

**GRADUATES' VIEWS ON THE EFFECTIVENESS OF TRAINING DELIVERY  
ENVIRONMENTS FOR SKILLS ACQUISITION IN ADULT NON-FORMAL  
EDUCATION CENTRES IN KWAZULU-NATAL, SOUTH AFRICA**

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## **Declaration**

I, Celestin Mayombe, declare that this Master of Education (Adult Education) dissertation is my original work and that all sources have been appropriately acknowledged and referenced in accordance with university requirements. This dissertation does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the dissertation and in the References sections. This dissertation has not been submitted to any other institution as part of an academic qualification.

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## **Abstract**

The South African government legislated non-formal adult education through the Adult Education and Training (AET) Act 25 of 2010 in order to provide employability skills and marketable skills to non-educated and unskilled adults. The scope of this study was demarcated to mainly examine graduates' views on the effectiveness of training delivery environments for skills acquisition in adult NFE centres in KwaZulu-Natal (KZN). The study utilised mixed research methods or a combination of both qualitative and quantitative methods. The sample was drawn from the educational district of uMgungundlovu of KZN. The sample size of the study consisted of six NFE centres and their 200 graduates. In the quantitative method, the research instruments for the data collection was questionnaires administered to 200 graduates, while one-on-one semi-structured interviews were conducted with five self-employed graduates.

Concerning the inputs, the study found that in the private centres and few from public, the existence of adequate tools and equipment for learning in the workshops for practicum fostered training delivery for skills acquisition. With regard to the transformation process, the majority of graduates, mostly from private centres, viewed that the approach of training delivery fostering skills acquisition was practice-oriented in the real situation similar to the future workplaces. Regarding the outputs of the training delivery, the majority of the graduates acquired technical skills and competence to work without supervision. As main recommendation, the centre managers should make the technical training delivery be 25% theory and 75% practical by means of workshops, on-the-job training and project-based training.

### **Key words:**

Adult non-formal education

Systems approach

Constructivist theory

Employability skills

Marketable skills

Skills acquisition

KwaZulu-Natal

## **Dedication**

I humbly dedicate this work to my parents Rev. Byamungu and Regina. Into their old age they continued to encourage me to study further. May the Almighty God richly bless them.

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My sincere appreciation to Dr E.V Nzama, Head of the Department of Education of KwaZulu-Natal province for granting me permission to conduct this study in AET centres offering skills programmes for adult learners. I would like to express my appreciations to AET centre managers of the district of uMgungundlovu (Msundizi) for their support in the selection of sample centres providing skills training and training courses. Many thanks to the directors of NGOs, FBOs, and CBOs for the permission to conduct the study in their skills development centres.

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## **Abbreviations and acronyms**

<b>AET</b>	Adult Education and Training
<b>BDS</b>	Business Development Services
<b>CBO</b>	Community-Based Organisation
<b>Cedefop</b>	European Centre for the Development of Vocational Training
<b>FBO</b>	Faith-based Organisation
<b>FET</b>	Further Education and Training (colleges)
<b>TVET</b>	Technical Vocational Education and Training
<b>IGAs</b>	Income-generating activities
<b>NFET</b>	Non-formal Education and Training
<b>NFVET</b>	Non-formal vocational education and training
<b>NGOs</b>	Non-Governmental Organisations
<b>NPOs</b>	Non-profit Organisations
<b>SMME</b>	Small, Medium, and Micro-Enterprise
<b>SME</b>	Small Micro-Enterprise
<b>SPSS</b>	Statistical Package for Social Sciences
<b>KZN</b>	KwaZulu-Natal Province (South Africa)
<b>KZN-DoE</b>	KZN-Department of Education
<b>RSA</b>	Republic of South Africa

## **CHAPTER ONE: INTRODUCTION AND BACKGROUND OF THE STUDY**

### **1.1 Introduction**

In the Sub-Saharan Africa's countries, a lack of marketable skills is the main contributing factor hampering adults from entering into labour markets (Betcherman & Khan, 2015). In the context of South Africa, adult non-formal education (NFE) programmes do not only open the doors of learning, but also provide non-educated and unskilled learners the opportunity to acquire marketable skills in order to access the means of living. This focus of NFE programme is justified by the fact that non-educated and unskilled adults are the most stricken by unemployment and poverty in South Africa (Anderson, 2012). This introductory chapter presents the landscape of the study by providing the broad research problem, problem statement and rationale for conducting the study targeting adult graduates.

The lack of employability skills and job opportunities contributes to unemployment of adults. In other words, the lack of employment opportunities is a result of a workforce with lower skills than are demanded by the available jobs in South Africa. This particular position in relation to issue of unemployment and skills, this position is currently subject to critique. Research shows that NFE graduates continue to experience challenges due to the insufficiency of internal enabling environments (Department of Higher Education and Training [DHET], 2012; Blaak, et al. 2012). Specifically, the main concern in this dissertation is that graduates from adult NFE programmes experience challenges due to the ineffectiveness of training delivery environments for skills acquisition in the centres of KwaZulu-Natal province (Mjoli, 2007). The chapter is organised in five main sections. The chapter starts with a background to the study followed by research problems, objectives and research questions. Next is the location of the study, which entails the description of the geographic areas where the research was conducted. The last sections involve the definitions of key concepts and outlines the structure of the dissertation.

### **1.2 Background to the study**

In South Africa, the provision of adult non-formal education is linked to community development (McGrath & Akoojee, 2009; Mosoetsa, 2011). Particularly, as mentioned in the *Continuing Education and Training Act, 2006 (Act No. 16 of 2006)* and the *White Paper for Post-School*

*Education and Training* (DHET, 2013), the government of South Africa considers education and training as the development sectors to reduce unemployment of adults.

It is noteworthy that Statistics South Africa indicates that in the first quarter of 2017, the unemployment rate was 27.7% countrywide (Stats SA, 2017). The unemployment rate among graduates from higher education institutions was at 7.3% (Stats SA, 2017). Though some TVET college and university graduates are also unemployed, it is widely acknowledged in South Africa that the majority of the unemployed adults is composed of those who may have either no formal basic education or individuals who dropped out of school due to circumstances at their early youth age. According to Stats SA (2017), the unemployment rate is persistently high among adults with a formal education level of less than matrics at 33.1%, which is 5.4 % points higher than the national rate average.

The study looks at adult non-formal education (NFE) as a tool to reduce the problem of unemployment. From its inception in the 1960s, the NFE was intended to be a tool to create opportunities for marginalised social groups in order to bridge unemployment and employment (Georgiadou, Kekkeris & Kalantzis, 2009). It is perceived as a ‘second chance education’ to those who had been ‘pushed out’ from the formal system (Kedrayate, 2012, p.12). The South African government legislated non-formal adult education through the *Adult Education and Training* (AET) Act 25 of 2010 in order to reduce poverty due to unemployment among non-educated and unskilled adults (RSA, 2010). Adult NFE targets those adults who have no access to formal vocational training systems. Central to Act 25 of 2010 is the aim to increase the capacity of non-educated and unskilled adults to produce goods and services; that is, to generate income.

The scope of this study was demarcated to mainly examine graduates’ views on the effectiveness of training delivery environments for skills acquisition in adult NFE centres in KwaZulu-Natal. The centres under investigation were those that provide technical and entrepreneurial skills to rural and urban adults. The researcher only considered adult centres and their skills training programmes which prepare learners for jobs at semi-skilled levels including programmes on starting an own business, or which contribute to the promotion of income-generating activities. These NFE centres are not the same as those recently referred to as Public Adult Learning Centres in the National Policy on Community Colleges (RSA, 2015). In this study, the NFE centres are private skills training programmes in non-profit training centres managed by non-profit organisations.

In the case of the public AET centres managed by the KZN Department of Education, the training programmes are also non-accredited skills training courses funded by private sector organisations. These are vocationally related skills programmes for income-generation activities in the form of non-formal vocational training and rural and community development in South Africa (Aitchison, 2007, p. 18). In South Africa, NFE is not SAQA accredited, therefore its role in the labour market is limited in low-skills jobs and self-employment. Despite these initiatives, there is still insufficient knowledge available on the extent to which the approaches of training delivery environments of NFE centre contribute to skills acquisition of graduates.

### **1.2.1 Socioeconomic situation of the poor adults of KwaZulu-Natal**

Unemployment due to the lack of employability skills and employment opportunities is one of the major challenges in the KZN province. As result, these unskilled adults have little or no access to economic opportunities in KZN (Mosoetsa, 2011). As a result, unemployment is the major cause of poverty (KZN, 2016; Mosoetsa, 2011). The poverty rate for KZN province as a whole was about 50%, meaning that 50% of the inhabitants live below the poverty line (KZN, 2016). In a same vein, data released in September 2016 show that poverty headcount is 7.7% and poverty intensity is 42.5% in the province (Stats SA, 2016). By definition, poverty headcount is “the share of the population which is poor, i.e. the proportion of the population for whom consumption or income is less than the poverty line” (Stats SA, 2014, p. 25). In other word, the head count ratio is the proportion of people that live below the poverty line. Another explanation is that, the “headcount index measures the proportion of the population that is poor” (Stats SA, 2016, p. 43). Poverty intensity is the extent to which the level of living of the poor population is below the poverty line. The intensity of poverty is measured by the extent to which the income of the poor lies below the poverty line. It entails the differences between the income and poverty line resulting in the poverty gap.

According to the Socio-Economic Review and Outlook 2017/2018 of KZN Government, unemployment causes poverty headcount and poverty intensity and verse versa (KZN, 2017). Unemployment has been identified as one of the main structural constraints within the province and contributes to high levels of poverty and income inequality. A report on national and provincial labour market (Stats SA, 2015) indicates that in KZN province, the unemployment rate among youth (15-34 years) is 33,4% compared to 13,8% among adults (35-64 years). The Quarterly

Labour Force Survey published in June 2017 by Stats South Africa (Stats SA, 2017) indicates that the unemployment rate of KZN province is 25, 8%.

The implication of the above data is that unemployability and low levels of education contribute to poverty in KZN. In other words, education is vital for the improvement of human capital, helping poor adults to generate income and reduce poverty. Poverty is linked to the levels of educational achievement of the population. The Socio-economic Review and Outlook of KZN government indicate that 8.8% (5,640, 206 out 6,426,764) of population had no schooling in 2015 and 13% of inhabitants had only some primary school between Grades one and six (KZN, 2017). Those who had Grade 7-11 constitute 38%, and 0.4 % of population had a certificate or diploma without matric (Grade 12). Those who completed Grade 12 comprised 30.5%, and only 9.3% had higher education qualifications. The implication of these data on the unemployment rate and educational levels for the present study is that there is a need for adult education in order to increase job opportunities for those with low levels of education and skills.

In addition to the background of the study, since 1994, the South African government has provided a range of policies and legislative frameworks that support NFE. The main policy framework and important for the purpose of this study is *Adult Education and Training (AET) Act 25 of 2010*, adopted in December 2010 (RSA, 2010). The act seeks to achieve the development of conducive factors in which high-quality adult education programmes can flourish. Adult NFE has been included in the AET Act 25 of 2010 (SA, 2010). Under the said Act, adult NFE aims at reducing poverty and social exclusion of adults in South Africa. Furthermore, the NFE programmes aim at responding to the learning needs of adults who did not have access to the formal education system; to improve their employment opportunities; to reduce the high rates of poverty in South Africa; and to increase social inclusion (Aitchison, 2007; KZN, 2016).

### **1.2.2 Education and training for poor adults in KwaZulu-Natal**

The adult education and training programme is one of the tools utilised by the KZN government to reduce poverty and unemployment due to the lack of employability skills. In the document *KZN Human Resource Development Strategy and the Development of an Implementation Framework (2016-2030)*, it is emphasised that adult education and training is an important component of the skills development structure for serving unemployed adults (KZN, 2016). Therefore, the government of KZN has set out a vision to provide literacy and skills development to all citizens.

According to the strategic plan 2015-2020 for KwaZulu-Natal Community Education and Training Colleges, all adult training centres aim to provide “quality technical, occupational and vocational skills towards economic empowerment” (Department of Higher Education and training [DHET], 2016, p.10). The adult education and training programmes mainly target youth and adults who for different reasons did not complete their basic education or who never attended formal education system.

Like formal education, adult NFE is crucial for the improvement of human capital, hence enabling poor people to participate in income-generating activities. To this end, the KZN government has committed itself to serve unskilled adults by “providing formal and non-formal education and skills based programmes that are responsive to socio-economic problems such as illiteracy, unemployment and poverty” (DHET, 2016, p.11). Furthermore, adult NFE programmes also aim at promoting and improving opportunities for entrepreneurship that empowers them to actively participate in the economy of the province. For this purpose, the KZN Department of Education and different NGOs implementing NFE programmes aim at providing adult learners with livelihood skills for employment at semi-skilled levels as well as entrepreneurial training programmes to enable them to start small businesses resulting in the promotion of income-generating activities (KZN, 2017).

### **1.3 Rationale and significance of the study**

As the researcher used empirical data that were already collected for his PhD studies, but not used in the PhD thesis, in this present M.Ed. dissertation, he was motivated to cover the gap that exists in the PhD thesis. The previous study did not examine in-depth and provide rich details on the transformation process of NFE programme for skills acquisition. To this end, he used different research questions/objectives and a different theoretical framework to cover the gap in knowledge.

