the previous issue, Mandina (2012) says that:

> The government should ensure that teachers who teach practical subjects are adequately in-serviced, staff developed and assisted to obtain the highest qualifications and skills possible in the field so that they can be able to impart these to the learner.

In line with the above statement, Chivore (1994:37) presents the opinion that "teachers who are well educated and trained are rendered less effective if schools lack basic facilities, equipment and materials for teaching and learning". Kasambira (2004:17) buttresses the point by saying "good teachers can be better teachers when they have plenty of material with which to work". These scholars see the availability of resources and equipping teachers as a strategy for enhancing learner performances. With the availability of learning resources, the teachers' attitudes change in line with the requirements of the subjects and the desired results are achieved. This situation is what is currently lacking in schools, hence the negative attitudes towards TTD from the teachers.

2.9 Summary

The chapter took into account the scholarly views of the teachers and perceptions of learners on the TTD curriculum in different settings. It gave the general perceptions about learning practical subjects in Africa and Zimbabwe in particular. The factors influencing the teaching and learning of TTD were discussed and the attitudes and perceptions of learners regarding the implementation of TTD were also looked at. Teachers' attitudes were scrutinised. The next chapter will look at the research methodology adopted in this study.

CHAPTER 3

RESEARCH METHOLODY

3.1 Introduction

This chapter focuses on explaining procedures that the researcher used in gathering and analysing data on the perceptions and attitudes of both teachers and students towards Textile Design and Technology as a new subject in the recently introduced curriculum. The elements covered in this chapter are the research design, target population, sampling methods and techniques, sample size, data collection methods, data collection procedures and data presentation techniques and analysis. Justification of the selected methods of questionnaires, interviews and participant observation techniques will also be provided.

3.2. Research approach

In this study the researcher adopted a qualitative research approach. Bless and Higson (2005:61) adds that "in qualitative research the questions often ask not only for information and opinions but also allow the interviewer to probe the richness of emotions and motivations related to the topic." The same author adds that "researchers often use qualitative data to help clarify hypotheses, beliefs, opinions, attitudes and motivations... qualitative work is often a first step because it enables a researcher to fine-tune the language that will be used in quantitative tools" (Bless and Higson 2005:61).

Shields and Twycross (2003) say qualitative methods were used when a question needed to be described and investigated in some depth. Qualitative research was however, sometimes subjective in nature and calls for examining reactions and perceptions in order to gain understanding of social and human activities (Leedy and Ormrod, 2001). According to Berg (2009) qualitative methods are an in-depth investigation into an individual or group or institution aimed at determining the varieties and relationship among variables influencing a current behaviour or status of the subject to be studied

3.3 Research design

According to Kothari (2004:34) a research design is "the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure." In fact, a research design is the plan for the collection

and analysis of data (Burns and Grove, 2003). As such research design includes an outline of what the researcher will do from formulating the research question, its operational implications to the final analysis of data (Kothari, 2004).

This study adopted the descriptive survey research design. Kothari (2004:134) points outs that descriptive studies are primarily concerned with finding out "what is." Put differently, this study adopted a descriptive survey research design as it involved gathering data to describe the perceptions and attitudes of both teachers and students towards Textile Technology and Design as a new subject in the recently introduced curriculum (Sidhu, 2003).

3.4 Population

Cooper and Schindler (2014:108) observe that "when conducting research, the first step is to define the population to be studied in terms of its geographical, demographic and other boundaries to decide whether it should be fully or partially covered." A study population or target population, therefore, refers to "the group about which the researcher wants to gain information and draw conclusions" (Tuckman, 2001:5). According to (Babbie, 2000), a population is a group of units or objects considered potentially useful in the dissemination of required information for the research understudy. In other words, a population is the entire pool of possible subjects that have some common characteristics that are of interest to the researcher (Berg, 2009). In this study, the target population comprised of 5 TTD teachers from the five schools in the Ntabazinduna cluster and a combined 200 TTD learners from the same cluster.

Table 3.1: *Research target population*

Category	Target population
Textile & Technology learners	200
Textile Design and Technology teachers	5
Total	**205**

N=205

3.5. Sample size

A sample size is the number of respondents who are required to participate in the survey in order to ensure statistically valid conclusions (Saunders et al, 2003). Best and Kahn (2010) say the ideal sample should be large enough to serve as an adequate representation of the population about which the researcher wishes to generalize and small enough to be selected economically in terms of subject availability and expense in both time and money. The researcher determined the sample size for pupils based on a 10% minimum threshold as suggested by Creswell (2004). A sample size of 30 learners was given questionnaires. All the five teachers and 200 learners were observed. Five (5) teachers were interviewed as depicted.

3.6 Sampling

Sampling is "the act or process of selecting a suitable representative part of a population for the purpose of determining the characteristics of the whole population" (Tuckman, 2001:7). Put differently, it is a finite part of a statistical population whose properties are studied to gain information about the whole population (Salaria, 2009). In this study it was not possible to collect or analyse all the data available in the population due to restrictions of time, money and often access (Chiromo, 2006). For this reason, a small group of participants was chosen from the population and this formed the sample. Tuckman (2001) argues that it is legitimate to generalize conclusions derived from responses obtained during field experiments provided the sample reflects the subject from the target population and for whom results were to be generalized in the wider population. The crucial question Tuckman (2001) argues is whether a sample respondents' particular characteristics differ from those of other people but rather whether such differences matter.

To select participants in the learners' category, the researcher used purposive or judgemental sampling to identify the learners that responded to questionnaires. According to King (2016) in purposive sampling, the researcher uses his or her own judgment about which respondents to choose, and picks those who best meets the purposes of the study. According to Alvi (2016) non-probability sampling is also known as judgement or non -random sampling where every unit of population does not get an equal chance of participation in the investigation. Kombo and Tromp (2006) note that judgemental sampling is based on the assumption that the investigator wants to discover, understand and gain insight and therefore has to select a sampling technique that best addresses what s/he wants to discover. The study sought to use

this method because it was able to capture the required information without being rigid in approach (Best and Kahn, 2010).

The justification of purposive sampling was that the researcher knew the schools and their setups. She was aware of the people who could possibly provide the needed information. According to Crest (2008), purposive or judgmental sampling occurs when one selects the sample on the basis of one's knowledge of the target group and the nature of the research aims.

As for the schools selection, the researcher used convenience sampling for the schools to use and places to conduct interviews. According to Holloway (2004:2) a convenience sample is "either a collection of the subjects that are accessible or a self-selection of individuals willing to participate which is exemplified by your volunteers." In this type of sampling, the teachers were selected just because they were easiest to recruit for the study and the researcher did not consider just selecting subjects that were representative of the entire population (Castillo, 2005:2). The convenience sampling technique was ideal because the research occurred at the time when schools were operational and when lessons were running. In effect this meant that teachers were busy attending to their daily chores in their classes as the research was being conducted.

Alvi (2016) says selection of a convenient sample is made on the basis of subjective judgment of the investigator. Though subjective, the researcher sought the best means possible to ensure that the views given added value to the research, based on the community knowledge, knowledge of schools under study and simplicity of the method.

Table 3.2 Sample size

Category	Sample size
Textile Technology & design learners	30
Textile Technology & design teachers	5
total	**35**

3.7. Data gathering instruments

According to Leedy and Ormrod (2014:52) a data gathering tool is "a device used by the researcher to collect data, to answer the research questions as well as an instrument designated to measure knowledge, attitude and skills of a study population." The instruments can be questionnaires, interviews, observations, document analysis, desk research or field research. In this study, the data gathering tools that were used were questionnaires, face to face interviews and participant observations (Holloway, 2004).

3.7.1 Questionnaires

A questionnaire 'is a research instrument consisting of a list of questions that a number of people are asked so that information can be collected about something (Leedy and Ormond (2014:36). Abawi (2013) defined a questionnaire as a data collection instrument consistent of a series of questions and other prompts for the purpose of gathering information from respondents. Most often, this method of data collection is used to gain statistical data that can serve as the basis for scientific research (Adler, 1994). Kumar (1999:138) notes that a questionnaire is a method of obtaining specific information about a defined problem so that after analysis and interpretation, it results in a better appreciation of the problem. The questionnaire was used in this study as it provided varied amounts of appropriate and easily comparable data at a low cost per respondent (Leedy and Ormond, 2014). Secondly, the questionnaire provided a reliable, practical and effective way of collecting data from a large sample size, that was easily managed by the researcher (Adler,1994). Considering that the teachers and learners in the Ntabazinduna cluster were busy with the teaching and learning process, questionnaires were easy in that they could be dropped off and collected later. Thirdly, the questionnaires made it easy for the respondents to have the freedom of private response to more personal questions as they were provided with enough time to answer the given questions (Salaria,2012).

Questionnaires work best with standardized questions that would be interpreted the same way by all respondents (Leedy and Ormond, 2014). Among some notable disadvantages of using questionnaires were that some respondents could not be found in their respective schools when questionnaires were administered (O'Leary, 2012). Another disadvantage is that questionnaires may be misplaced, torn or lost in some cases (Babbie, 2000). These issues reduced the likelihood of having a 100% on questionnaire returns. As such the researcher had to put measures in place such as using colleagues to monitor the questionnaire respondents

who were learners in this case. Some learners could have simply rushed to fill in the questionnaires without fully understanding the meaning of the questions. It was, therefore, difficult to fully know the conditions in which questions were answered but the researcher could only hope that all ethical procedures were followed.

3.7.2 Interviews

Participants within the teacher category were interviewed. Rubin and Rubin (2005:5), defined interviewing as "a way of uncovering and exploring the meanings that underpin peoples' lives, routines, behaviours and feelings.". O' Leary (2012) says face to face interviewing is a type of qualitative research that combines immersive observation and directed one-on-one discussions. Interviews were done in an informal setting or whatever settings were comfortable with the teachers, provided all research ethics were followed (Marvasti, 2010). Through interviews the teachers' views, opinions and experiences were noted.

The advantages of interviews were that it was possible to probe more deeply and make follow ups on questions (Salaria, 2012). According to Boyce and Neale (2006) the primary advantage of in-depth interviews was that they provided much more detailed information than what is available through other data collection methods, such as questionnaires. They also provide a more relaxed atmosphere in which to collect information (Babbie and Mouton, 2001). The teachers felt comfortable having a conversation with the researcher about their programs and teaching as opposed to filling out questionnaires.

Just like any other data collection instruments in-depth interviews have drawbacks. Interviews are prone to bias, they are time intensive in the collection and transcribing and analysis of the collected data. Interviews need a skilled interviewer to get good results and the results from interviews are not generalizable to the whole population (Marvasti, 2010). To mitigate these drawbacks of interviews the researcher limited the interviews to the five teachers so as to reduce on the time to be expended on transcribing. The interview guide was used to avoid some instances where some respondents strayed from the subject matter. Furthermore, the researcher triangulated data collection methods to offset some of the noted cons of interviews (Adler, 1994).

3.7.3 Participant Observation

Participant observation is where the observer deliberately becomes involved in the situation under assessment in order to understand it better but not to influence it (Adler, 1994). Marvasti, 2010;39 says "Seeing" and "Listening" is the key to observation. Crest (2008) defines participant observation as viewing the subjects under study while taking part in their day to day activities. Observation provided the opportunity to document activities, behaviour and physical aspects without having to respond to questions. (Taylor-Powell and Steele, 1996). According to Adler (1994) observation could be combined with both quantitative and participatory methods. According to O'Leary (2012), some of the things the researcher observed could be quantified, such as the number of lessons taught by the TTD teacher, number of exercises written by learners and the time spent doing practical subjects. According to DeMunck and Sobo, (1998:40), the advantage of participant observations were that they afforded access to the "backstage culture"; they allowed for richly detailed descriptions, which DeMunck and Sobo, (1998:41) interpreted to mean that one's goal of describing "behaviours, intentions, situations, and events as understood by one's informants" would be highlighted. Participant observation provides opportunities for viewing or participating in unscheduled events. (DeMunck and Sobo, 1998:43). Through the interactions with fellow teachers and learners in the cluster and in the distribution of the questionnaires, the researcher had an opportunity to observe many things within the schools. This information was used for the purpose of beefing up other findings from other research instruments. The observations enabled information to be gathered without the teachers and learners knowing that they were being observed (Best and Kahn, 2010)

The disadvantage however was that male and female researchers had access to different information, as they had access to different people, settings and bodies of knowledge (Crest, 2008). As such, observation is conducted by a biased human who serves as the instrument for data collection; the researcher must understand how his/her gender, sexuality, ethnicity, class, and theoretical approach may affect observation, analysis, and interpretation (DeWalt and DeWalt (2002). Nonetheless, the observer made note of this and tried to be impartial and partial where the situation required it.

3.8 Ethical considerations

Ethics basically refers to "moral principles that govern a person's behaviour or the conducting of an activity" (Tuckman, 2001:2). Ethics imply preferences that influence behaviour in human relations (Rice and Wilson, 1999). Quite often ethics go hand in hand with values

which deal with issues pertaining to what is right or wrong and what is good and desirable‖ (Babbie & Mouton 2001:470).

Ethical aspects that were addressed by the researcher included obtaining authority from the Umguza District Education Offices before embarking on the research, respect for a person's freedom, the right for self-determination, autonomy, volunteerism, confidentiality, consent and respect for persons' freedom. All subjects were politely asked to participate by the researcher prior to the study. Subjects were adequately informed about the nature of the study and they were free to withdraw anytime during the period of study.

Since some of the learners used in the research were minors, the researcher used the ethical standards spelt out by the Ministry of Primary and Secondary education. This meant ensuring that all the learners used in the research were fully indemnified by the school since they were likely to be below the age of 18. In transcription, the originality of meanings and contexts in thematic analysis were kept as close as possible to the original meanings to ensure authenticity of the information.

3.9 Data Presentation and Analysis

Cooper and Schindler (2014) described data analysis as an attempt to organize, account for and provide explanations of data so that some kind of sense could be made of them. This allowed the researcher to move from a description of "what" is the case to an explanation of "why" that is the case. According to Kumar (1999), the analysis of data is an important phase of any research process because it is at this point that the researcher can assume that the results obtained are valid and trustworthy. In this study, data was analysed using the frequency tables, bar graphs, pie charts and line graphs generated from the SPSS Version 21. According to Bless and Higson (2005), presenting data in visual tools like graphs and pie charts make it easier for information to be understood and analysed.

Data from interviews was transcribed and re-transcribed to capture all the information (O' Leary (2012). The information was coded according to recurring texts which were clustered together to form recurring themes (Abawi,2013). Marvasti (2010) says thematic analysis is important because it condenses similar responses from variably phrased opinions into a categorised body of knowledge or theme.

3.10 Summary

This chapter looked at the descriptive survey research design that were used in the research. The chapter discussed the Ntabazinduna cluster population of 205 TTD teachers and learners, the sampled 30 learners and 5 teachers and the procedures that were used to select the respondents. The questionnaires, participant observations and interviews and their application in the research were discussed, noting their advantages and disadvantages. The data gathering procedures and methods that the researcher used to present and analyse data were discussed. The next chapter presents, analyses and discusses the research findings.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents the findings from the questionnaires, interviews and observations conducted with the sampled 35 Ntabazinduna cluster school teachers and learners. Tables, bar graphs, pie charts and narrative descriptions are used to present the findings of the study which are analysed according to the research questions.

4.2 Respondents' Demographic Data

Table 4.1: *Learners' gender by form*

Gender of Learners by Form				
		Which Form Are You In?		Total
		Form 3	Form 4	
Gender of Learners	Male	6	4	10
	Female	9	11	20
Total		15	15	30

N=30

Table 4.1 above shows that the number of Form 3 learners who answered the questionnaires was equal to those in Form 4, with 15 learners each. However, the number of female learners was 20 compared to 10 male learners. In essence, there were more females doing Textile Technology and Design (TTD) than there were males. This is because most of the male learners were doing agriculture, metalwork and woodwork as practical subjects.

Table 4.2: *Teachers' Gender and classes taught*

Gender of Teachers and Level Taught				
		Which Form do you teach?		Total
		Form1&2	Form 3&4	
Gender of Teachers	Male	0	1	1
	Female	0	4	4
Total		0	5	5

N=5

Table 4.2 above indicated that there was only one male teacher who taught TTD while the other four were female. The data indicated that the subject was biased towards female teachers. Observations indicated that TTD was perceived as a subject for females. This observation was substantiated by the point that most boys did practical subjects like Metalwork, Woodwork and Agriculture. The number of male teachers in Metalwork, Woodwork and Agriculture was much higher than in TTD.