Furthermore, there are three main reasons for the study: these are the high unemployment rate among adults, the lack of livelihood skills among adults in KZN and South Africa and the lack of effectiveness of training delivery environments for skills acquisition in adult NFE centres (Blaak, et al. 2012; DHET, 2012; DHET, 2016; Stats SA, 2017). These are further presented and discussed here below. Firstly, as mentioned above, according to Stats SA (2017), the unemployment rate in South Africa remains high among adults with a formal education level of less than matric, at 33.1%. The majority of unemployed adults are those who did not complete their formal basic

education or individuals who dropped out of school due to circumstances at **an early age**. Their socio-economic condition is the best lens of development and social equity (KZN, 2013).

Secondly, the lack of livelihood skills among adults in KZN and South Africa **hinders** them **from accessing** resources (DHET, 2016). Given the fact that illiterate and unskilled citizens are the poorest of the poor in KZN, their socio-economic condition is the best lens of development and social equity (KZN, 2013). In the context of South Africa, probably the strongest justification is that provided by McGrath and Akoojee (2009) and Robert (2008) who argue that unskilled adults are much more likely to be poor than skilled ones. In the context of KZN Province, citizens living in households with an uneducated household head are more likely to be poor (Robert, 2008). The study is significant in making known the importance of NFE in building social inclusion for low-skilled adults.

Thirdly, the lack of effectiveness of training delivery environments for skills acquisition in adult NFE centres is also a matter of concern (**Mjoli, 2007; Blaak, et al. 2012; DHET, 2012**). Graduates experience challenges due to the ineffectiveness of training delivery environments for skills acquisition in adult NFE centres. In the context of KZN, previous research revealed that adult graduates **failed to make the transition** from skills training to skills utilisation for economic activities (**Mjoli, 2007**). One of the causes is challenges due to the insufficiency of training delivery environments for skills acquisition in the adult NFE centres. Moreover, there **is** insufficient knowledge about the views of NFE graduates on the link between training delivery approaches and their ability to work without supervision in their future paid jobs or self-employment.

#### **1.4 Research problems, objectives and research questions**

The main problem that the present study **intended to solve concerns the challenges of training delivery approaches leading to skills acquisition**. **In other word, the lack of transforming skills into gainful activities is due to the ineffectiveness of training delivery environments for skills acquisition in adult NFE centres of KwaZulu-Natal province** (**Mjoli, 2007**). The research gap that informed the present study was to know the extent to which the approaches of training delivery in the NFE centres contributed to skills acquisition of the NFE graduates. Little attention has been focused on analysing the approaches of training delivery and the mode of training assessment in order to understand the nature of the problem. Therefore, the main research question the study

seeks to answer is the following: To what extent do the training delivery environments of the NFE centre contribute to skills acquisition in KwaZulu-Natal? The sub-questions are the following:

- What are the approaches of training delivery for skills acquisition?
- What is the mode of training assessment at the end of the training programmes?
- To what extent do graduates have the ability to work without supervision after acquiring skills?

The research purpose was to assess graduates' views on the effectiveness of training delivery environments for skills acquisition in adult non-formal education centres in KwaZulu-Natal. The achievement of this purpose of the study is supported by the realisation of the following objectives.

- To conceptualise the training delivery environments for skills acquisition in adult non-formal education centre within the context of a systems approach and constructivist approach of learning;
- To find out the approaches of training delivery for skills acquisition;
- To investigate the mode of training assessment at the end of the training programmes;
- To determine the ability of learners to work without supervision after acquiring skills.

The researcher assumes that if there are employment opportunities in the local communities, an effective training delivery environments at the adult NFE centre level can foster skills utilisation of graduates in the labour market of the graduates. Using a quantitative approach supplemented by qualitative approach and post-positivist paradigm, this study focuses on examining the training delivery environments for skills acquisition in adult NFE centres. The examination entails looking at the approach of training delivery, material resources and the mode of training assessment at the end of the training programmes that could increase the employability of the adults excluded from the labour market. The main argument of the study is that, in the existence of employment opportunities, the training delivery approach and resources at the adult NFE centres lay a good foundation for fostering skills utilisation in the employment of the graduates. The study was conducted among adult learners in the district of uMgungundlovu, who attended training in NFE centres in KZN. The NFE centres under investigation are run by not-for-profit organisations and provide work-related skills training programmes for unemployed adults.

## 1.5 The location of the study

The research was conducted in the province of KwaZulu-Natal, specifically, in the educational district of uMgungundlovu. According to the administrative description, uMgungundlovu District Municipality encompasses seven local municipalities, which are Impendle, Mkhambathini, Mpofana (Mooi River), Msunduzi (Pietermaritzburg), Richmond, uMngeni (Hawick) and uMshwathi (KZN-Department of Health, 2015). The name uMgungundlovu derived from Zulu language meaning “place of the elephant”. The uMgungundlovu District covers 8307 square kilometres and has population of 1,066,152 living in residences ranging from farmland communities, rural settlements, townships to urban areas (KZN, 2016). However, the research did not cover all these seven municipalities because of the lack of the existence NFE centres relevant for the purpose of the study.

The researcher selected uMgungundlovu **educational** District for the study because of its geographical and demographic the diversities. It entails diversity in geographic areas (Urban, rural and peri-urban). In terms of race, the district covers all four races: Whites, Africans, Indians and Coloured. Therefore, these two factors allowed the researcher to compare the effectiveness of the training delivery approach between urban and rural settings. Concerning the race, it is **important** to mention that the researcher only considered the learners of NFE centres who were relevant to the objectives of the study. The participants in the study were learners who enrolled for livelihood skills and entrepreneurial training in their respective NFE centres of uMgungundlovu District.

## 1.6 Definitions of key concepts

It is significant to define two key concepts of the study, adult and NFE. This study adopts the definition of ‘adult’ in the context of the South African legal age of majority which is 18 years old as stated in the **Children’s Act 38 of 2005** (Children’s Act 38 of 2005). At this age, a person is considered to have attained physical, mental, emotional and social maturity.

**Education:** In this study, the concept ‘education’ refers to those activities that provide the knowledge, skills and moral values that individuals need in daily life in order to participate in the cultural and political life of the community (Singh, 2005, p.ix; Erasmus, 2010, p.2).

**Training:** The term ‘training’ refers to the acquisition of knowledge, practical skills and competencies of an adult to perform a task, job or occupation to a benchmarked level (Erasmus, 2010, p.2). Contrary to education, training is “task oriented” because it focuses on the work to be performed in an organisation and institution (Singh, 2005, p. ix).

**Learning:** There is no generally accepted definition of learning. However, for the focus of the present study, the researcher adopts the definition by De Houwer, Barnes-Holmes and Moors (2013, p. 4), who define learning as the “process by which a relatively stable modification in stimulus-response relations is developed as a consequence of functional environmental interaction via the senses”.

**Non-formal education:** According to Coombs and Ahmed (in Rogers, 2004), the basic definition of NFE is “any organised, systematic, educational activity carried on outside the framework of the formal schooling system to provide selected types of learning to particular sub-groups in the population, adult as well as children.” In South Africa, NFE is any education that is carried on outside the formal school and higher education system and not certificated (Aitchison, 2007).

**Employment:** In the context of this study, employment is the state of having paid work and encompasses both wage and self-employment aimed at improving trainees’ livelihoods and living conditions (Erasmus, 2010).

**Employability skills:** Wherever used in this study, employability skills are the transferable skills needed by adult individuals to become ‘employable’ in their field of training. These skills enable NFE graduates to find a job in the local community or create their own small business to the best of their abilities.

**Marketable skills:** In the context of the study, these refer to skills that an adult learner can easily use to create or sell a product in the labour market in order to gain an income.

## **1.7 Brief overview of the research methodology**

The study used mixed methods of quantitative and qualitative research design. According to Creswell (2009), the quantitative method is essentially about collecting numerical data to explain a particular phenomenon. The reason for utilising the quantitative method is based on its primary purpose which is to determine cause-and-effect relationships or comparability (Creswell, 2014). In

quantitative study, the main source of data collection is generally questionnaires. The researcher used self-completed questionnaires in a survey to collect quantitative data.

The researcher used the qualitative approach to supplement the quantitative approach. In the context of qualitative method, the researcher used semi-structured interviews and document analysis to collect the data (Delpont & Roestenburg, 2011). The advantage of qualitative the method was its ability to help understand the transformation process leading to outcomes (outputs) or product. Similarly, Creswell (2014, p. 4) supports that the qualitative method is descriptive allowing the researcher to examine the process, meaning, and to gain understanding through words of the respondents. When collecting the data, the researcher was interacting with the adult learners directly such as it happened while data collection through interviews. Following the view of Maree and Pietersen (2012), one-on-one semi-structured interviews were conducted with five self-employed learners. The researcher also used document analysis.

## **1.8 Structure of the dissertation**

The dissertation has five chapters. Chapter One, “Introduction and background of the study” presents the context of the study, the problem statement, the research questions and objectives. Chapter Two, “Theoretical framework and literature review”, discusses the theory underpinning the study and previous studies in the field of adult non-formal education. Chapter Three, “Research design and methodology” describes the methods used in conducting the study. It also entails study population, sampling method, data collection instruments and data analysis. Chapter Four, “presentation of the findings” consists of analysing and interpreting the data. Finally, Chapter Five, “discussions and conclusions”, discusses the key findings, draws conclusions and suggests some recommendations arising from the study.

## **1.9 Summary**

This chapter focused on providing the background to the study, the research problem, and presented the socio-economic situation of adults with low educational achievement in the province of KZN. It has also presented the research questions and objectives to be achieved through the empirical findings. The main concern in conducting the study is that the unemployment rate in South Africa remains high among adults who did not complete their basic education and are unskilled. The next chapter deals with conceptual framework and literature review.

## **CHAPTER TWO: CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW**

### **2.1. Introduction**

The purpose of this chapter is to present the conceptual framework and the theoretical framework informing the study including its application to the NFE programme, and to examine previous studies on the topic. The conceptual framework of the study consists of the elements of the systems approach while the theoretical framework and constructivist approach to learning. Based on the scope and objectives of the study, the researcher used four elements of systems approach which are: inputs, transformation process, outputs and environments of non-formal education. Because of the delimitation of the study on the training delivery environment, the research could not include the fifth element, which is “feedback”. This study emphasises the importance of aligning the major elements of training delivery environments (input, transformation process and output) in order to achieve the system approach in of adult NFE programmes. For the purpose of the study, the researcher argues that the transformation process components of NFE system follow the principles of the constructivist approach to learning. The chapter consists of three main sections. It starts with discussing the systems approach to NFE teaching and learning, followed by the constructivist approach of learning. Next is a review of research on NFE delivery environments for employment.

### **2.2 The systems approach to NFE teaching and learning**

The systems approach is an interconnected (interrelated) set of elements functioning as an operating unit (Lunenburg, 2010). The system theory was coined by Ludwig von Bertalanffy in 1940 and has been applied to math, sciences, research, management and education. In connection with education, a systems approach serves to stress the outcomes or competencies that the learners will demonstrate after receiving a training programme. In other words, a systems approach gives a process that an education programme should have in place as main elements of the design, delivery of a training programme and assessment of a programme (Scott, 2008).

In a simple sense, systems approach means doing something systematically. Salam (2015, p.1) argues that, “In educational industry, to teach systematically teachers must consider input, process and output and decide objectives, contents, methods and assessment.” The systems approach is defined by its components, “its constituent parts and by their interrelationship” (Gupta & Gupta,

2013, p.52). In the context of NFE, the system approach entails four elements: inputs, a transformation process, outputs and environment (see figure 1).

**Figure 1:** Systems approach of NFE delivery environments for skills acquisition (adopted from Lunenburg, 2010)

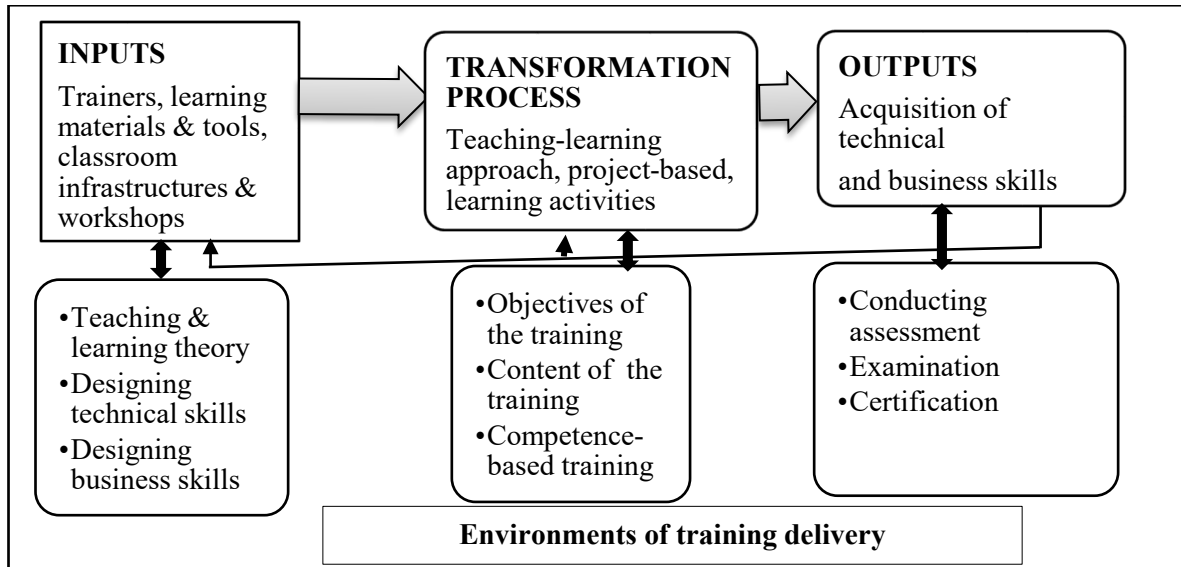


Figure 1 above presents a model of the components of systems approach of NFE delivery environments for skills acquisition. For the learners to acquire skills, all component should be integrated in a process.