The five teachers interviewed indicated that they had no experience in teaching TTD as a subject. What they had was experience in teaching Fashion and Fabrics. By virtue of the subject being introduced in 2017, the teachers indicated that they had not received retraining but were encouraged to upgrade their teaching skills to match the demands of the subject.

> "We are also learning the subject through teaching it. We are merging our experience of teaching Fashion and Fabrics into the subject. We are constantly researching to upgrade ourselves so that we deliver the right content", said one female teacher**.**

Figure 4.1: *Experience of teachers in Fashion and Fabrics*
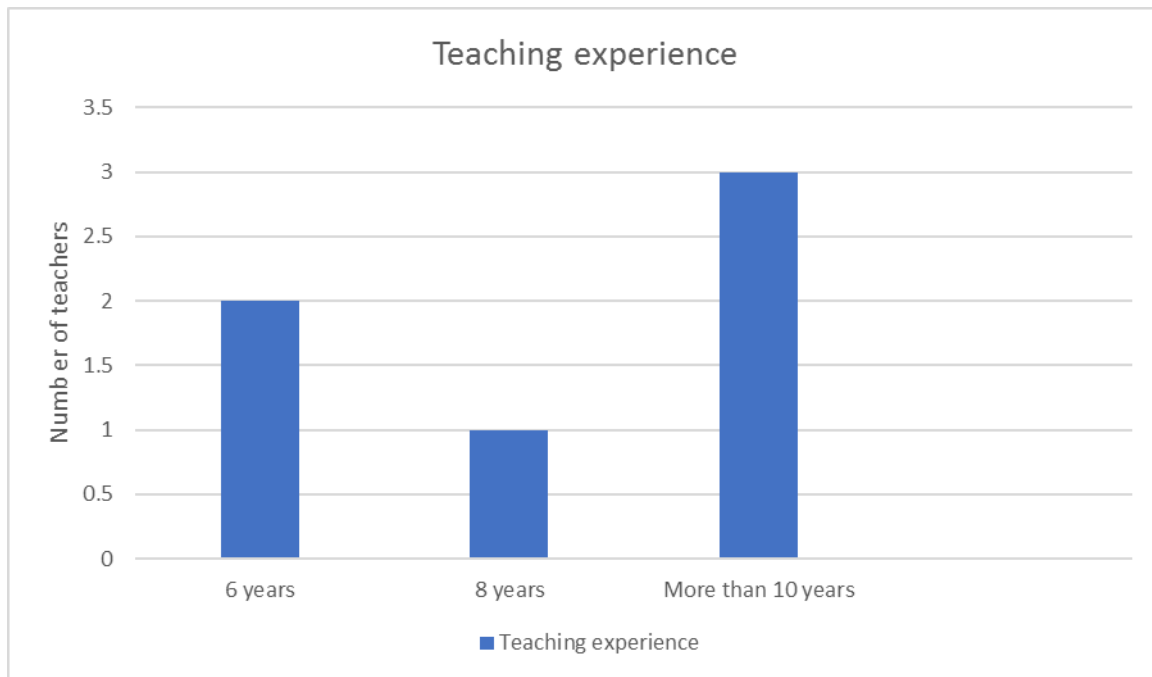
The above bar graph shows that all the teachers had Fashion and Fabrics experience which spanned more than 5 years. Two teachers had taught Fashion and Fabrics for 6 years. One had taught for 8 years while 2 had more than 10 years' experience in Fashion and Fabrics. The indication is that the teachers had enough experience between them to tackle Fashion and Fabrics but no experience in tackling the TTD curriculum though they indicated that the content was much similar.

4.3 Teachers and Learners' understanding of Textile Technology and Design

All the 5 teachers interviewed stated that TTD was a practical subject which taught learners to become seamsters and seamstresses through the use of technology and its related tools. The teachers noted that the subject was a modified version of Fashion and Fabrics which took into account that the world clothing and textiles trends were encompassing the accurate use of ICTs in people's day to day lives. In the words of one respondent, it is "Computerised Fashion and Fabrics". One female teacher stated that:

> TTD is subject that encourages learners to use their phones, laptops, the internet and other related tools to investigate more into the textiles industry and apply what they would have discovered into their learning process.

From the responses, the teachers did not see TTD as an entirely new subject but more as a modification of the existing subject. The teachers' perception of the subject was informed by what they already knew about Fashion and Fabrics hence from observation, they did not approach it with the enthusiasm associated with a new subject.

From the learners' perspectives, 25 out of 30 learners identified TTD as a practical subject which taught them how to sew modern day garments through the use of technological tools such as phones and laptops. Like the teachers, the learners stated that the subject was an upgraded version of Fashion and Fabrics. They noted that not much had changed from the subject except the ICT aspect which they attributed to the need to follow technological trends. The responses given by the leaners indicated that they understood TTD in the same manner their teachers also understood the subject.

Five of the learners attributed the subject to the design element, where they stated that TTD was a fashion design subject which enabled them to look at how the world perceives fashion and how they could come up with different designs which cater for the diverse needs of the people. One learner vividly stated that TTD was:

> A subject that teaches one to use the computer aided software to make garment designs and patterns that can be made on a large scale by manufacturers of textiles.

From the above definition, the learners clearly understood that TTD was more focussed on making sure that the textile teaching and learning was aiming at ensuring that the subject conforms to the technological trends which the 21st century encourages.

4.4 Perceptions of teachers and learners on Textile Technology and Design

4.4.1 Learners' Attitudes and Perceptions

Figure 4.2: *Importance of TTD to learners*
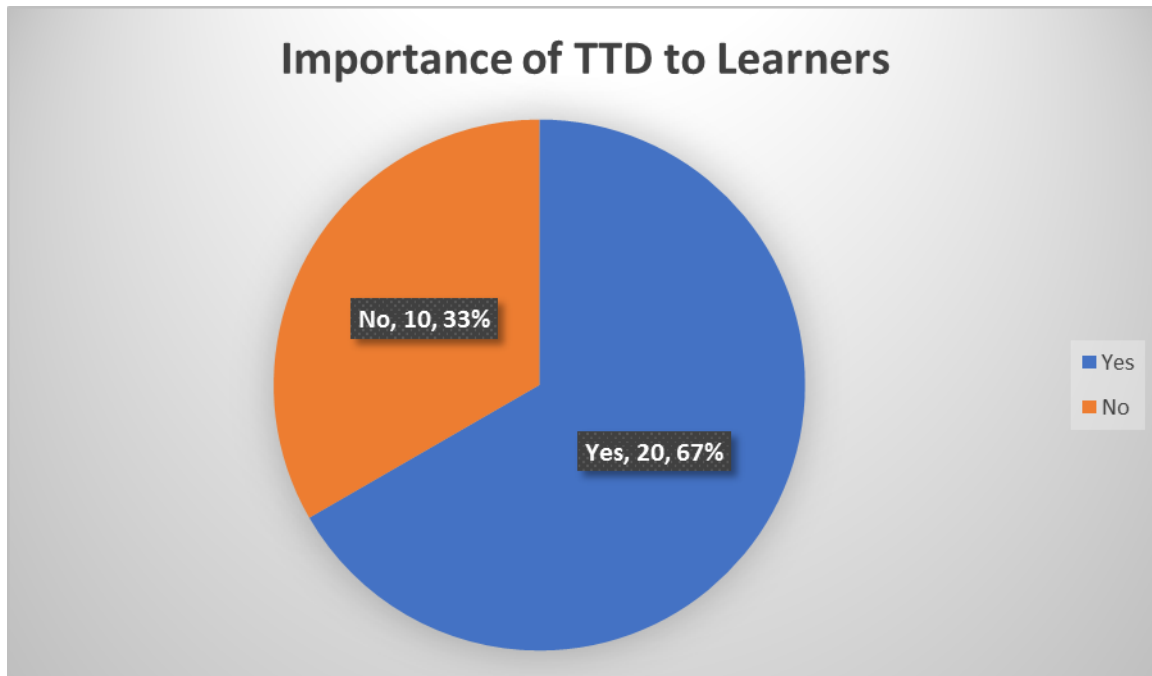
Of the 30 learners who responded to the questionnaire, 20 stated that TTD was very important in their lives. The reasons given were that:

i) It taught them practical skills which they could use in their lives. The learners stated that the skills learnt from TTD could be used in managing domestic chores such as sewing torn clothes at home. They stated that the skills were more practical and could be applied in lessening the expenses that parents could incur in taking garments to tailors

ii) It enabled them to pursue income generating projects even if they may fail to pass the subject within the school settings. Ten of the 20 learners who said yes, highlighted that TTD was important in that the skills learnt were lifelong and could enable one to become an entrepreneur by using them to start a business. An answer given by of the learners stated that:

> I do not need to pass to be able to use the skills learnt. The practical skills learnt can help me to start my own business. It is not academic like learning English or Science.

iii) The subject was not difficult to master as it extended beyond the school time into home life where parents could still assist them. The learners stated that they were able to extend the subject from school to their homes, therefore, helping them to engage more with their

parents. The learners identified that the subject was more social than subjects like Mathematics or Physics. They were able to tap into their parents' knowledge of textiles and ICT usage.

During interviews, the teachers also concurred with their learners by stating that the subject extended beyond school into the learners' homes. From observations made, the learners took their practical projects of making garments at home. This meant that they would consult their parents, making the subject more universal in approach.

The 10 learners who said TTD was not very important in their lives reasoned that:

i) The subject was uninteresting and that they could not practice it anywhere because the community saw it as a weakness for a boy to be seen sewing. The learners did not see the subject as a career opener but an end in itself. In particular, the boys saw the subject as a hindrance to their future than as an opportunity. From observation, the boys who did TTD were viewed as less manly than the boys who did surjects like Agriculture and Metalwork which were stereotyped to be more masculine.

ii) It was a practical subject that did not add value to their lives. The responses given by most of the boys showed that they had a misconception about the subject because of the manner in which the subject was presented by society as being more feminine than being a universal subject which encompassed a lot more than dressmaking. Observations indicated that most of the male leaners were not comfortable talking about the subject among their peers. They were embarrassed to reveal their work to their colleagues.

Table 4.3: *Choice of doing Textile Technology and Design (TTD)*

N=30

Choice of doing TTD				
		Did You Do TTD By Choice?		Total
		Yes	No	
Gender of Learners	Male	1	9	10
	Female	12	8	20
Total		13	17	30

According to the figures shown on the table above 17 of the 30 learners said that they were did not choose to do TTD but they were doing TTD because they were streamed at Form 2. Some of the learners also said that their teachers and parents had selected them to do the subject while others pointed out that it was their teachers and parents who had selected them to do the subject. Out of the 30 learners interviewed in Ntabazinduna, only 13 learners said that it was their choice to do TTD. Perhaps the streaming of learners was one of the reasons for the negative attitudes towards the subject.

Table 4.4: *Causes of negative attitudes and perceptions towards TTD*

N=30

Description	Strongly Agree	Agree	Disagree	Strongly Disagree
Streaming of learners according to performance	15	8	4	3
Late payment of practical fees	13	11	5	1
Negative attitude of parents towards school work	10	17	3	0
It's a subject of under archivers	6	7	7	10
Inadequate parental involvement in school work	11	6	10	3
Inadequate practical tools	20	10	0	0

Inability by parents to pay fees	18	9	1	2
Fewer teachers	14	14	2	0
Shortage of sewing machines	20	10		
Inadequate lesson time per week	16	8	3	3
Teachers changing frequently	19	9	1	1
Low teacher morale	12	14	4	0
Unchanging lesson delivery methods	13	14	2	1
Negative attitude of teachers towards Textile Technology and Design	11	11	4	4
Incomplete/Poorly done course work submitted before examinations	16	4	5	5
Choice of course work garment by teachers	12	10	2	6

The information given in Table 4.4 shows that 20 out of the 30 learners agreed that negative attitude towards TTD as learning area was due to the following factors inadequate practical tools, streaming of learners according to performance, negative attitudes towards school work and late payment of practical fees. The teachers interviewed also concurred that these were among the main causes of learner attitudes towards the subject. 3 of the 5 teachers stated that the learners felt embarrassed when they had to be taken out of class to go home and remind the parents to pay practical fees. As a result, the learners developed a negative attitude towards the subject because they knew that they did not have adequate materials to do coursework or practical.

The table also shows that more than 20 of the 30 learners questioned had a negative attitude towards TTD owing to inadequate lesson time per week, frequently changing teachers, low teacher morale, unchanging lesson delivery, negative teacher attitudes towards school work and choice of coursework garment. From the causes given, it was imperative to note that these were issues that directly pointed at the teachers as the reasons for negative learner

attitudes and perceptions. In response to the issues raised by the learners, all the interviewed teachers cited the following as causes of negative attitudes amongst learners towards TTD, high teacher-pupil ratios, Inadequate lessons per week and teacher turnovers. The teachers acknowledged that these issues affected the learners but cited the lack of control over administrative issues as the main cause for such issues.

One teacher stated that:

> Learners are demoralised that the school does not have adequate ICT materials like laptops or printers. In fact, the school does not have internet, and this affects how they research.

Three out of the 5 teachers said the learners have a negative attitude and find the subject uninteresting. The teachers also noted that the learners, perceived TTD as a girls' subject. The reasons given by the teachers were that the learners did not have adequate learning materials. This made it hard for them to master the ICT elements that were compulsory to the subject. The teachers also stated that the learners did not see the subject as a career-oriented subject but more as a hobby or a subject for under achievers. Observations indicated that the teachers did not do much to make the learners understand that the subject was as important as other academically oriented subjects.

The teachers also said the learners' perceptions and attitudes were influenced by:

- Complacency to follow the precepts and rules of the subject
- Poor career prospects of the subject> Learners were sceptical about the careers that they
- Lack of ICT knowledge
- Resistance to change from Fashion and Fabrics to the new ICT
- Low support from school administration and parents

4.4.2 Teachers' Perceptions

From the interviews, it was ascertained that the teachers' perceptions were more inclined on the negative perceptions and attitudes as indicated by the responses given by the learners they taught earlier in the chapter.

On the negative side, the teachers stated that the subject had inadequate resources. This response was in line with what the learners had indicated in their questionnaire responses. The subject was fairly new, hence there was little materials in terms of textbooks, examination papers, notes and teacher- learner guides to enable smooth understating of the subject. Such a scenario presented headaches for some of the teachers, especially those who were not conversant with ICTs.

In line with the previous point, some of the teachers said that it was difficult to teach as they had to learn ICT usage and application. Three of the 5 teachers interviewed were above 40 years and were not as technologically knowledgeable as the other two teachers. One female teacher said:

> I only started using technology when my daughter in United Kingdom bought me an android phone. I am still learning how to use it. It will take me a while to understand how to use a laptop effectively, let alone use it to teach learners. We will need lessons from the Computer department.

Such sentiments were also highlighted by two other teachers who were not fully aware of technology usage. What this meant was that negative attitudes and perceptions given by the teachers were driven by ignorance of ICT tools and applications and not necessarily because the curriculum had flaws.

Another issue noted by the teachers was that the curriculum implementation had been done without the full consultations of all relevant stakeholders. Four out of the 5 teachers said that they had not been fully consulted when the curriculum was implemented. The cited that the Ministry of Primary and Secondary Education had failed to ask their opinions as the implementors of the subject. The teachers stated that the negative perceptions emanated from the point that the subject content did not come from them but was imposed on them by those in positions of authority. One teacher boldly stated that:

> The Ministry of Primary and Secondary Education has a problem of trying to please politicians at the expense of the learners. Doctor Lazarus Dokora (the then Minister of Education), implemented the curriculum without asking the teachers who had taught the learners for years. The result is a hurriedly introduced curriculum which has no resources to back it up.

Observations showed that most of the teachers and learners felt the same way though they did not voice out their concerns. By observing other departments, the researcher also noted that the teachers were dissatisfied with the manner in which their employer side-lined the issues that were core to their teaching. As such the disgruntlements seeped through to the actual teaching and learning of the subjects, hence the negativity.

On the positive perceptive side, 3 of the 5 teachers stated that their colleagues said that TTD was a good curriculum which brought learners in line with the 21st century. The teachers said that the curriculum challenged the learners to apply the skills they learnt from Computers and computer studies to do TTD related tasks. However, not all the schools in the district had computers or equipment. This meant that the curriculum was not entirely effective in teaching learners, largely because of unavailability of resources.

Another positive perception given was that the subject prepared learners for the work place. The teachers stated that the subject was more skills oriented, meaning that whatever the learners would have gathered in terms of knowledge, they would be able to retain it and continuously use it through practice. One teacher stated that:

> Not all learners are academically gifted to do the more challenging subjects. TTD prepared the learners for blue collar employment as well as self-employment

The above point meant that the subject was more future oriented as it synced with the needs of the industry. It meant that the curriculum was supportive of the government's initiatives of ensuring that the country moved forward in ensuring economic stability. However, the responses from the teachers showed that the implementation was hurried.