**Inputs (resources):** Following the view of Lunenburg (2010) and Gupta and Gupta (2013), the systems have four types of inputs or resources: human resources, financial resources, material resources and curriculum. For the focus of this study on delivery approach, firstly, the human resources entail qualified and skilled trainers in the field of adult education and training for income-generating activities. Secondly, material resources entail the availability of learning materials, teaching tools, instructional equipment and classroom infrastructures (including workshops) adapted to transmit the skills to adult learners (Palmer, 2007). Thirdly, the curriculum serves as an education system’s roadmap. Care and Anderson (2016, p.8) note that a curriculum shapes subjects, topics, activities and the route (or routes) to take in order to achieve objectives of a particular skills training programme.

**Transformation process:** The jobs of NFE centre managers and trainers consist of integrating various resources available in order to achieve the effectiveness of skills delivery, which is skills acquisition. This stage involves training delivery approach discussed as the constructivist approach

of learning (see section 2. 3 below). As an element of a system, Lunenburg (2010, p.2) argues that, “This transformation process includes the internal operation of the organisation and its system of operational management.” Therefore, the interaction between adult learners and trainers is a component of learning process by which learners become skilled individuals capable of utilising the skills in the world of work.

As part of the transformation process, **the** training delivery approach or adult learning approach is not the simple provision of the content of the knowledge contained in the curriculum from trainers to adult learners. In the NFE system, trainers need to teach relevant skills and their application in the world of work (Care & Anderson, 2016). Therefore, to provide skills, trainers require a specific set of teaching approaches, with various tactics adapted to the adult way of learning. In other words, training delivery approach for skills acquisition encompasses a combination of technical skills with business skills, the use of workshops and project-based training similar to the world of work and the visits to the workshops, businesses and industries.

**Outputs:** This is the attainment of training objectives. The transformation process generates a product (outputs). Gupta and Gupta (2013, p.52) assert that, “The product results from the activities of the class, that is, from interactions between the teacher, the students, the resources and the constraints, via the method used.” It is the task of teachers and NFE centre managers to mobilise the resources (inputs) and transform them in order to attain the objective of the training delivery. In the context of this study, **learners should** become able to work without supervision after acquiring skills. As Figure 1 shows, the mode of training assessment at the end of the training programmes is an important component of the educational system. Assessment is the means of evaluating learners’ progress in skills acquisition. According to Care and Anderson (2016), **in an** education system focusing on livelihood skills for employment, the learning objective is the learners’ ability to use the skills after graduating.

**Internal environment:** In relation to the topic of this study, the environments entail internal factors to the NFE centre, which contribute to favourable conditions for skills acquisition. In **the** view of Palmer (2007), internal delivery environments for skills acquisition consist of the availability and quality of trainers, learning materials, centre management, curriculum contents, NFE centre infrastructure, workshops and training delivery approaches.

### 2.3 The constructivist approach to learning

Like the systems approach, the constructivist approach to learning is suitable for providing an answer to the research questions. However, in this study, the constructivist approach helped to illuminate the “transformation process” of the systems approach to NFE explained above. This is because the approach points to adult teaching practice involving training delivery approaches which aim at helping adult learners to perform tasks as close to those on the job as possible. In this connection, Knowles (1996) argues that the delivery approaches of adult education stress firstly experiential techniques, which encompass simulation exercises, skill practice exercises and field projects. Secondly, the delivery approach should emphasise the practical application of the acquired skills.

Many scholars in education have expressed various interpretations of constructivism. However, Khanal (2014, p.92) summarises them by stressing that, “Constructivism is a philosophy of learning based on the premise that knowledge is constructed by the individual through his or her interaction with the environment.” Furthermore, Nagowah and Nagowah (2009, p.280) note that, “constructivism is a learning theory that is actively constructed in the mind of the learners out of their experiences in the world”. Applefield, Huber and Mahnaz (2011) argue that constructivist theory means that learner’s views of “knowledge originate from a meaning-making search in which learners are involved in a process of constructing individual interpretations of their experiences.” The principle of the approach is that a learner begins by considering a difficult problem and works on it in order to learn and acquire abilities necessary to solve that problem. The constructivist learning approach entails cooperation, testing and flexible problems allowing each learner to become actively involved with the concepts. In this connection, the role of the teachers is of facilitators who support the learners to understand the contents of a course (Nagowah & Nagowah, 2009).

The constructivist approach to learning suggests that prior knowledge or experience lays a good foundation that helps a learner to construct his or her own reality of life. In other words, the constructivist approach of learning entails a paradigm shift in the aspect of learning process, considering the learner’s effort to grasp the new knowledge. According to Huang (2002, p.28), founders of constructivism, Dew (1916), Vygotsky (1973), Piaget (1973), and Bruner (1996) suggested that, “learners could learn actively and construct new knowledge based on their prior knowledge.”

Constructivism distinguishes itself from other learning theories on characteristics. Applefield, et al. (2011) note that most constructivists agree each other that there are four main principles of what impacts on learning processes: (1) “learners construct their own learning”; (2) the “dependence of the new learning on learners’ existing understanding”; (3) the “critical role of social interaction” and (4) the “need of authentic learning tasks for meaningful learning”. I view that these four principles indicate that a learner can construct meaning if he/she is active in making sense of different knowledge or skills, then relate them to what is already known or believed about the lesson. Thus, significant learning happens when learners are actively participating in a cooperative environment of learning.

In the context of NFE provided in adult training centres, the constructivist approach mainly emphasises the “dynamic interaction between the cognitive and social dimensions of learning” (Khanal, 2014, p.91). As result of these dimensions, constructivism consists of two types - “cognitive constructivism and social constructivism” (Khanal, 2014, p.92). Coined by Piaget, (1977), ‘cognitive constructivism’ associates elements of cognitive theory and constructivist approach and suggests that “learning is a process of accommodation assimilation and equilibrium” (Khanal, 2014, p. 92). In contrast, Vygotsky (1978) argues that in terms of ‘social constructivism’, learning is not purely an internal process of learning, nor is it passive, but it vitally involves the cultural and contextual environment in making understanding.

This study uses five concepts or principles of the constructivist approach of learning developed by Huang (2002). The concepts are as follows: interactive learning, collaborative learning, facilitating learning, authentic learning and learner-centred learning (Huang, 2002, pp.32-34). In the context of the present study, these five instructional principles of constructivism are applicable in answering the research questions. Within the systems of NFE, these five principles will help understand the approaches of training delivery for skills acquisition and the mode of training assessment, which should result in learners having the ability to work without supervision after acquiring skills from NFE centres in KwaZulu-Natal.

***Interactive learning:*** This approach of learning within constructivism consists of motivating learners to learn from others in a group. According to Huang (2002, p.32), “learner do not learn in isolation from others, [rather,] people naturally learn and work collaboratively in their lives”. In the context of adult NFE, the effectiveness of training delivery will depend on the extent to which learners are interactive whether in the whole class or in a designed group. In this connection, the

interaction **might** include group **work**, discussions among learners or between learners and the trainer. Similarly, Khanal (2014) asserts that Vygotsky's cooperative method of learning allows the acquisition of skills and competencies as result of learners' interaction. Furthermore, **Ngusa and Makewa (2014) argue that the interactive learning through discussions between teachers and learners in the classrooms or workshops helps the learners to share their experience acquired from their communities prior to the enrolment for the training course. Connecting these arguments to the theoretical framework, the inference is that the class discussions can result in the improvement of adult learners' level of skills acquisition at benchmark.**

***Collaborative learning:*** Learning collaboratively entails peer exchanges of ideas and skills among learners. Kaye (in Khanal, 2014, p.97) describes collaborative or cooperative learning as “the acquisition by individuals of knowledge, skills or attitudes occurring as the result of group interaction.” During the class session, this instructional approach helps **learners** to seek knowledge from classmates who may play **the** role of guides. Huang (2002, p.33) maintains that in ‘collaborative learning’ learners exchange knowledge “with other people or environments which foster potential development through instructors guidance or in collaboration with more capable peers”. The usefulness of this constructivist principle of learning for the analysis of the training delivery approach of the NFE centre is that learners collaboratively exchange ideas and skills among others with more work experience in a particular context.

***Facilitating learning:*** In order to achieve an effective delivery approach **in** NFE, a trainer should create a favourable environment for learners to express themselves in sharing their ideas or **experiences** and to ask relevant questions. According to Huang (2002) and Applied, Huber and Moallen (2011), ‘facilitating learning’ creates favourable factors for learning. As result, adult learners can positively debate in an appropriate way that contributes to the process of teaching and learning in class by asking pertinent questions.

***Authentic learning:*** This principle of constructivism mostly emphasises that “learning must be lifelike and that learning needs to meet real-life experiences” (Huang, 2002, p.33). The principle encompasses ‘learning by doing’ through simulation. In other words, authentic learning is learning which consists of participating and working on real-world issues. Through authentic **learning**, “learners practice the skills and knowledge that are relevant and real to workplace situations and learn it at the same time” (Iucu and Marin, 2014, p.415). The principle encompasses learning by doing through simulation-based learning. Authentic learning activities help adult learners to construct a new knowledge that is connected to the prior learning experience. This principle is

significant to NFE because “adult learners want to learn skills related to their real life or work experience” (Huang, 2002, p.33).

In other words, the NFE centre should train learners using real world and case-based environments for meaningful and authentic skills acquisition. According to Khanal (2014), practical learning such as simulation, case studies, or internship is very important for adult education. Authentic learning also stresses that learning experiences be related to adult learners’ real world of work. Similarly, Iucu and Marin (2014) note that authentic learning is linked to approaches such as personalised learning, project-based learning and community-based learning. The training delivery approaches are guided by activities in which learners have the opportunity to learn related skills such as problem-solving, presentation techniques, etc.

***Learner-centred learning:*** The usefulness of this principle is to help learners become active rather passive during the learning process. Huang (2002, p.34) notes that this principle emphasises the “ownership of learning process by the learners, experiential learning and problem-solving approach to learning”. Similarly, Pai and Mallya (2016, p. 411) argue that that learner-centred approach to learning is beneficial in making the “students more active in acquiring knowledge and skills and might include exercises in class, fieldwork”. In the context of analysing the extent to which the training delivery environments of the NFE centre contribute to skills acquisition, the trainers should design class activities that motivate learners to take initiative in discovering new knowledge that makes sense of their real-life experiences.

### **2.3.1 Implication of constructivist approach for adult NFE**

The constructivist approach stresses the interaction-based method of learning by providing adult learners with a supportive environment. The interaction between learners and a teacher is vital for participation, reciprocal communication and significant engagement in learning activities that involve questioning and encouraging. According to Khanal (2014, p.96), the “major implications of constructivism for learning environment of adult education entail using curriculum adapted to learners’ prior knowledge, tailoring of teaching methods to learners’ background and employing open-ended questions that stimulate dialogue among learners”. Another implication of the constructivist approach for adult learners concerns its emphasis on collaborative learning as opposed to individual learning. Collaborative learning allows learners to work in groups by cooperating, yet they remain self-directed.

### 2.3.2 Application of **the** constructivist approach of learning in adult NFE in KwaZulu-Natal

From the perspective of teaching and learning experiences, the approach appears useful because adults easily and quickly learn through hands-on activities that stimulate **them** to use five senses and the mind. In this connection, **Gordon (2009, p.39)** points out that “such experiences include problem-based learning, inquiry activities, dialogue with peer and teachers that encourage making sense of the subject matter, exposure to multiple sources of information, and opportunities for students to demonstrate their understanding in diverse ways.” The Gordon’s argument concurs with the constructivist approach of learning where an adult learner constructs his/her own knowledge from the experience encountered.

**A constructivist** approach of learning place an adult as a learner and teacher of his /her peers by using prior learning experience. Sanders, Van Oss and McGeary (2016, p.76) explains adult learning experience by stating that “personal growth through service learning has been conceptualized in theory of transformational learning as a transformative process in which students become aware of tacit assumptions through analysing values and beliefs around learning experiences, using feedback to further personal understanding”. A prior learning experience as a learner of NFE in any subject can influence a rapid acquisition of the skills. Applying the learner-centred principle during class sessions, a **trainer** will ensure that each individual learner practice skills activity before introducing a new one. Pai and Mallya (2016, p.410) state that the concept of learner-centred learning is that “students might not only choose what to study but how and why that topic might be an interesting one to study”. In the context of NFE in KZN, learners can benefit from three principles of learner-centred learning approach if utilised diligently during class sessions. Firstly, a trainer must rely on the active participation of learners instead of passive learning. Secondly, the teaching should emphasise deep learning with the intention to foster the understanding of the concepts and their application in the real-life situations. Thirdly, if well applied, the approach can help improve responsibility and accountability on the side of the adult learners in KZN, while creating a condition of interdependence between trainers and learners.