4.5 The curriculum versus the 21st century educational and economic trends

Three out of 5 teachers said the curriculum addressed the 21st educational and economic trends because:

i) It had relevant content which looked at the needs of the current textiles markets. Three of the 5 teachers stated that the content was more relevant to the needs of the 21st learners who are able to utilise technological materials and applications. The teachers noted that the 21st learners were more into internet usage and not necessarily into the old way of doing things manually.

ii) All the teachers (5) said that the curriculum was educationally inclined to the demands of the 21st economy because it allowed thee learners to use phones and laptops which they are already conversant with. One teacher commented that:

> Unlike the old ways where all the content was found in hard copies, the current material is found online and through the use of different software. The modern-day learners are technologically knowledgeable

iii) The curriculum follows the agrarian policies set by the government of self-sustenance. Through the ICT usage, the teachers stated that the curriculum supported government policies which made education to align to the demands of industry and commerce.

On the other hand, 2 out of 5 teachers said the TTD curriculum did not address the 21st century educational and economic trends because:

i) The curriculum had irrational expectations from the learners. One of the two teachers stated that the curriculum expected too much from the learners. She stated that the majority of the learners in Ntabazinduna did not have technological gadgets as the area is predominantly rural. On a national scale, she stated that the curriculum served urban learners much better than it did rural learners.

ii)The teachers stated that there were incomplete consultations before the curriculum was introduced in schools. As such, the teachers had negative perceptions of the subject based on its incompleteness. Inadequate resources were also noted as a key reason for the curriculum being unable to match the 21st century economic needs.

4.6 Textile Technology and Design perception and attitude influencers

Teachers identified the following groups of people as key in influencing the perceptions and attitudes of learners towards TTD?

i) Parents

All the 5 teachers interviewed stated that the parents had a lot of influence over the manner in which children learn. They stated that the parents were the most dominant group in influencing the choices that the learners make because they are the ones who paid school fees and were decision makers in the home. The teachers stated that learners tend to be mentored by their parents or adults in the community. Through observation, the researcher noted that the learners in rural schools listened more to their parents or elders. In other words, the

parents or the community influenced the decisions that the learners made as well as shape the perceptions and attitudes of learners.

ii) Teachers

Apart from parents, the teachers also identified themselves as being responsible for the shaping and moulding of the attitudes and perceptions of the learners. All the teachers (5) stated that their role was to teach. In the process of teaching, they influence the learners deliberately and unintentionally. Considering that learners spend most of their times at school, it is befitting to state that teachers were attitude and perception shapers.

iii) Peers

Four of the 5 teachers stated that peers had a role to play in influencing the perceptions and attitudes of learners. A comment from the teachers was that learners influence each other's behaviours and the groups they chose to be in affected how they would interact and view the world around them. In other words, learners can influence each other positively or negatively, depending on their interests. Considering that Umguza district has more rural schools than boarding schools, it follows than peer groups have more influence since the learners spend more time with each other at home and at school.

4.7 Discussion

The teachers and learners in the Ntabazinduna cluster schools understood fully what TTD meant. They highlighted that the subject entailed becoming seamsters and seamstresses through the use of technology and its related tools. They understood that the subject was meant to enhance the skills of both the teachers and the learners through the use of ICT related tools. Of interest was that the teachers and learners noted that the subject was a modified version of Fashion and Fabrics and that the subject was making sure that the 21st century needs were being met through practical practice in the day to day learning environment. According to the findings of Reber (1993:35), as discussed in Chapter 2 of this study "when people are presented with an environment that is structured, they learn to exploit that structure". In other words, the learners saw the subject as a means of expressing themselves through designing of different garments and textiles, an element that could be enhanced by the use of technology and the internet. They saw the subject as an opportunity to exploit what it presented, to their advantage. As such, the learners took a more cognitive approach to the subject.

In the findings of Mberengwa (2004), Gaidzanwa, (2012) and Puyate (2008), they acknowledged that the rural communities were more inclined to look at TTD (Fashion and Fabrics) as a subject for girls. The same perceptions and attitudes were brought up in the study. The findings indicated that learners, especially boys had a negative attitude towards the subject because they saw it as a gender specific subject and not a boys' subject. The same stereotyped representation of the TTD as a subject for girls was seen among fellow teachers in the Ntabazinduna cluster and Umguza district schools.

Despite the stereotyped representation of the subject, the teachers and learners agreed that the subject enabled them to pursue income generating projects, it taught them practical skills which they could use in their lives and that it was not difficult to master as it extended beyond the school time into home life where parents could still assist them. Such positive affirmations of the practicality of the subject were affirmed by Katanda (2010) who argued that when learners are given elective subjects such as TTD they tend to identify them as an extension of home life where girls and boys conform to some norms and values. Manwa and Motsi (2010) shared the same view when they said that gender role socialisation has a pivotal role in creating attitudes towards the uptake of some subjects at school. The findings of the research are therefore agreeing with the scholarly arguments presented in Chapter 2.

Though there were clear positive elements being deduced from the new curriculum, the negative aspects of the curriculum emanated from the failures by the Ministry of Primary and Secondary Education (MoPSE) to fully prepare all stakeholders for its introduction. As noted by Uwameiye (2015) when he argued that the classroom was the major component of the learning and that a good learning environment allows easy acquisition of skills and techniques involved in practical subjects, issues such as unavailability of resources, poor curriculum consultation forums, changing of teachers, low teacher morale, unchanging lesson delivery, negative teacher attitudes towards school work and choice of coursework garment, were among the causes of negativity, were identified. In other words, the negative perceptions and attitudes of teachers and leaners were as a result of failures in other related sections of the governing body (MoPSE) in availing what was needed to ensure the smooth running of the curriculum. The failures had a ripple effect whereby the unavailability of resources affected the teachers' attitudes and perceptions, which in turn affected the learners.

Enhancing the point on the findings, the teachers and learners in the Ntabaznduna cluster schools, the causes of negative attitudes were indicative of the socio-economic status of the

Ntabazinduna community. These causes included late payment of practical fees, and inadequate parental involvement in school work, inadequate practical tools and inability by parents to pay school fees. The identified causes were also agreeable to those identified by Mupfumira and Rubaya (2014) and Chiweshe et al who stated that the community's socio-economic statuses affected the performances of learners. Apparently, the socioeconomic status of the community affected the perceptions and attitudes that the learners had towards their studies as well.

Administrative problems and staffing issues in Ntabazinduna schools were also cited as causes of learner attitudes towards TTD. The streaming of learners according to perfomances, high teacher turnover, low teacher morale, choice of course work garments and inadequate lesson time per week were given as some of the challenges which caused negative attitudes. In concurrence to the above identified challenges, Chisaka and Vakalisa (2003) pointed out that rural schools are made worse by high teacher turnover and large classes which also pose a burden for both teachers and learners.

Still on causes of negative perceptions, some of the teachers interviewed expressed their ignorance of ICTs. This ignorance later emerged as negativity towards TTD. In line with the findings of Mandina (2012), that the government should ensure that teachers who teach practical subjects are adequately in-serviced, staff developed and assisted to obtain the highest qualifications and skills possible in the field so that they can be able to impart these to the learner

Perhaps, retraining and making sure that resources were available would reduce the headaches over the kind of negative perceptions presented by learners and teachers in this study.Of note as well was that the community had a role to play in shaping perceptions towards a subject. This was highlighted by Manwa and Motsi (2010) who shared the same view when they said that gender role socialisation has a pivotal role in creating attitudes towards the uptake of some subjects at school. There was a tendency of attachment of labels to subjects like TTD that it is for girls only. From the findings, learners' perceptions were influenced by peers, teachers and parents. These groups of people shaped how learners thought and behaved. In this case the negativity emanated from what society had prescribed, negativity towards the new curriculum.

4.8 Summary

The findings from the interviews, questionnaires and observations were presented in this chapter as tables, pie-charts and summative descriptions. The causes of negative learner attitudes were given as late payment of practical fees, inadequate parental involvement in school work, fewer teachers, frequently changing teachers, low teacher morale, choice of course work garments and inadequate lesson time per week. The teachers' and learners' perceptions and attitudes were mostly negative and indicative of the socio-economic environment in which they operated in. The results were discussed in line with the literature review. The next chapter summarises, concludes and makes recommendations of the whole research.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMMENDATIONS

5.1 Introduction

This chapter summarises the entire research by highlighting the key issues tackled in each chapter. The chapter concludes the research findings in line with the research objectives. The recommendations will also be noted in line with the findings.

5.2 Summary

The first section of the research gave the background of the study from an international perspective and then narrowed it down to the Zimbabwean situation including the colonial and post-colonial application of textile Technology and Design. The purpose of the study was to understand perceptions of teachers and learners on the new ordinary level Textile Technology and design in the Ntabazinduna cluster in Umguza District in Matebeleland North Province. It also sought to identify perceptions and attitudes learners and teachers have towards Textile Technology and Design in Ntabazinduna as well as unpacking factors which influences the perceptions of teachers and learners towards Textile Technology and Design Syllabus. These factors influencing teachers and learning of TTD were noted as the school environment, the community, staff in schools and resources. The possible causes of attitudes were noted as poverty, inadequate resources, teacher turnover, high teacher-pupil ratios as well as parental attitudes towards school work. The perceptions of teachers and learners were discussed under various environmental settings.

The research also concentrated on the scholarly writings of the Zimbabwean and African researchers on the issues pertaining to teachers and learners' attitudes. It delved into the Gestalt approach and the Cognitive/empirical approaches to teaching and learning, noting how learners understood information within different Zimbabwean settings. The study also identified the African scholars' perspectives on how practical subjects like Textile technology and Design (TTD) were viewed in Africa. The scholarly perspectives of Zimbabwean researchers were also highlighted in line with the perceptions and attitudes of teachers and learners from across the country. The school environment, the community, staff in schools and resources were noted as factors influencing the teaching and learning of TTD. The possible causes of attitudes were noted as poverty, inadequate resources, teacher turnover, high teacher-pupil ratios as well as parental attitudes towards school work.

This study was premised on a qualitative research approach and the descriptive survey was the research design used in the research. The targeted population of the study was the Ntabazinduna cluster population of 205 TTD teachers and learners and 30 learners as well as 5 teachers were the sampled population. The Purposive selection procedures that were used to select the respondents. The questionnaires, participants' observations and interviews and their application in the research were discussed, noting their advantages and disadvantages. The data gathering procedures and methods that the researcher used to present and analyse data were discussed. The ethical procedures of obtaining authority from different offices, as well as indemnifying the learners were all stated.

The research findings were presented in line with the research objectives. Causes of negative learner attitudes were given as late payment of practical fees, inadequate parental involvement in school work, fewer teachers, frequently changing teachers, low teacher morale, choice of course work garments and inadequate lesson time per week. The teachers' and learners' perceptions and attitudes were mostly negative and indicative of the socio-economic environment in which they operated in. The results were discussed in line with the literature review.

Recommendations were made so as to fulfil the last research objective which stated: Identify recommendations that can be made to influence the perceptions of teachers and learners of Textiles Technology and Design in the Ntabazinduna cluster. These recommendations include that, Textile Technology and Design teachers should be retrained in the use of ICT related to their subjects so as to boost their confidence in teaching and in turn it will boost the confidence of their learners, positively shaping the perceptions and attitudes towards the subject

5.3 Conclusions

The research found out that the Textile Technology and Design (TTD) teachers and learners in the Ntabazinduna cluster understood the subject entailed and were aware that the subject was more inclined and suited to address the needs of the 21st century learner through the use of technological devices in learning. Teachers and learners' perceptions were a reflection of the environment in which they operated from. They understood TTD to be a subject that can be used to showcase and express their designing skills at the same time being conscious of the technological tools needed to achieve what they wanted, sustainability.

Research findings were that the attitudes and perceptions that teachers and learners expressed were mostly negative owing to issues such as poor consultations by the government prior to introduction of the curriculum, techno-phobia by some of the teachers and learners who were not conversant with the tools that were needed to make the curriculum function effectively as well as the inability by the community, peers, teachers and parents to motivate the learners towards a more optimistic outlook.

On the other hand there were positive attitudes and perceptions such as the ability of the subject to create entrepreneurial opportunities and being able to transcend beyond the school environment not the home setup, these were outweighed by the negative perceptions noted in the discussion.

Another conclusion drawn from the findings was that the causes of negative attitudes and perceptions included late payment of practical fees, and inadequate parental involvement in school work, inadequate practical tools and inability by parents to pay school fees. Staffing and administrative issues in the Ntabazinduna schools were also cited as learner attitudes. The streaming of learners according to perfomances, high teacher turnover, low teacher morale, choice of course work garments and inadequate lesson time per week were given as the causes of teachers and learner's attitudes. From the teachers' perspectives, the causes of negative perceptions and attitudes were more to do with their inability to comprehend ICT needs, disgruntlements with their employer, poor working conditions as well as inhouse challenges such as inadequate poor resource allocations their departments. In essence, the research concluded that the perceptions of teachers and learners in the Ntabazinduna cluster were an indication of the greater macro-economic environment in which they operate in. The perceptions and attitudes are more related to the socio-economic systems failures of the whole nation than to those specific to the subject and its characteristics.

5.4 Recommendations

The researcher recommends that:

- Textile Technology and Design teachers should be retrained in the use of ICT related to their subjects. Training would boost their confidence in teaching and in turn it will boost the confidence of their learners, positively shaping the perceptions and attitudes towards the subject

- Dialogue and consultations between the Ministry of Primary and Secondary Education (MoPSE), the Curriculum Development Unit (CDU) and teachers' unions should be more holistic in approach to ensure that every view was heard and that every credible point was pursued to come up with a TTD curriculum that addressed most of the stakeholder needs. This would reduce disgruntlements and created a sense of ownership from all stakeholders. The results of such a dialogue and consultations are unified, purposeful thoughts aimed at achieving unified goals. Perceptions become more focussed and developmental.

- Educational policy makers should be independent from politics of the day so that changes in the educational systems become more traceable, accountable and focussed on learning outcomes which are economic related than politically driven.

- More research should be conducted in the Ntabazinduna cluster on issues related to curricula versus resources.

REFERENCES

Abawi, K. (2013). Data Collection Instruments (Questionnaire and Interview): *Training in Sexual and Reproductive Health Research,* Geneva 2013

Adler, P. (1994) *Observational techniques*, In Handbook of qualitative research. Norman Denzin and Yvonna S. Lincon. Newbury Park: Sage, 1994, 377-392.

Alvi M.H. (2016) *A Manual for Selecting Sampling Techniques in Research*, https://mpra.ub.uni-muenchen.de/70218/

Arubayi, D.C. and Obunadike J.C. (2011) *Problems of Teaching and Learning Clothing and Textiles in Senior Secondary Schools in Anambra State, Nigeria*, Stud. Home Com. Sci 5(1):113-119 (2011)

Azubuike, O.C. (2011) Influential Factors Affecting the Attitude of Students towards Vocational/Technical Subjects in Secondary Schools in South eastern Nigeria. *Journal of Educational and Social Research, 1 (2), 49 – 56*

Babbie, S. (2000). *Research in Education*. Englewood Cliffs: Prentice Hall

Babbie E & Mouton, J. (2001). *The Practice of Social Research*. Oxford: South Africa.

Bandura, A. 1977) Self-efficacy: Towards a unifying theory of behaviour change. *Psychological Review, 84,191-215*

Barlex, D. ((2007) *Design and Technology for the next generation*. Cliffeco communications: Shropshire.

Beach, D.N. (1988) *A History of Southern Africa*, MacMillan Books, South Africa

Best, J. W. and Khan, J. V. (2010). *Research in Education*. New Delhi: PHI Learning, p.223

Berg, B.,L. (2009.) *Qualitative Research Methods for the Social Sciences*. (7th edition) Allyn and Bacon. USA

Bergmann, H. (2003). *Practical subjects in basic education- relevance at last or second rate education?* Lessons from 40 years of experience. Sustainable Development Department. FAO.