In summary, this section has demonstrated the constructivist approach is the transformation process of the systems approach of NFE programme. The **usefulness of a systems** approach for skills acquisition in adult NFE centres, specifically for training delivery environments in KZN is its ability to help to analyse and to **improve the** NFE system. However, Salam (2015) advises that, “the input, transformation process and output must be relevant **and there must be the** right mix of

curricular objectives, contents, methods and assessment” in order to produce competent and confident adult graduates for employment after graduation.

## 2.4 Review of research on NFE delivery environments for employment

This study draws upon existing literature about non-formal education in South Africa and elsewhere. The literature is that relating (in some way) to the provision of NFE programmes that meet the educational needs of adults for access to appropriate livelihood skills for income-generating activities. This section attempts to review literature on the topic of training delivery environments of NFE linked to skills vocational training programmes and their effectiveness.

Nevertheless, there is an abundance of literature on formal vocational training or adult education focussing on literacy. A key area of the research activities in South Africa and other African countries is the assessment of the implementation of policy and legislation of non-formal adult education. There is a low publication rate of research that has been done in the area of adult NFE. This is why it is difficult to accurately assess the state of research because of few openings for the sharing of research findings. Besides the lack of sufficient publications on the present topic, this critique has not caused the researcher to abandon his commitment to the idea that good research uses existing knowledge as the basis for the design and direction of new research. Thus, previous studies have helped identify existing gaps of knowledge in NFE programmes.

Non-formal education (NFE) became part of the international discourse on education policy in the late 1960s and the early 1970s (Rogers, 2004). It can be seen as being related to the concepts of recurrent and lifelong learning. Taking the debate on the origin of non-formal education further, Rogers (2004) suggests that in the 1970s, four characteristics came to be associated with NFE:

- Relevance to the needs of disadvantaged groups;
- Concern with a specific category of people;
- A focus on clearly defined purposes;
- Flexibility in organisation and methods (Rogers, 2004, p.42-48).

These four characteristics of NFE point to models of curriculum. There are various models of curriculum in NFE that can be considered depending on context and purpose of the adult education. This means there are also various ways of approaching curriculum. A short definition of curriculum

is a “plan for learning” (Netherland Institute for Curriculum Development [SLO], 2009, p.9). Some scholars like Kelly (2009), Smith (2000), Taba (1962) and Stenhouse (1975) look at the curriculum in four models. The curriculum of adult education can be considered as curriculum as product, curriculum as process and curriculum as praxis. Firstly, curriculum as a body of knowledge means a syllabus to be transmitted to adult learners. In this form of curriculum, the content of knowledge is connected with courses leading to examinations of the learners (Smith, 2000; Stenhouse, 1975). Therefore, curriculum as a syllabus concerns theory and practice which focus on the content of knowledge to be taught.

Secondly, curriculum as praxis means that the curriculum is developed through the active interaction of action and critical reflection. Grundy (1987, p.115) notes that “ the curriculum is not simply a set of plans to be implemented, but rather is constituted through an active process in which planning, acting and evaluating are all reciprocally related and integrated into the process”. Curriculum as praxis stresses on information, reflection and commitment to action. Curriculum as praxis motivates learner and teachers together to confront the actual problems of their lives and relationships. In this connection, Grundy (1987, p.105) argues that “When students confront the real problems of their existence they will soon also be faced with their own oppression”.

Thirdly, curriculum as a product is an attempt to achieve certain ends in adult learners. With regard to the curriculum as a product, objectives are set, a plan drawn up, and then applied, and the outcomes (products) measured (Smith, 2000). According to this approach, a curriculum can be seen as a programme of activities (by teachers and learners) designed so that learners will achieve certain educational objectives.

Fourthly, curriculum as process and development means that it is a particular form of specification about the practice of teaching. It is not a package of materials or a syllabus of ground to be covered (Mesaric, Kuzic & Dovedan, 2011). The model of the curriculum as process calls for a critical testing rather than acceptance. In view of Stenhouse (1975, p.42), “A curriculum is an attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice”. Similarly, Mesaric, Kuzic and Dovedan (2011, p.359) argue that, “a process is generally characterised by changes in the time of a system or some of its features, initiated by events, teachers and learners, their roles and results”. The process model of the curriculum in adult NFE seeks to contextualise the knowledge to be relevant and related to the local situation and time of the target learners.

There is an abundance of literature on adult education, especially adult literacy. However, few studies have a focus on NFE for livelihood skills acquisition. Adult NFE programmes leading to income-generating activities in order to meet the basic needs of unskilled adults with low educational achievement are not extensively studied. In the following paragraphs, the researcher presents the debate on the relevance of NFE and some findings from previous studies in relation to the topic.

Adult NFE programmes have been used as a tool for income generating programmes. To achieve this goal, Islam and Mia (2007) argue that there should be innovative elements **within** NFE in terms of its contribution towards poverty alleviation through income generating programmes. In the context of Bangladesh, Islam, et al. (2012) note that the most significant feature of NFE programmes is the conceptual coherence and practical integration between education and **skills** training with the aim of transforming the target groups into a productive human resource for poverty reduction. In a similar vein, using the context of Kyrgyzstan, Tajikistan and Uzbekistan (former Soviet Union republics), Jiyankhdjaev (2011) joins the discussion by stating that the application of NFE including **skills** training should be directed at producing services and goods, marketing of products, and allow some income for the trainees while they participate in the intervention programme. Jiyankhdjaev's (2011) argument is appealing because adult NFE programmes are job-oriented. Therefore, the curriculum design and its delivery approach should have elements of demand-driven non-formal skills training.

In the context of Ethiopia, Tekle (2010) assessed the relevance and effectiveness of non-formal adult farmer training programmes for rural households living in poverty. To solve **the** problem of **poverty**, educating farmers through basic education intervention and training on improved agricultural and sustainable living practices was of paramount importance (Tekle, 2010). Tekle concludes that the **training** was not relevant because the practice on the farm and on a specific agricultural production technology (which are the two most important and appropriate component of such training) **were** not covered in the training. **This study points to the need for course content to be relevant to training delivery for skills acquisition.**

The effectiveness of NFE for income-generation **can be** measured by tangible and immediate outcomes. Tangible and immediate outcomes of education and learning are a major driver for skills acquisition **in adult education programmes**. In a recent study on improving career prospects for the low-educated adults conducted **by the** European Centre for the Development of Vocational

Training (Cedefop) (2016), the findings reveal that the main driver for learning that was identified across the seven European countries involved was goal-oriented. Many adults viewed the value of education through the tangible benefits it brings to income-generating activities. In a similar vein, Gboku, Nthogo and Lekoko (2007) argue that, for some adults, education is a 'sacrifice' (in terms of effort, opportunity costs) and must have a 'pay-off' as the objective of learning. According to Cedefop (2016), tangible and immediate outcomes are expressed as a precondition for engaging in learning activities, often based on a negative experience where adult education did not lead to desired outcomes. In my view, the implication is that approaches of training delivery for skills acquisition should go hand-in-hand with the immediate outcomes of learning.

**NFE programmes should** ensure that real learning is done in 'real situations'. Blaak, Openjuru and Zeelen (2012) argue that if there is a mismatch between the approach to training delivery and the specific tasks in prospective job activities of graduates, the training delivery for skills acquisition will not be effective. The empirical findings also support that many adult interviewees reflected on the need for learning to be relevant to what they were doing at work; learning on the job was found to motivate them (Cedefop, 2016; Islam, et al., 2012). The main conclusion deriving from the discussion is that adult learning is positive, but only with a strong link to concrete contents and results.

There is a need to connect **the** training delivery approach to labour market reality. Fennes and Otten (2008) view that the disconnection between education and training and the labour market reality results in the belief by learners that engaging in adult NFE makes no sense because it does not lead to the acquisition of skills that are useful on the labour market. However, Gasperine and Acker (2009) believe that the connection between skills acquisition and labour market reality cannot be achieved without considering the issue of quality of non-formal adult education and training. In their view, the quality of education entails many factors like the quality of existing facilities such as training centres, the qualifications of trainers or teachers and their expertise, the quality of training materials and the use of formative and summative evaluation. Supporting the views of Fennes and Otten (2008) and Gasperine and Acker (2009), one can admit that the quality in NFE is also achieved when curriculum learning (with explicit and clear learning objectives), learning materials and learning methods are designed to be relevant to workplace realities.

The previous studies also reported on the challenges in delivering NFE programmes in the African context. Hussein (2013) analysed the challenges facing adult NFE delivery in Nigeria by looking at

recognition, accessibility, and funding, human and material resources. The study revealed that a lack or an insufficient number of human resources with knowledge and skills hampered the effectiveness of the training delivery of the NFE in Nigeria. Hussein (2013, p.141) argues that “Lack of personnel with Information and Communication Technology skills across the Non-Formal Education centres inhibits the effective use of Information and Communication Technology for Non-formal Education delivery in the country.” There was **also the problem of the** appointment of trainers who were not qualified or trained in androgical techniques in order to teach adult learners. Another significant finding related to the present study is that there was a negative attitude of adult learners hindering the process of skills acquisition (Hussein, 2013). Most of the targeted learners did not really embrace the NFE programme as useful for skills development and income generation.

Similarly, a recent study conducted in Mozambique shows that qualified and competent educators play an important role in the delivery of NFE. In their study on educators in non-formal vocational education and training (NFVET) in Mozambique, Manuel, Van der Linden and Popov (2017), argue that when examining the delivery of NFE, one should not only look at the programme design with specific outcome and facilities in the centre, but importantly the professionalization and competence of the educators. The study attempted to explore the perceptions, experiences and reflections of educators in NFVET working in training centres in Maputo (Manuel, et al. 2017). Due to social economic transformation impacting on job **outcomes** of the learners, the findings reveal that educators in adult NFVET face many challenges in delivering the courses because they have to provide effective skills without being properly trained themselves, or **receiving** support and resources (Manuel, et al. 2017). The empirical findings infer that the improvement of educators’ competencies in teaching would help improve the effectiveness of NFVET programmes.

Empirical findings reveal that it is **important** to ensure the quality of adult NFE. In an early study, Islam, Mia and Sorcar (2012) examined the effectiveness of NFE for income-generation, and more specifically on internal environments at the centre level. The findings reveal that the NFE programmes were ineffective in reducing poverty among the poor adults because the training centres did not develop materials on income generation such as technical education, poultry, sewing and garment making, vegetable cultivation, mushroom cultivation and **fisheries** (Islam, et al., 2012).

The quality and accreditation of skills training of NFE programmes require that an adult NFE curriculum and its delivery approaches have components of entrepreneurship training. Weyer (2009) notes that adult NFE programmes provide access only to the lowest-level occupations because they do not have the legitimacy to award school diplomas and credentials required to access to professional and paid jobs. Betcherman and Khan (2015) go beyond accreditation of the courses and argue that entrepreneurial training is important because adults who enrol in the NFE centres do not have the appropriate formal education required to **get wage employment** in the labour market. In this connection, Arko-Achemfuor (2014) also supports that the component of NFE courses should contain entrepreneurship in order to equip adults with business skills and knowledge for self-employment.

In the communities where there is a scarcity of paid jobs, the combination of technical training with entrepreneurial training in adult NFE programmes proves relevant. The reason is that NFE programmes provided skills to those **adults** previously unemployed due to the low level of education and employability skills (Weyer (2009). In a recent study, Pantea (2016) reported that NFE centres combined technical with entrepreneurial training as **an effective** approach allowing graduates to become self-employed by starting micro-enterprises. The same approach contributed to training delivery for skills acquisition because it also motivated adult learners to solve their real-life problems of unemployment. Therefore, Pantea (2016) concludes, integrating entrepreneurial training in the NFE programmes is a relevant curriculum design aiming at **helping adults who are unemployable due to the lack of employability skills.**

In the context of the Netherlands, Harkema and Popescu (2015) assessed training delivery environments of adult education programmes coupled with entrepreneurship training. The study sought to determine which competencies needed to be **taught to** adult learners and was the teaching **approach helped** adults learn to become innovative entrepreneurs. The training programme focused on providing both technical and entrepreneurial skills and motivated adult learners “to acquire skills and knowledge necessary to develop their ideas further and start their own business” (Harkema and Popescu, 2015, p. 215). The findings revealed that adults were interested and able to acquire skills because the training delivery had a problem-centred approach to learning and the contents of the training programmes had entrepreneurship in order to allow graduates to immediately apply the skills in their lives (Harkema & Popescu, 2015, p.218). In other words, the training delivery was effective because adult learners saw how the course content was relevant to solve their current problems of life.

In summary, the literature review reveals that challenges in NFE programmes consist of the accessibility of the learners funding, human and material resources for their effectiveness. These challenges result in NFE graduates experiencing difficulties in transforming skills and knowledge into the real world of work. To ensure the quality of adult NFE, the literature points to the need for connecting training delivery approach to labour market reality of the adults. Based on previous studies, the research gap that informs the present study is to know the extent to which the approaches of training delivery environments of NFE centre contribute to skills acquisition of graduates. While previous studies discuss the issue of effectiveness of NFE programmes, the link between the training delivery and the ability of graduates to work without supervision in paid jobs or self-employment has not been sufficiently studied. Different from previous studies, the present study will focus on the approaches of training delivery for skills acquisition and the extent to which learners have the ability to work without supervision after acquiring skills from NFE centres.