Bless, C. & Higson, S. (2005). *Fundamentals of social research methods: An African perspective.* 2nd Ed. Cape Town: Juta and Co. Ltd,

Blosser, P. (2007) Principles of Gestalt psychology and their applications to teaching junior high school science, Science Education, 57,43-53

Boyce, C. & Neale, P. (2006) *Conducting In-depth Interviews: A Guide for Designing and Conducting In-depth Interviews for Evaluation Input. USA*: Pathfinder International. information@pathfind.org

Brand, S. (1992) *Assessment of Classroom and School Climate. Significance of School Climate for Students' Learning and Development.* http://www.education.com/referennce/article/schoolclimate

Burns, N. and Grove, S.K.(2003). *Understanding Nursing Research* 3rd Edition, Philadelphia, Saunders Company

Chimwayange C.C. (2005) *Factors affecting Fourth Form girls' participation and achievement in Design and Technology subjects in selected secondary schools of Zimbabwe: A case study exploration*, Massey University Palmerston North, New Zealand

Chisaka, B.C. and Vakalisa, N.C.G. (2003) Uses of ability grouping as an instructional strategy. Qualitative Inquiry in two secondary schools, *The Zimbabwe Bulletin of Teacher Education*. Volume 12(1) page 16-19.

Chiromo, A.S. (2006) *Research Methods and Statistics in Education*, Gweru, Midlands State University

Chivore, B. S. (1994) *Teacher Education Post Independent Zimbabwe*. Harare: Zimfep

Chiweshe, M.,Edziwa, X.,Jumo, C. and Chakamba J. (2013) The Gloomy Outlook of Practical Subjects in Zimbabwe: A case of History Perpetuated? *International Journal of Asian Social Science*, 2013, 3(4):890-898

Clover, E.K. (2005) Assessment of practical skills subjects with particular reference to technical institutions and schools. Uganda National Examinations Board Kampala.

CREST (2008) *Module 4, Data Collection Methods, Centre for Research on Evaluation, Science and Technology*, Stellenbosch University, South Africa

Cooper, V. and Schindler, K.,A. (2014) *Research Design in Social Research*. London: Sage.

Dabbagh, N. (1999) *Gestalt Theory: Instructional Technology Foundations and Theories of Learning,* California, USA

DeMunck, V, C. & Sobo, E, J. (Eds) (1998). *Using methods in the field: a practical introduction and casebook*. Walnut Creek, CA: AltaMira Press

Desforges, C., and Abouchaar, A. (2003) *The Impact of Parental Involvement, Parental Support and Family Education on Pupils' Achievement and Adjustmen*t. Research Report RR433.

DeWalt, K, M. & DeWalt, B, R. (2002). *Participant observation: a guide for fieldworkers*. Walnut Creek, CA: AltaMira Press

Driscoll, M. (2004) *Psychology of learning for instruction*, Needham Heights, MA: Allyn and Bacon

Dzikite,C., Chimbindi, F., and Dandira, T. (2013) Integration of Computers in Teaching of Textiles and Clothing at Tertiary Institutions; A Case Study of Masvingo Teachers' College, *Zimbabwe Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 4(5): 793-799* www.jeteraps.scholarlinkresearch.org Accessed April 2016

Gaidzwanwa, R. (2012). *Activism, Feminist Chronicles, Gender, Women in Zimbabwe*. Feminist 'Chronicles' Month/word.com

Grant, E and Lewin,F.R. (2015) *World Fashion Trends*, Paris, France

Gogo, J.O. (2002). *The Impact of cost Sharing on Access, Equity and Quality of Secondary Education in Rachuonyo District Kenya*. Unpublished M.Ed.Thesis. Maseno University

Harris,B.(2002). *Supervision for Effective Teaching*. New York: Longman

Harris, S. (2002). Innovative pedagogical practices using ICT in schools in England. *Journal of Computer Assisted Learning,* No. 18, Pp;449-458.

Hendrikz, E. (1994) *Introduction to Educational Psychology.* Harare: College press.

Holme, R. (2009) *Cognitive Linguistics and Language Teaching* . Palgrave Macmillan*,*

Holloway, I. (2004) *Basic Concept for Qualitative Research*. Oxford: Blackwell Science, Wiley,USA

Hughes (2003) *The History of Textile Industry*, Palgrave, Italy

Italian Republic-Country overview (2015), www.countryoverview_italy.htm

ITEA, (2007) Intemational Technology Education Association. (2007). *Standards For Technological Literacy:Content for the Study of Technology.* Reston

Johnson, T. and Watson,R (2005) *Teaching practical subjects in Africa* Journal of Philosophy of Education 43(1): 57-74.

Kanyongo, Y., (2005) Zimbabwe's education system reforms: Successes and challenges. *International Education Journal* 6(1): 65-74.

Kasambira, T.C. (2004) *Teaching Methods.* Gweru. College Press

Katanda,T.(2010). *Challenges of Education in 21st century*. Harare. Zimpapers.

Kaizer, S.B. (1994) *The Social Psychology of Educational Clothing*. London. MaCMillan Publishing Company

Kim, D. H. and Kim, J. H. (2012). *Social Relations and School Life Satisfaction in South Korea.* http://link.springer.com/accesspage/article/10.1007/s11205-012-0042-8?coveraImageUrl=/static-content/0.6144/covers/journals/879/11.205.jpg

King, D.B. (2016) *Max Wertheimer & Gestalt theory*. New Brunswick: Transaction Publishers.

Keane, D. (2008) *Textile industries of the 21ˢᵗ century*. www.textiles_industries_htm

Kelly, A. V. (2006) *The Curriculum Theory and Practice*. London, Sage Publications.

Kombo, D. K. and Tromp, L. A. (2006). *Proposal and Thesis Writing*: An introduction. Nairobi: Pauline's Publication of Africa,

Kumar, V. (1999) *Research Methodologies,* Ontario, Prentice Hall

Kothari, A. (2004) *Qualitative research and evaluation methods* 4th ed. Thousand Oaks, CA: Sage.

Leedy, P. & Ormrod, J. (2001). *Practical research: Planning and design* (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. Thousand Oaks: SAGE Publications

Lewis, M. (1993) *The Lexical Approach: The state of ELT and the way forward* . Hove, England: Language Teaching Publications.

Li Yun (2016) An Analysis of the Significance of Gestalt Theory in English Listening Tests and English Vocabulary Teaching in Universities and Colleges *International Conference on Education, Management, Computer and Society (EMCS 2016)*

Mahamood, S.F.,Tapsin, R.,Saat,A., Ahmad,S.,Wahab,K.A.B., Boon, M.H. and Rahman,K.A. (2012). *Parental attitude and environmental in children education*! : A study on the parental aspiration among form four students in Selangor, India

Mandina S. (2012) Challenges of Implementing the Food and Nutrition Curriculum in Secondary Schools in Chivi district, Zimbabwe: *Journal of Emerging Trends in Educational Research and Policy Studies* (JETERAPS) 3(5): 779-784 www.jeteraps.scholarlinkresearch.org

Manwa, L. and Motsi, E. (2000) Role of Gender in Teaching and Learning of Home Economics: A Case in Masvingo Peri Urban, Zimbabwe, *Journal of Educational Research, Volume 22, Number 2 July 2010, ISBN1013-3445*

Maravanyika, O.,E.(2011). *Implementing Educational Policies in Zimbabwe*. World Bank discussions paper no 91 Africa Technical Department Series.

Marvasti , A.(2010) *Interviews and Interviewing,* USA: Elsevier

Mawere, D. (2013) Evaluation of the Nziramasanga report of inquiry into education in Zimbabwe, 1999: The case of gender equity in education, International Journal of Asian Social Science, 2013, 3(5):1077-1088

Mberengwa, L. (2004). Curriculum change in Home Economics education at Gweru Teachers College, Zimbabwe, 1975-1995 *Journal of Family and Consumer Sciences Education*, 22(2): 17-23.

McQuaid, L.E., (2017) *Teaching and learning of Fashion and Fabrics* , Sage Books, London

MoPSE (2015) *Ministry of Primary and Secondary Education, Stakeholder consultation report on the alignment of the education act [chapter 25:04] with the constitution of Zimbabwe, Inter-ministerial task-force on the implementation of the constitution (IMT) technical committee*, Harare, Zimbabwe

Mujaji,R.(2012). *Supervision of secondary school teachers in Zimbabwe*. Harare: Zimbabwe Open University.

Mungazi, D.A., (1990) *Education and government control in Zimbabwe: A study of the commissions of inquiry 1908-1994.* New York: Praeger Publishers.