## **2.5 Summary**

The chapter focusses on the concepts of systems and constructivist approaches of learning that will help analyse the data and interpret the findings in chapter four. The first section on the conceptual framework of the study has elaborated and explained considerable variables necessary to analyse in order to answer the research questions. There are previous studies conducted on NFE programmes, however, few of them focused on training delivery environments for skills acquisition in adult non-formal education centres. The analysis of the studies on the present topic point to the need for further investigation of NFE programmes connecting training delivery approach to labour market reality of the learners. Therefore, there is still a need to know the extent to which the approaches of training delivery of NFET centre foster skills acquisition of graduates. Next chapter will deal with the research design and methods used to collect and analyse data in order to achieve the research objectives.

## **CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY**

### **3.1 Introduction**

This chapter discusses **the choice made** in designing the study and developing strategies, which guided the researcher during the study process. It outlines the approach and techniques the researcher used to collect and analyse the data. The nature of the research problem, **which is the ineffectiveness of training delivery environments of the NFE centre in contributing to skills acquisition in KwaZulu-Natal**, research questions and research objectives called for an appropriate research design to collect data and draw valid conclusions. The focus of the examination in this study on NFE programme was the training delivery environments for skills acquisition and the effectiveness of the training approach of teaching and learning of adults. The study **sought** to answer three research questions. The first was “What are the approaches of training delivery for skills acquisition?” The second was “What is the mode of training assessment at the end of the training programmes?” and the third was “To what extent do graduates have the ability to work without supervision after acquiring skills?”

In order to answer these research questions, the researcher used quantitative supplemented by qualitative methods in **conducting the study; because of the weakness of the quantitative approach**. This chapter **comprises** four main sections. Firstly, the research design discusses a quantitative design is supplemented by **qualitative research design**. Secondly, **research methods are discussed in relation to quantitative and qualitative approaches**, focussing on four techniques of data collections used in this study. Thirdly, the issue of validity and reliability of research data are discussed, followed by a **discussion on ethical** considerations in conducting the research.

### **3.2 Research paradigm and research design**

Every research **study** is grounded on some philosophical assumptions about what constitutes scientific inquiry and which research methods are suitable for generating knowledge from a study. Underlying philosophical assumptions constitute a research paradigm of a study. Neuman (2014) describes a paradigm as a whole system of thinking when conducting a study. In order to allow the researcher to understand graduates’ views on the effectiveness of training delivery environments for skills acquisition in adult NFE centres, the **study used post-positivist paradigm to examine the training delivery for skills acquisition in NFE centres**. The post-positivist paradigm was suitable for this study because it emphasises meanings and seeks to explain social concerns (De Vos et al.,

2011). The post-positivist paradigm explores social reality and is based on observation and reason to understand human behavior (Edirisingha, 2012).

While positivists view that there is an objective reality out there to be examined and understood, post-positivists maintain that reality can never be fully comprehended, only approximated (De Vos et al., 2011). As result, post-positivism uses multiple methods for capturing reality from different perspectives. In this study, post-positivism also allowed the researcher to use mixed methods because it provided a practical strategy to collect data on training delivery environments using a combination of quantitative and qualitative methods. To this end, the researcher focused on the understanding of the training delivery environments of NFE programmes at the centres. The purpose of using the post-positivist paradigm in this study was to capture reality from different perspectives of the NFE graduates. In this connection, post-positivist paradigm also allowed the researcher to collect diverse data in order to understand the views of the graduates on training delivery environments.

According to Neuman (2014, p.180), a “research design focuses on the end-product and all the steps in the process to achieve that outcome”. This view describes a research design as the practical plan in which specific research methods and processes are connected together to collect reliable and valid data for analyses, conclusions and practical applications of the findings. Similarly, Babbie and Mouton (2010) define research design as a plan or blueprint guiding any scientific study. The arguments of these scholars suggest that the research design involves a detailed plan to follow during data collection, analysis and interpretation processes in an endeavor to address the research questions. The research design entailed a combination of both quantitative and qualitative research approaches in order to allow the researcher to view a phenomenon from more than one perspective (Creswell & Clark, 2011). This means that in the process of data presentation, a qualitative approach complemented the quantitative one.

Within the mixed research design, the quantitative approach helped the researcher to collect subjective information on the topic. According to Cresswell (2014), the quantitative research approach consists of explaining phenomena by collecting numerical data that are analysed using mathematically based methods (in particular statistics). The main reason for choosing the quantitative design is that it helped to make a comparison across types of the centres (public and private NFE centres) and geographic areas (urban, rural and peri-urban). It is the characteristic of the quantitative research design to perceive reality to be objective, tangible and fixed. In the context

of this study, the main disadvantage of the quantitative research design is that it is not perfect for answering controversial questions in a questionnaire like “explain how your learning process was related to your future job”. Some questions may not be precisely answered by the respondents because of the probable difficulty of recalling the information related to them (Babbie & Mouton, 2007).

The researcher used a qualitative research approach within the mixed research design in order to complement **the quantitative** approach and to resolve the weaknesses or limitations of quantitative design, for example knowing how the learning was related to the needs and objectives of the graduates. While **the** quantitative research perceives reality to be objective, tangible and fixed, in qualitative research approach, the researcher perceives reality as subjective, constructed and multiple (Creswell, 2009). Therefore, the researcher used some learners’ experiences to understand quantitative data on specific findings. As result, the supplementary qualitative approach allowed the researcher to view the reality as is experienced from inside out by the graduates on a particular and important finding for a thorough understanding. Thus, interviews and document analysis supplemented the survey design, in order to overcome the weaknesses of the quantitative study.

### **3.3 Research style**

To answer the research questions, the study used a survey research style. To this end, the researcher used interviews and written survey as questionnaire. The type of the survey was a cross-sectional survey in which information was collected at one point in time from the graduate sample, selected to represent the larger population of the graduates from NFE centres. In the context of this study, the questionnaire entailed the self-administered groups of questions to the graduates (Ponce & Pagán-Maldonado, 2015; Creswell, 2009). The advantage of the questionnaire was that it allowed the researcher to ask closed-ended questions and to determine the number of respondents who answered a particular question “yes” or “no”; “agree”, “**disagree**” or “**neutral**”. Concerning verbal survey, researcher used face-to-face interviews because it has an advantage of **allowing** follow-up questions in order to have a better understanding of the answers from the adult graduates (Creswell & Clark; 2011; Creswell, 2014).

In the context of the present study, the advantage of using a survey was its capability to collect comparable data from different respondents across urban, peri-urban and rural areas. It also allowed the researcher to use a consistent questionnaire equally relevant to all respondents, irrespective their

geographical area, race and the types of the NFE centres. Following the view of Fouché and Bartley (2011), another advantage of the survey was the **statistical presentation**. It was easier to find statistical results related to the research questions due to the high representativeness made by the survey method.

### **3.4 Research methods**

Research methods are techniques used to conduct research from the sampling of participants, **through** data collection to the analysis. Creswell and Clark (2011, p.129) note that, “Research methods or refer to the techniques the researchers use in performing research operations.” This definition of research method means that all those techniques which the researcher uses during the progress of studying a research problem, are called research methods. Based on the research questions, the study utilised quantitative (number-based) method supplemented by qualitative (text-based) methods in order to provide a better understanding of the research problem. In this study on NFE, both quantitative and qualitative research methods allowed the researcher to focus on collecting graduates’ views, analysing and combining both quantitative and qualitative data in a single section of a chapter.

The study used mixed research methods in the form of triangulation by combining both qualitative and quantitative methods (Creswell, 2009, p.204). According to Creswell and Clark (2011, p.129), combining quantitative and qualitative techniques and concepts in a single study or series has an advantage of “relating studies to single or multiple phases within a pragmatic philosophical worldview (paradigm) and theoretical lenses that direct the plan”. In the context of the present study, both methods helped to obtain the evidence of the approaches of training delivery for skills acquisition, the mode of training assessment at the end of the training and the ability of learners to work without supervision after acquiring skills.

The characteristic of the conceptual framework (cf. Chapter Two), which is the systems approach to NFE teaching and learning, and the sources of the data required the use of quantitative and qualitative methods. As data came from three components of the NFE systems (inputs, transformative process and outputs **and environment**), there was a need for complementing data so they may support each other. Following the view of Ponce and Pagán-Maldonado (2015), the other reason for using the mixed method was the complexity of the research problem **which** could not be addressed from one **approach**. The argument is that the researcher intended to examine all internal

delivery environments from human and material resources, teaching and learning approaches, skills acquisition to the learning assessment. In other words, the complexity of the training delivery environment for skills acquisition **could not be fully examined** using only a quantitative or qualitative approach.

The researcher used the quantitative method to provide numerical data that were analysed using descriptive and inferential statistics. According to Creswell (2009), the quantitative method is essentially about collecting numerical data to explain a particular phenomenon. The reason for utilising the quantitative method is based on its primary purpose which is to determine cause-and-effect relationships or comparability (Creswell, 2014). The quantitative research method was a survey questionnaire. In the context of the present study, there were three advantages of using quantitative method. Firstly, it helped produce the detailed description of respondents' opinions and experiences; then the researcher interpreted the meanings of their responses (Rahman, 2017).

In terms of the effectiveness of training approach on the skills acquisition, the researcher sought the data providing deep information on the relationship between teaching techniques and the ability to work without supervision. Delport and Roestenburg (2011), too, note that qualitative **methods** are utilised to attain deeper insights of issues related to examining a process of an intervention. Secondly, the qualitative method helped understand the connections and interdependence between four elements of NFE delivery for skills acquisition, which are inputs, transformation process, outputs and environment. Creswell (2014, p. 4) supports that qualitative **research** is descriptive allowing the researcher to examine the process, meaning, and to gain understanding through the words of the respondents. In the present study, a special emphasis of qualitative was on the interdependence between **the** transformation process and the outcomes of the NFE delivery approaches.

Thirdly, the qualitative data do not only explain the process of training delivery in NFE centres, but **provide** full descriptions of activities that occurred, including the real experiences of the adult learners. In this connection, Creswell (2014, p.15) supports that, "qualitative method emphasizes the human element; uses close first-hand knowledge of the research setting and avoids distancing the researcher from the people or event/situation being studied". Therefore, semi-structured interview, observation and document analysis inadequately compensated the weaknesses of the closed-ended questions in the quantitative method by discovering complex issues the researcher could not obtain **during the quantitative** data collection process. The qualitative methods were able

to deal with controversial issues. Respondents could provide precise answers to the question because they could easily remember the specific learning activities in their NFE courses.

### 3.4.1 Study population and sampling size

A study population is the people to whom the results of a quantitative and post-positivist study could be generalised (Creswell (2014)). For the present study, the researcher selected topic-specific graduates from centres as participants, based on their experience and close involvement in NFE programmes. The population for the study was the adult graduates of NFE centres of KZN. The sample was drawn from the district of uMgungundlovu, selected because it has diversity in geographic areas (urban, rural and peri-urban). There is no document reporting the exact number of NFE centre in KZN, and most NFE centres managed by NGOs are not with registered either the provincial and national Department of Education (KZN, 2017). This is why it was impossible to obtain the population size of the centres and graduates.

The sample size of the study consisted of six NFE centres and their 200 of their graduates. In connection with the research purpose, the primary eligibility criteria for the NFE centres were that they should be not for profit and hence not require adult learners to pay tuition fees. In addition, a centre was selected if it provides technical and entrepreneurial skills to enable an adult to take up wage or self-employment in the field of agriculture, services and small business activities. This means that the researcher did not select an education adult cente that provides adult literacy only.

### 3.4.2 Sampling method for NFE centres and graduates

Sampling is defined as a process of selecting a sub-group of persons or things from a larger population. Nieuwenhuis (2012) point out that a sample is a set of elements selected in some way from a research population. In connection with the research purpose, correct sampling methods allowed the researcher to investigate relatively small groups of the target graduates from NFE centres, and yet obtain information that was representative of the entire number of graduates. Therefore, the researcher used a mix of stratified and purposive sampling methods to select six NFE centres and 200 graduates. These sampling methods were suitable for the study using the mixed method approach because they enabled the researcher to select relevant participants holding diverse information to answer the research questions (Nieuwenhuis, 2012).

Kumar (2011, p.203) defines stratified sampling as “a method of sampling that involves the division of a research population into smaller groups known as strata, and a sample is drawn from each stratum”. In this study, the purpose of using the stratified method was to obtain centre representatives from public and private centres within the population needed to be represented in the sample of graduates according to their areas (urban and rural). Furthermore, purposive sampling simply means, “participants are selected because of some defining characteristics that make the holders of the data needed for the study” (Nieuwenhuis, 2012, p.79). In a similar vein, Kumar (2011, p.207), asserts that, by using a purposive sampling of non-probability sampling, the researcher only selects participants who “are relevant to the topic, are best positioned to provide the needed information for the study and are willing to share it with the researcher.”

Stratified sampling was used to select six NFE centres, meaning that two centres were selected from each geographic setting (urban, rural and peri-urban areas). The selected NFE centres had to be not for profit and hence not require trainees to pay tuition fees. In order to select two centres in each geographic setting, the researcher used purposive sampling. The focus of the study was on examining the training delivery environments of NFE centres. The examination looked at the training approaches, mode of assessment and skills acquisition by the graduates. Using purposive sampling, the study considered NFE centres that provide technical and entrepreneurial skills to rural and urban adults. Because the purpose of the study was to assess graduates’ views on the effectiveness of training delivery environments for skills acquisition in adult NFE centres, the research only focused on the NFE centres that provide technical and vocational training programmes. This is why the researcher did not select NFE centres offering literacy programme.

In the context of purposive sampling, the following criteria helped to select two NFE centres from each of three geographic settings (urban, peri-urban and rural) in order to make six centres in total:

- Providing technical and vocational training programmes to the adult learners;
- The programmes should focus on preparing the learners for jobs at semi-skilled levels after graduating, not for further education at Technical Vocational Education and Training (TVET) colleges;
- The type of technical and/or entrepreneurial training programmes should aim at enabling a learner to start an own small business;
- The technical and/or entrepreneurial training programmes should aim at contributing to the promotion of income-generating activities.

In order to identify the target centres, in the first stage, the researcher visited each adult training centre within the district and examined its skills training activities. This process helped to determine the NFE centres focusing on technical training programmes and income-generating activities.

The reason for using a big sample size of 200 graduates for the quantitative study was to obtain a relevant comparability (Creswell, 2013:86). Comparability in the context of the current study refers to the inter-relationship of two variables or factors in a causal analysis, the cause X, and the outcome Y. In the context of purposive sampling, the following criteria were used to select 200 graduates within the NFE centres under investigation:

- Being a graduate (past learner) of the technical and/or entrepreneurial programmes from 2016 to 2017;
- Having completed the technical and/or entrepreneurial programme;
- Being unemployed, wage or self-employed;
- Spatial distribution in rural, peri-urban and urban settings.

Therefore, from the 200 graduates who filled in the survey questionnaire, the researcher selected five self-employed graduates for one-on-one interviews. The researcher considered self-employed graduates because they were very keen to acquire practical skills for immediate utilisation after graduation. Other graduates enrolled for the training courses to gain academic knowledge and certificate in order to secure their admission at technical colleges. The researcher followed the view of Zohribi (2013, p.256) who pointed out that, “In order to obtain more valid and reliable information, the interviewer should select the respondents more carefully”. Therefore, the selection criteria of the interviewees were according to the principles of purposive sampling and were as follows:

- Be selected according to gender and areas (urban and rural) of the NFE centre.
- He/she must have a minimum of one year after completion of NFE programme and be involved in self-employment;
- Currently being self-employed in micro-enterprise related to the training course;
- Being the sole owner of the micro-enterprise or jointly owning with others;
- The small businesses should be in existence for more than six months;

- Be selected according to the type of skills training (technical and/or entrepreneurial) obtained on the one hand and the type of micro-enterprise activity on the other;

### 3.5 Data collection

As a recruitment strategy of the **interview** participants, the self-completion questionnaires (or self-administered questionnaires) were handed to the graduates, who completed them in their own time. The NFE centre managers helped the researcher to organise a meeting with the graduates (past learners) in order to explain the process of the research, giving clear guidance **on** the completion of the questionnaire. After the process, learners personally handed back the completed questionnaires to the researcher at the centre on an agreed day and time.

For those graduates who did not participate **in** the meetings, the centre managers agreed to provide the list from the database containing the physical addresses and telephone contacts of the **graduates**. Although the centre managers assisted in recruiting the **graduates**, the researcher did the data collection process. He handed the questionnaires to the respondents so they **could** complete them in their own time. To this end, the researcher requested the centre managers or educators to introduce him to the adult **graduates** by explaining the goal of the research and asking for **graduates' consent** to participate in the study. Once a learner granted the permission, the respective centre managers made a pre-arrangement and had a prior agreement **with graduates** for the distribution of their contacts details to the researcher. The centre managers also informed the learners that the researcher would approach them.

#### 3.5.1 Quantitative methods of data collection

In the quantitative method, the research instruments for the data collection **was a** questionnaire administered to 200 graduates. However, Creswell (2014) raises a critical point advising that there is a need to ensure that questions within the questionnaire are valid, reliable and unambiguous. This study used **closed-ended** (structured questionnaire) in order to provide the researcher with numerical data (Maree & Pietersen, 2012). Creswell (2014), Ponce and Pagán-Maldonado (2015) and Rahman (2017) support that closed-ended questionnaires are more effective because they facilitate analysis of the data using a computer. Questions were asked using a standardised questioning procedure applied equally and consistently to all respondents.

A survey questionnaire was a suitable method for this type of the study because it allowed the researcher to collect data from a sufficient number of adult graduates and to get relevant answers for a specific set of questions on training delivery approaches (Creswell, 2014). Therefore, the survey questionnaire involved asking graduates about their opinions on the challenges facing their NFE centres in terms of human and material resources, the mode of teaching and learning, and the extent of skills acquisition. The questionnaire contained three types of the questions in order to achieve the research objectives. The questions were binary or dichotomous with 'yes or no' responses. Dichotomous questions were useful because they provided clear and explicit responses. Moreover, following the view of Creswell (2014) and Ponce and Pagán-Maldonado (2015), it was possible to code responses quickly. The questionnaire also contained multiple questions serving to capture the range of choices of respondents to give statements. For example, the researcher might ask a sequence of questions about all vocational skills training courses a learner studied at his/her NFE centre. The other type of the questions was rating scales. This consisted of a set of four categories namely, 'strongly agree', 'agree', 'neutral', 'disagree', and 'strongly disagree' (see Appendix 1A: Questionnaire for Graduates).

However, as Fouché, Delport, and De Vos (2011) also pointed out, the questionnaire presented some limitations when collecting the data. It was impossible to probe on some questions related to processes and causes pertaining to the variables being examined. The closed-ended questions within the questionnaire appeared to be inadequate to cover complex issues, such that the researcher could not explain them during the data collection process. Another limitation of the survey questionnaire was its incapacity to deal with controversial issues. Respondents could not provide a precise answer to a question because of difficulty to remembering the specific information related to their NFE centres.

### **3.5.2 Qualitative methods of data collection**

The researcher utilised qualitative methods of data collection administered to five graduates in order to supplement quantitative data by probing questions related to processes and causes pertaining to the variables being analysed. The closed-ended questions could not cover complex issues during the data collection process. Thus, semi-structured interviews shed more light on complex variables. Specifically, semi-structured interviews were useful in providing a detailed description of respondents' opinions and experiences on the effectiveness of the training approach and skills acquisition.

### 3.5.2.1 Semi-structured interviews

The researcher conducted one-on-one semi-structured interviews with five self-employed graduates. Lavery (2016, p, 12) explains that in semi-structured interviews, researchers pre-determine a set of questions; however, they have the flexibility to probe into questions for clarity or make a follow-up on issues revealed by the respondents during the interviews. The reason for selecting five self-employed graduates only was that the researcher wanted to obtain valid and reliable information from very knowledgeable and suitable informants. The semi-structured interviews focused on the components of training delivery environments. This means, the conceptual framework of the study, discussed in Chapter **Two**, guided the questions of the semi-structured interview.

### 3.5.2.2 Document analysis

**Document analysis** entailed primary documents, which were those directly related to the NFE centres under investigation. According to Kumar (2011, p.163), document analysis is “a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning to an assessment topic”. Though there are diverse types of document analysis, for the purpose of this study, the researcher utilised descriptive content analysis, which deals with identifying and describing the main content of data, chronologically and thematically (Kumar, 2011).

The research analysed documents, directly related to a specific training programme. By permission of the NFE centre manager, the researcher had access to the training curriculum or course templates, the training application forms, NFE manuals, annual reports, the guideline of the course implementation and monitoring documents and memoranda. In this study, the purpose of using document analysis was to identify information related to training objectives, learning materials, teaching tools, instructional equipment and content of the knowledge contained in the curriculum. The curriculum of each training centre was also viewed because it serves as an education system’s roadmap. The research views the curriculum in terms the outlines both the objects of the learning, such as subjects, topics and planned activities.

Furthermore, the analysis of documents also helped identify elements of the training delivery approach for skills acquisition. The data related to training approach were the combination of

technical skills with business skills, the use of workshops and project-based training similar to the world of work, the visits to the workshops, businesses and industries. Following the advice of Nieuwenhuis (2012), the researcher compared all these data from document analysis with responses from questionnaires and interview schedules.

### 3.6 Data analysis

The researcher jointly analysed the data from the questionnaire and interviews in order to elucidate the views of the graduates on different aspects of the training delivery environments contributing to skills acquisition in KwaZulu-Natal. The data from the questionnaire were analysed using Statistical Packages for Social Sciences (SPSS) software. The analysis consisted of three categories that are descriptive, associative and causative (Fouché & Bartley, 2011). The associative or correlational analysis is “a method that examines the relationships between two variables” (Fouché & Bartley, 2011). The associative method helped to make relationships between the analysed variables (Fouché & Bartley, 2011). The causative method involved the use of factor analysis in the attempt to determine the network of relationships between variables, cause and effect of a phenomenon (Fouché & Bartley, 2011).

The analysis and interpretation of the data from interviews were done using thematic analysis. According to Nieuwenhuis (2012), a ‘theme’ is an attribute, descriptor, or element generated from the interview text in inductive analysis. The qualitative data from semi-structured interviews and document analysis were coded, then sorted and classified to find common themes and sub-themes with the quantitative findings (Bryman, 2008). The researcher assigned each category a label. The codes and themes provided an understating of the raw data after the researcher put names for the descriptions and interpretation.

The researcher presented and analysed the quantitative findings first in table and figure formats, then qualitative findings for a thorough understanding of specific data. In other words, the researcher used qualitative findings in order to shed more light on specific quantitative findings related to the issue presented in the tables and figures. As supplementary to quantitative findings, the qualitative findings served to support or to contradict the findings from the questionnaire. The researcher jointly interpreted the quantitative and qualitative findings so to shed light on the views and concerns of the learners on the issues under discussion.

### 3.7 Validity and reliability of research data

The question of validity and reliability of the research instruments and trustworthiness of the research data are of great importance to findings and conclusions. Alshenqeeti (2014, p. 43) points out that, “validity and reliability issues serve as guarantees of the results of the participants’ performances”. Validity is the degree to which a research study reflects the specific concepts it intends to examine. According to Zohrabi (2013, p.258), validity is “The degree to which any measurement approach or instrument succeeds in describing or quantifying what it is designed to measure”. Similarly, Heale and Twycross (2015, p.66) state that, “Validity is defined as the extent to which a concept is accurately measured in a quantitative study.” Thus, validity refers to whether the measurement is accurate and precise. The way validity was achieved is explained below.

A research instrument is valid if it measures what it was intended to measure, and does so cleanly without containing other factors by mistake. In the context of this study, a question within a questionnaire or interview schedule was valid if it helped the researcher measure to the extent to which the training delivery environments of the NFE centre contribute to skills acquisition. In the context of the present study, to ensure the validity of the questions, the researcher submitted the survey questionnaire and interview schedule to reviewers who are specialist in the field of adult education for assessment. The corrections and advice from the reviewers were very helpful.

In addition, the researcher pre-tested the data collection instruments in two different NFE centres. Firstly, for the survey questionnaire and data collection process, the validity increased because the study utilised a purposive method of sampling (Thyer, 2010). This means, the researcher only selected graduates who were relevant to the purpose of the study. Secondly, the questions and variables in the survey were similar to those constructed in the semi-structured interview (see Appendix 1B: Interview Schedule for Learners).

Reliability or dependability was also a matter of concern during data collection process and analysis. Reliability deals with the accuracy of the research instruments. It relates to the consistency of a measure or the consistency of a measurement process. It is concerned with the degree to which measures are free from errors and thus, yield consistent results. By definition, reliability means the extent to which a research instrument repetitively has the same results if it is used in the identical situation again (Heale & Twycross, 2015). Alshenqeeti (2014, p. 43) explains that the reliability is “The degree to which a measurement technique can be depended upon to secure consistent results

upon repeated application”. In other words, if measurement tools or procedure consistently produces the same score to subjects or objects with equal values, the instruments are considered reliable.

One of the main requirements of any research process is the reliability of the data and findings. In the context of the present study, reliability concerns the extent to which the data collection instruments repetitively have the same results if it is used in the identical situation on frequent cases. Similarly, Zohrabi (2013, p.259) stresses that reliability deals with the consistency, dependability and replicability of “the results obtained from a piece of research”. In order to ensure that questions contained clear wording so that all graduates could understand them in the same sense, the survey questionnaires were tested **with** five graduates who did not participate in the actual study. To ensure the reliability or dependability of the data and findings of the present study, the researcher used three techniques: (1) the use of a precise level of measurement (2) **the use** multiple indicators to measure one variable, (3) the researcher’s position of objectivity, and (4) mixed methods of data collection (quantitative and qualitative).

Firstly, *the use of a precise level of measurement* improved reliability. According to Neuman (2011), precise indicators at higher levels of measurement are likely to be reliable due to the fact that they provide detailed information. To this end, the researcher strived to measure the indicators at the most precise level possible. For instance, to measure the level of skills acquisition by a graduate, he used the level of competence to work for others without supervision or for managing small businesses individually.

Secondly, *using multiple indicators* increased reliability “because two (or more) indicators of the same construct are better than one” (Neuman, 2011, p.210). For example, to measure the extent of the challenges facing the NFE centre in using a certain training approach, the researcher used multiple indicators such as adequacy of time to practice and use of the practical component of the skills training, attention is given to link learning and workplace; the presence of qualified trainers who are also motivational.