Munikwa, S.(2011) Analysis of the Current Zimbabwe's Secondary School Two Path-Way Education Curriculum. *Journal of Innovative Research in Education, 1(1), 21 -35.* http://www.grpjournal.org

Munikwa, S. and Chinamasa, F. (2010) *A Survey of Secondary School Pupils Vocational and Technical Subjects Preferences in the Makonde District of Zimbabwe. Zimbabwe Journal of Technological Sciences*. Vol 1 (1) September 2010 pages 45-57.

Mupinga , D.M., Burnett, M.F. and Redman, D.H. (2005) Examining the Purpose of Technical Education in Zimbabwe's High Schools, *International Educational Journal, Shannon Research Press*

Mupfumira I.M. and Rubaya L. (2014) Performance of Students at 'O'Level Fashion and Fabrics: A Comparative Study of an Urban and Rural School in Masvingo Zimbabwe *International Journal of Innovative Research and Development* Vol.3. Issue3

Nziramasanga Commission Report (1999) Presidential commission of inquiry into education and training report, Harare, Government Printers

 O'Leary, A (2012) *Conducting an Interview,* Lighthouse, London

Phillips, K. (1985). *A progression of technology in industrial arts education in technology education: A perspective on implementation.* (pp.15-18). Reston, VA: International Technology Education Association.

Polanyi , K. (2009) *Active Learning: Energizing the Classroom.* Green Mountain Falls, CO: Active Learning Workshops

Puyate, S.T. (2008). Constraints to the effective implementation of vocational education programme in private sec schools in Port Harcourt local government area. *Asia-Pacific Journal of Cooperative Education,* 9(2), 59-71.

Reber, A. S. (1993). Implicit learning and tacit knowledge: An essay on the cognitive unconscious. New York: Oxford University

Press.Rice, M. L. and Wilson, E. K. (1999) How technology aids constructivism in the social studies classroom. *Social Studies. 90(1), 28-33.*

Rubin, H.J. and Rubin, I.S. (2005) Interviewing as guided conversation. In Qualitative Interviewing- *The Art of hearing data (Chapter 6, p122-144)* London, Sage

Salaria, N.(2009)Meaning of the Term-Descriptive Survey Research Method: *International Journal of Transformations in Business Management* (IJTBM) 2012, Vol. No. 1, Issue No. 6, Apr-Jun ISSN: 2231-6868 http://www.ijtbm.com/

 Saunders, T., McKenzie, O., and Waters, J. 2003). *Research project methodologies*. www.researchstatus.com/methodologies.htm

Schiffman, V. (1990) *Gestalt Theory: An Analysis* www.gestalttheorypapers.com

Seels,B. (1998) The instructional design movement in educational technology. Educational Technology, 11-14

Sharpe, R.M. (2012) *Secondary school students' attitude to practical work in school science*, PhD, University of New York Education, November, 2012

Shields, O.and Twycross,N. (2003) *Qualitative Research Methods*, MacMillan, USA

Sidhu, K. S. (2003) *Methodology of Research in Education*. New Delhi. Starting Publishers.

Sims, E, Roland, M., Woods, X., Cook, B. (2016) *Colonialism and Development in Africa: A perspective into the cause-effect relationship of colonialism*. Journal of African Development, 87 (9) ,543-611

Smith-Hohn, A. (2010).   Decolonising methodologies: Research and indigenous peoples, London: Zed books ltd and university of Otago Press

Steeg, T. (2003) *Makers, Hackers and Fabbers:What is the future for D&T.* The Design and Technology Association Education & International Research Conference, Leicestershire, Technology Education. *Technology Teacher,* 64(3), 8-11.

Taylor-Powell, A. and Steele V,E., (1996) *Guidelines for Environmental Assessments S Traditional Knowledge*. Unpublished. Ottawa: Centre for Traditional Knowledge.

Tuckman, B.W. (2001). Conducting educational research. New York: Harcourt.

Uwaifo, V. O. and Uwaifo, I. U. (2009) Training Technology and Vocational Education Teachers for the new 9-3-4 Education System in Nigeria: Its Problems and Prospects. *International NGO Journal*, 4 (4), 160- 166. Available online at http:// www.academicjournals.org/INGO

Wilkins, D.A (1998) *Linguistics in Language teaching*. London: Edward Arnold.

Williams, M.W. (2009) Gestalt Pedagogy – Creativity in Teaching, *Gestalt International Study Center*

Woldt, A. (2009) Gestalt Pedagogy – Creativity in Teaching, *Gestalt International Study Center*

Zvobgo, R. J. 1994) *Colonialism and Education in Zimbabwe*, Harare: SAPES Trust

APPENDIX A

<u>INTERVIEW GUIDE FOR TEACHERS</u>

I, **Sithole Rwadziso**, am a student at the **Midlands State University.** I am studying for a **Bachelor of Education Honours Degree in Fashion and Textile**. Part of the requirements of my studies is that I conduct research. My research topic is: **An investigation into the perceptions of teachers and learners on the new textile technology and design curriculum in the Ntabazinduna cluster in Umguza District of Matabeleland North Province, Zimbabwe.** I am therefore requesting your aid in achieving this goal by participating in this study. The responses you will provide are for use in this research only.

1. How long have you been teaching TTD and at what level?

2. What are your perceptions of the introduction of the new TTD curriculum?

3. Does the curriculum address the 21st century educational and economic trends? Please explain

4. How has the new TDT curriculum changed from the previous curriculum?

5. What are the attitudes and perceptions of your learners towards TTD?

6. What are the possible causes of such learner attitudes and perceptions?

7. What are the attitudes and perceptions of fellow teachers towards TTD?

8. What are the possible causes of such teacher attitudes and perceptions?

9. How do learner attitudes affect your teaching and learning?

10. Which group of people do you think have the strongest influence towards the development of learner attitudes towards TTD?

11. What recommendations can you make for the effective shaping attitudes and perceptions towards TTD?

QUESTIONNAIRE FOR LEARNERS

I, **Sithole Rwadziso**, am a student at the **Midlands State University.** I am studying for a **Bachelor of Education Honours Degree in Fashion and Textile**. Part of the requirements of my studies is that I conduct research. My research topic is: **An investigation into the perceptions of teachers and learners on the new textile technology and design curriculum in the Ntabazinduna cluster in Umguza District of Matabeleland North Province, Zimbabwe.** I am therefore requesting your aid in achieving this goal by participating in this study. The responses you will provide are for use in this research only.

COMPLETION INSTRUCTIONS

- Please insert a tick (√) for a selected answer in a given box
- Please insert your responses in the spaces given using a black or blue pen
- TTD refers to Textile Technology and Design
- Please answer all the questions

SECTION A: DEMOGRAPHIC DATA.

1. GENDER

Gender	
Male	
Female	

2. GRADE LEVEL

Form	Tick
1	
2	
3	
4	

SECTION B: PERCEPTIONS OF LEARNERS

3. What do you understand by the term Textile Technology and Design?

_____
_____
_____
_____

4. Do you think Textile Technology and Design is very important in your life?

Why?_____
_____
_____q_____
_____

Yes		No	

5. Do you enjoy learning Textile Technology and Design?

Why?_____
_____
_____
_____

Yes		No	

6 Did you do Textile Technology and Design by choice?

Explain:_____
_____
_____
_____

Yes		No	

SECTION B: LEARNERS' ATTITUDES AND PERCEPTIONS TOWARDS TEXTILE TECHNOLOGY AND DESIGN

7. The following factors are possible causes of attitudes towards Textile Technology and Design

Description	Strongly Agree	Agree	Disagree	Strongly Disagree
Streaming of learners according to performance				
Late payment of practical fees				
Negative attitude of parents towards school work				
It's a subject of under archivers				

Inadequate parental involvement in school work				
Inadequate practical tools				
Inability by parents to pay fees				
Fewer teachers				
Shortage of sewing machines				
Inadequate lesson time per week				
Teachers changing frequently				
Low teacher morale				
Unchanging lesson delivery methods				
Negative attitude of teachers towards Textile Technology and Design				
Incomplete/Poorly done course work submitted before examinations				
Choice of course work garment by teachers				

8. Which of the following lesson delivery method does your textile technology and design teacher favour?

METHOD	TICK
Demonstration	
Lecture	
Peer Presentation	
Group Work	

9 Which of the above teaching methods do you like the most?

_____Why?_____

_____

_____

10 Are your parents supportive of your learning textile technology and design?

If Yes,
HOW?_____
_____
_____

Yes		No	

If NO,
Why?_____
_____
_____

11. What do you think should be improved in the learning of textile technology and design in your school?

_____

_____

_____

_____

_____