Thirdly, *the researcher’s position* also improved the reliability during data collection process. Following the view of Zohrabi (2013), in order to increase the reliability of the data, the researcher explained explicitly the various processes and stages of the investigation. Therefore, before the filling **of** the questionnaire and each interview session, the researcher clearly elaborated on every

aspect of the section in the questionnaire. He explained in detail the objectives and the rationale of the study, research methods and the category of the learners relevant for the study. Concerning the positionality of the researcher to avoid bias **and influence of the PhD studies**, he used data that were not analysed before and **narrowed** the study to one educational district of uMgungundlovu.

Fourthly, *the use of both quantitative and qualitative methods of data collection* increases the reliability when a researcher uses various procedures such as questionnaires and interviews. In this connection, Zohrabi (2013) and Nieuwenhuis (2012) argue that collecting wide-ranging types of information through diverse sources can improve the reliability of the data and the findings. This approach of data collection, such as semi-structured interviews and document analysis contributed to the reliability and credibility of both quantitative and qualitative data. As stated above, another element **improving** the reliability of the data is that the researcher should elaborate in detail how the data were collected; how they were analysed and how the findings were obtained in this study. Thus, this information **could help replicate the study and contribute to ensuring** its reliability.

Similarly, trustworthiness of qualitative data was ensured by using the triangulation of data collection techniques of semi-structured interviews and document analyses (Nieuwenhuis, 2012). In addition, the purposive sampling method contributed to trustworthiness of the qualitative data because the researcher selected graduates who were knowledgeable about the study's topic and they had had **their relevant** personal experience (Nieuwenhuis, 2012).

### **3.8 Limitations of the study**

**The first limitation of the study resides on the fact that there is no document reporting the exact number of NFE centres in KZN. Yet most NFE centres managed by NGOs are not registered with either the provincial Department of Education. This is why it was difficult to obtain the population size of the centres and graduates.** The second limitation of the study include using graduates only for the survey questionnaire and semi-structured interviews. **It would have been** be better to use three types of self-completed questionnaires and semi-structured interviews, administered respectively to the graduates, trainers and centre managers. Involving the trainers and centre managers in the study would help to crosscheck the information provided by the graduates and to give the full picture of the training delivery environments

The third limitation is **that** the study did not use field observations as another technique of data collection in order to supplement the questions on the training delivery in the survey questionnaire and interview schedule. In other words, the present researcher **could have used** field observation to substantiate the quantitative and qualitative findings. In this connection, Zohribi (2013, p.257) argues that the purpose of using observation in a study is to collect data in a “natural setting”. Field observations would allow the present researcher to analyse training activities the graduates were involved in classrooms, workshops or gardens for practical work. **Finally, in the context of this study on NFE leading to acquisition of employability skills, the participants had to tick on one answer only whether the training consisted of 75% practice or the training consist of 25% theory. This limited the possibility for graduates who felt that the training consist of 60%, 50%, 30% etc.**

### **3.9 Ethical considerations**

Research ethics entails a consideration of the conduct of a researcher in relation to how he/she relates to and treats the participants during the research process. Denscombe (2010) points out that the observance of ethical principles is important for the respect of the rights and dignity of all those who are involved in the research or affected by it. Because the study involved human participants, though all were adult learners, this research was ethically **cleared by** the Research Office of the University of KwaZulu-Natal. In this regard, the researcher **observed the following** principles of ethical considerations:

***Informed consent.*** He sought written and signed informed consent from prospective respondents prior to conducting the study (see Attachment on Appendix 3). Respondents were given adequate information before filling in the consent form for the data collection process: the researcher’s credibility; the goal and objectives of the study; their right and freedom to withdraw from participation.

***Avoidance of harm.*** To avoid harm, respondents were asked about any factors in the procedure that might create a risk and the **researcher committed** himself **to taking** the required action to avoid any risk. Possible harm could have been emotional because graduates may be reminded of their bad experience with their trainers during the training process. Consequently, to avoid such harm, the researcher committed to asking a respondent about any factors prior to the process of data collection that could have caused discomfort that he/she would like to discuss. However, the researcher protected respondents against harm by thoroughly informing them beforehand about the

possible effects of the study (Strydom, 2011). Moreover, the researcher also advised a respondent who might be vulnerable, not to participate in the study if he/she expressed any hesitation about participating in the research.

*Voluntary participation.* Participation was voluntary and no respondent was forced to participate in the research (Strydom, 2011).

*Anonymity and confidentiality.* Anonymity means that “research respondents remain anonymous, or nameless, their identity is protected and remains unknown” (Neuman, 2011, p.152). Names of participants do not appear on the completed questionnaires. They cannot be identified in any documents, including interview transcripts and in the final study report, either by name or by means of any information that may identify them.

### 3.10 Summary

This chapter **presented** on the approach used in conducting the study. It has detailed every single component of the research methods and data collection instruments in a specific way in order to obtain good quality data, valid and reliable results. To this end, mixed research methods and data collection were **important** in viewing particular variables from more than one perspective. Mixed research methods were used in collecting data, analysing and combining both quantitative and qualitative findings, then integrating them during data interpretation to answer the research **questions**. The other reason for using the mixed **method approach** was the characteristic of the systems approach to NFE teaching and learning (the conceptual framework). Moreover, mixed methods of data collection increased the reliability because the researcher **used multiple** data collection methods such as questionnaires and interviews. Next chapter will present the findings and analyse them in line with the conceptual framework and research methods discussed respectively in **Chapter Two** and Three.

## CHAPTER **FOUR**: FINDINGS ON NFE DELIVERY ENVIRONMENTS

### 4.1 Introduction

This Chapter Four presents and analyses the data collected from the adult graduates in their respective NFE centres. It presents the empirical findings by focusing on the graduates' views on the effectiveness of training delivery environments for skills acquisition in KwaZulu-Natal (KZN). It is **important** to mention that KZN is made up of rural, semi urban and urban areas. The chapter aims at answering three sub-questions derived from the main research question: To what extent do the training delivery environments of the NFE centre contribute to skills acquisition? However, it **important** to note that the assessment of graduates' occupation in the labour market after the training programmes is beyond the scope of the present study. The researcher understands that it would be very interesting for the reader to see how many graduates became wage employed or created their own micro-enterprises as the outcomes of the NFE programmes.

In order to obtain relevant and reliable data, as mentioned in the previous Chapter Three, the study utilised **a** quantitative **survey** with 200 **graduates** **selected from six NFE centres**, supplemented by qualitative (one-on-one structured interviews with five graduates and document **analysis**). The semi-structured interview schedule for self-employed graduates was drawn from the themes of the survey questionnaire (**se Chapter Three**, sub-section 3.4.2.1 for explanation). This technique permitted the researcher to combine the discussions of the findings from **the** survey questionnaire with the one-on-one semi-structured interviews in common themes.

**This chapter** contains six main sections, which are organised according to six main themes. Section 4.2: A demographic characteristic of the **graduates** deals with the biographic information of the learners. Section 4.3: **Graduate's** skills training course studied at the NFE centres, discusses the courses according the geographic areas. Section 4.4: **Graduates'** main expectations after graduating from NFE programmes, presents different objectives of the learners prior to **attending** training intervention. Section 4.5: Training delivery internal environment for skills acquisition, presents the views of the learners on the teaching and learning approaches used in classrooms and outside for practicums. Section 4.6: The methods of training assessment at the end of the training programmes, examines how learners were evaluated to ensure that they had acquired skills at benchmark level. Section 4.7: Effectiveness of the training delivery approaches on skills acquisition in NFE centres,

assesses the extent to which the graduates felt they have the ability to work without supervision after acquiring skills. The final section summarises the findings presented in all sections.

## **4.2 Background of NFE centres**

The findings reported in this section were collected from the documents of the centres. In this section, the profile of the NFE is limited to the focus, overall goal and target groups of the skills training programmes.

### **4.2.1 NFE centre A in an urban area**

This is a public centre whose skills training programmes started in 2012 after its establishment by the KZN-Department of Education. The centre provides skills training programme for both self-employment and wage-employment. The centre has been offering training courses in travel and tourism, ancillary health care and sewing. The duration of the skills training courses is for one year. The skills training courses differ on each year and are basically designed as a pre-employment training in both formal and informal sectors. However, the centre had financial challenges to continue implementing the skills training programme.

### **4.2.2 NFE centre B in a peri-urban area**

This is a public centre established in 2004 by the KZN-Department of Education. The focus of the training programme is on both self-employment and wage-employment. The centre offers training courses in travel and tourism, ancillary health care, SMME and agricultural technology. The skills training programme focuses on wage and self-employment in the informal sector. According to the programme booklet, the overall goal of the NFE centre is to increase household income, improve living conditions of the graduates through skills training, self-employment and wage-employment. The specific objectives of the centre are:

- To empower unemployed adults by providing them with livelihood skills and knowledge to enable them to become self-reliant;
- To provide adult with training in vegetable farming, managerial skills, and equip them to manage a business;

- To assist the graduates in the formation of self-help groups or co-operatives, and to educate them how to apply for business loans/credits.

#### **4.2.3 NFE centre C in a rural area**

This public NFE centre provides skills training programme for self-employment. The centre offers skills training courses in agricultural technology and SMMEs. According to the centre's booklet, the centre aims at training adults in small scale farming and entrepreneurship development. The objectives of the centre are:

- To empower unemployed adults by providing them with livelihood skills and knowledge to enable them become self-reliant;
- To provide adult graduates with training in vegetable farming, managerial skills, and equipment to manage business;
- To assist the graduates in formation of self-help groups or co-operatives, and to educate them how to apply for business loans/credits.

#### **4.2.4 NFE centre D in an rural area**

This a private NFE managed by an NGO whose the skills training programme focuses on self-employment. The centre offers training courses in agricultural technology, SMMEs and co-operatives. According to the annual report, the goal of the centre is to promote and develop entrepreneurs for sustainable small businesses at the same time. The centre trains adults interested in creating micro-enterprises and co-operatives; as well as potential entrepreneurs with a business idea. To develop entrepreneurship, the centre assesses the target group's objectives and type of informal business, then learners undergo a non-formal skills training in business. The business skills trainings entailed teaching basic knowledge in entrepreneurship, book-keeping, simple business management, marketing and financial management.

#### **4.2.5 NFE centre E in an urban area**

This NFE centre is managed by is a faith-based organisation based in a rural area. According to the NGO booklet, since it was established in 1992, the centre aims at meeting the skills training needs of the poor and empowering the disadvantaged in KwaZulu-Natal. The skills training within the

NGO are part of empowerment programmes which aim at providing skills, jobs and mentorship. The empowerment programmes seek to raise up well-equipped entrepreneurs running sustainable businesses in a number of sectors, and provide training and mentorship opportunities for learners in starting up small and micro-businesses. The centre provided skills training in fashion design and sewing, computer literacy and crafts.

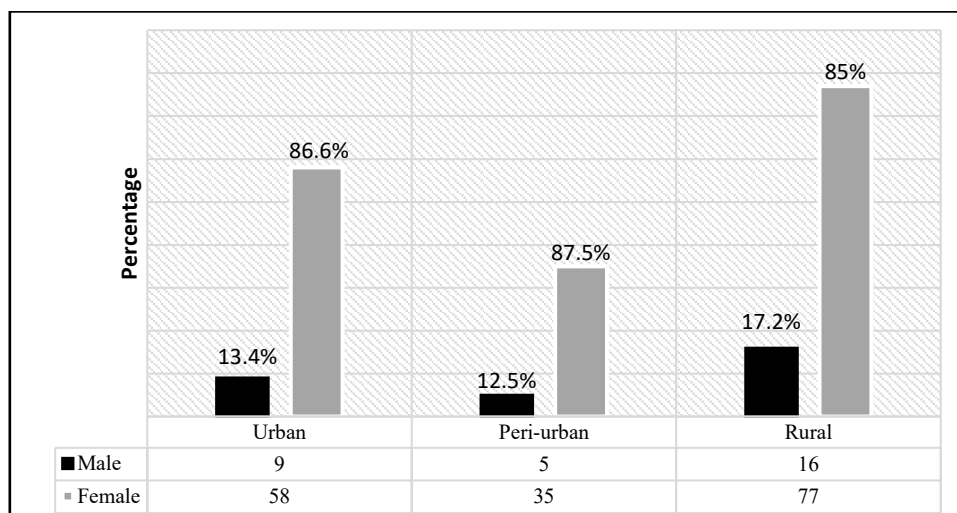
#### **4.2.6 NFE centre F in a peri-urban area**

This centre is managed by a church-based CBO in a township and was established in 2003. The centre aims at developing the livelihood skills of the youths and adults so that they might find employment within the local community. It provides skills training in fashion design and sewing, and crafts to unemployed citizens. The aim to provide technical and business skills is to enable youth and adults to become self-reliant. To this end, the centre assists the graduates in forming self-help groups or co-operatives, and educates them how to apply for business loans/credits

According to the annual report and course design documents of the centre, the skills training programme is structured on two phases, namely adult literacy and skills training. Once learners completes the literacy programme, they are registered for sewing or craft skills training. Within the skills training programme, each course is subdivided into competence skills learning areas. For instance, for each month the centre allocates learning activities such as a proper use of the sewing machine and its maintenance, cutting the materials and fashion designing. The programme consists of a practical component of on-the-job training. The first component of the programme is to teach technical skills, followed by business skills training enabling graduates to start their own small businesses.

#### **4.3 Demographic characteristics of the graduates**

This section provides the graduates' profile as this may affect the approaches of training delivery, skills acquisition and the effectiveness of adult NFE programme. The section looks at the distribution of the graduates according to gender, age, marital status and educational achievement. The analysis of the data revealed that the racial composition of the graduates was only African, which implies that the African population dominated all NFE centres selected for the focus and purpose of the study. Chart 4.1 presents the analysis of the respondents according to the sex distribution of the graduates according to the centre areas.



**Chart 4.1: Sex composition of graduates by centre area (n=200)**

In general, Chart 4.1 reveals that the great majority (85%, 170/200) of respondents were women as compared to 15% (30/200) who were men. The analysis of the findings according to the centre areas indicates that in the urban area, the sample consisted of 13.4% of males and 86.6% of females. In the peri-urban area, male graduates were 12.5% and 87.5% of them were females. In the rural area, males were 17.2% while females were 82.8%. Within the male gender, the analysis of the findings reveals that 30.0% were from urban centres, 16.7% were from peri-urban centres and 53.3% of graduates were from rural centres. This means that most male graduates came from the rural areas. Though there is no gender discrimination in the provision of NFE programmes in KZN, the findings indicate that females dominate the NFE centres. However, in the context of South Africa and specifically in KZN province, the uneven gender representation may also be explained by cultural and social factors.

As one of the NFE environments, age categories of the graduates could also impact on the training delivery. The analysis of the respondents' age reveals that only 15% (30/200) were between 18 and 24 years old. Other age cohort was 26-35 comprised 33.5% of respondents; 35.5% of the graduates were between 35 and 45 years, 13.3% of them were between 46 and 55 years. Only 5% were older than 55. The age cohorts 18-25 and 26-35 years constitute a youth group and working age, which may have access to formal skills training at colleges. The enrolment of young citizens in NFE centres indicates that some of the training courses are significant for job.

It was also significant to examine the marital status of the respondents in relationship to the age cohort in order to determine their family responsibilities. Marital status can have a positive or

negative impact in the process of the skills acquisition in the NFE centres. On positive side, those married and unskilled individual with family responsibilities will be keen to learn and acquire relevant skills in order to utilise them profitably in the labour market in order to provide food for their dependents. In other words, they are driven by the need to support their families after graduating. On the other side, family responsibilities can hinder learning process due to absenteeism. Table 4.1 presents marital status of the sample learners by age cohorts.

**Table 4.1: Marital status of the sample graduates by age cohorts (n=200)**

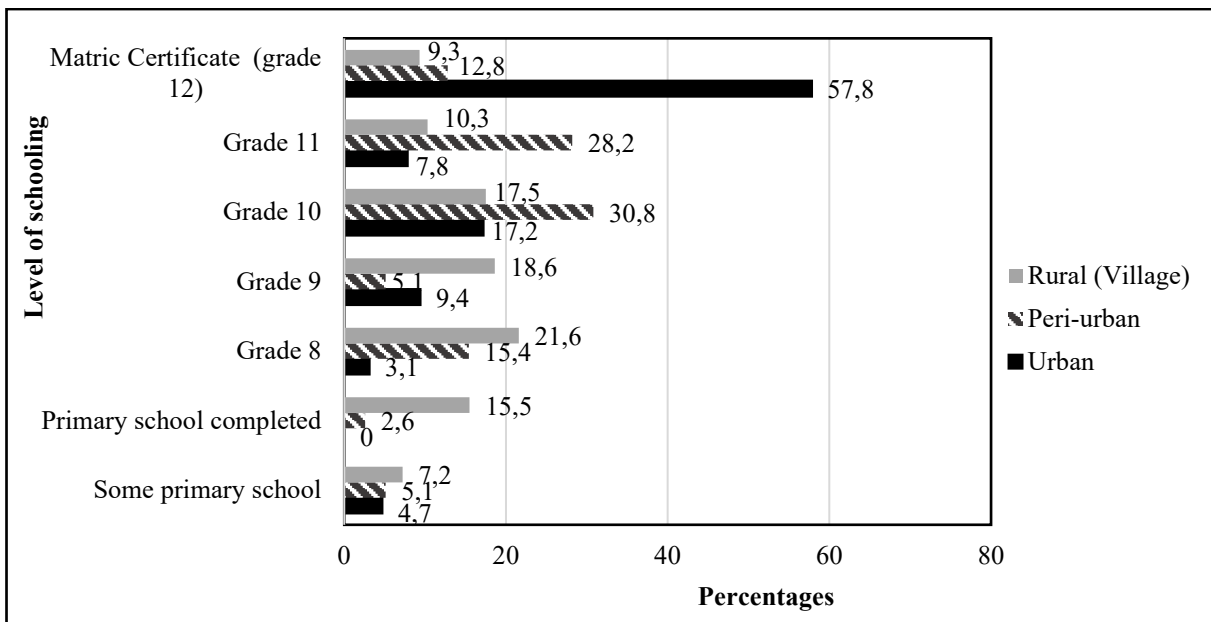
Marital status	18-25		26-35		36-45		46-55		56 and above		Total sample	
	n	%	n	%	n	%	n	%	n	%	n	%
Single	28	14.0	54	39.7	44	32.4	7	5.1%	3	1.5	136	68.0
Married	-	-	8	18.2	23	52.3	13	29.5	-	-	44	22.0
Divorced	1	0.5	1	0.5	-	-	3	1.5	-	-	5	2.5
Widow/widower	-	-	1	11.1	4	44.4	2	22.2	2	1.0	6	3.0
Living with a partner	1	0.5	3	1.5	-	-	2	1.0	-	-	6	3.0
<b>Total</b>	<b>30</b>	<b>15.0</b>	<b>67</b>	<b>33.5</b>	<b>71</b>	<b>35.5</b>	<b>27</b>	<b>13.5</b>	<b>5</b>	<b>2.5</b>	<b>200</b>	<b>100</b>

**Note:** Percentage within the total sample of 200 graduates

The analysis of Table 4.2 reveals that from the total sample, the majority of the learners were single (68%), and 22% were married. Only 2.5% of the graduates were divorced, 3% of them indicated to be single, and other 3% of respondents were living with partners. However, in the case of female learners, during the survey, many reported to be single parents having a range of dependents from one to four children and struggling to feed them because of poverty due to unemployment. In this case, aspiring for better life constitutes one of conducive factors for an effective adult learning.

In addition, the researcher looked at the level of the formal education each graduate had before enrolling for a training course at the NFE centres they attended. The aim of examining the highest level of formal schooling of the learners was to find out whether or not it helped the learners to easily grab some terms and concepts within a training course; thus constituting a conducive factor for skills acquisition. In some training courses a learner was required to have a certain level of basic education as a selection criterion before enrolling for skills training programmes. Chart 4.2 presents highest levels of formal schooling of the learners by residence areas.

**Chart 4.2: Highest level of formal schooling of the graduates by residence areas (n=200)**



Generally, the analysis of Chart 4.2 reveals that only 25.5% (51/200) completed a matric certificate of South Africa, which is equivalent to General Certificate of Education. Next, 33% (66/200) of the graduates completed grades 10 and 11, which allows for admission to TVET Colleges in South Africa. For the purpose of the present study, 58.5% of graduates who completed grades 10, 11 and 12 are an indication that they were likely to understand the content of the training course. This finding implies that these graduates likely could outperform others with education achievement below grade 10. Chart 4.2 again reveals that 16% of the graduates had some primary school, 8% completed primary school, and 14.5% of them had Grade 8 level of basic education and 13% of respondents indicated that they left formal education system after Grade 9. It is possible that this low level of education achievement could have impeded these graduates from adapting to different teaching and learning approaches for skills acquisition, hence causing them to struggle in learning environments.

The analysis of the highest level of formal schooling of the graduates according to the residence areas shows some uneven distribution. A significant number of graduates (57.8%) from urban areas had completed Matric Certificate (grade 12) before enrolling for NFE programmes. Those graduates from peri-urban areas constituted 12.8%, while in rural areas comprised 9.3% of graduates. The analysis of the highest level of formal schooling of the graduates suggests that the uneven level of educational achievement prior to enrolment at NFE centres could present a challenge in teaching and learning process. It might be difficult to teach technical skills to learners

with Matric Certificate together with those who have some primary school. They might not learn at the same pace nor acquire skills at the same level.

In summary, in the context of this present study, the findings on demographic characteristics of the graduates reveals three important challenges. Firstly, the dominance of female and African graduates in all centre areas implies that the NFE programmes are not inclusive in terms of gender division in KZN. The strong intake of women in **NFE programmes** may be explained by the fact most of the training courses result in soft skills (see Table 4.2 below on graduates' skills training course studied). Therefore, female graduates would select skills that lead to home-based work, such as ancillary healthcare, sewing, etc. Some of the training programmes offered at NFE centres keep men from enrolling for specific training courses. The inference from the first challenge is that a type of the training course may keep men from studying.

The second challenge is the imbalance between highest levels of formal schooling of the graduates (see Chart 4.2). As already explained in the previous paragraph, the analysis of the findings in Chart 4.2 reveals that **learners who may be quick to learn skills due to their prior formal education achievement may feel they are delayed or held back by the slow learners**. This challenge may result in conflict between quick and slow learners during the process of learning, hence creating a disabling factor for skills acquisition. As the analysis of Table 4.1 reveals, the third challenge concerns the mixture of younger learners (18 years old) and older of learners (56 years and above) who may feel uncomfortable to learning skills with younger ones, considered as their children. From cultural perspective, age gap between the learners can hinder the learning process for skills acquisition.

These findings on three **possible** main challenges had an impact of the whole system demonstrated in the Figure 1 of the conceptual framework. The challenges **would possibly** mostly impacts on the transformation process of the component of systems approach of NFE delivery environments for skills acquisition (see Figure 1 of **Chapter Two**). These challenges **might** not allow the trainers to utilise some specific set of teaching approaches, with various tactics because of uneven age and formal education achievement. As the training delivery approach for skills acquisition consisted of combining technical skills with business skills in some NFE centres, the slow learners with low formal schooling may hold back the learners with high and formal school achievement.

#### 4.4 Graduates' skills training courses studied at the NFE centres

The document analysis (project documents) reveals that in the majority of the centres under investigation, skills training courses mainly focused on enabling adult learners to become self-employed which a few of them aimed at training for wage employment at low-skills levels in both private and public sectors. In connection with the focus of the present study, the objective of the training programmes guided the NFE centres to utilise the relevant training delivery approaches and resources contributing to skills acquisition for specific skills training course. This section presents the categories of skills training courses provided in each centre by geographical areas.

The analysis of the training courses offered would help determine whether a specific skills training course would be relevant to adults living in a related geographical setting, and thus serves as one of the factors of effective learning for adults. Table 4.2 below presents the training courses graduates studied according to areas. It is significant to mention that in some NFE centres graduates studied more one training course; this is why the total number of responses is 271 instead of 200 graduates (see footnote 1).

**Table 4.2: Graduates' skills training course studied by residence area (n=200)<sup>1</sup>**

Skills training course	Within total sample (n=200)		Urban (n=64)		Peri-urban (n= 41)		Rural (n=95)	
	n	%	n	%	n	%	n	%
<b>Agricultural technology</b>	55	27.5	-	-	-	-	55	57.9
<b>Ancillary health care</b>	52	26	3	4.7	19	46.3	30	31.6
<b>Small medium and micro-enterprises</b>	31	15.5	11	17.2	1	2.4	19	20
<b>Travel and tourism</b>	6	3	3	4.7	3	7.3	-	-
<b>Information and computer technology</b>	27	13.5	24	37.5	1	2.4	2	2.1
<b>Craft</b>	24	12	2	3.1	9	22	13	13.7
<b>Sewing and fashion skills</b>	42	21	27	42.2	12	29.3	3	3.2
<b>Poultry</b>	17	8.5	-	-	-	-	17	17.9
<b>Co-operative</b>	17	8.5	17	26.6	-	-	17	17.9
<b>Total</b>	271		87		45		156	

A general view of Table 4.2 reveals that more graduates registered for some training courses than others. What informs their choices on training courses is their main expectations after graduating from NFE programmes informed their choices (see Section 4.4 and findings from interviews

<sup>1</sup> Frequency in the Table 4.2 reflects responses of a multiple questions and refers to the number of times each training course was mentioned by a graduate. Although few graduates indicated only one of nine skills training courses, there were many who ticked more than one course.

below). Many graduates in rural areas (27.7%, 55/200) studied agricultural technology, followed by ancillary health care (26%), and sewing and fashion skills (21%). The distribution of skills training courses studied by residence area shed more light on the reason for preferring one course than another. **The majority of the graduates** in urban areas (42.2%, 27/64) and peri-urban (29.3%, 12/41) enrolled for sewing and fashion skills.

The analysis of the findings in Table 4.2 reveals that in the rural areas, 57.9% (55/95) of the graduates studied agricultural technology, and 31.6% (30/95) of them enrolled for ancillary health care. Co-operative training was selected by 26.6% (17/64) of the graduates in one urban NFE centre and other 17.9% (17/95) of graduates were from one centre located in a rural area. Nevertheless, it is understandable to find that poultry was studied only in the rural areas in the form of NFE by 17.9% (17/95). Interviews with the graduates revealed that the reason for choosing agricultural technology and poultry training is linked to the availability of farming lands and facilities to breed the chicks. The analysis of the training courses studied by the graduates reveals that they require practical **components** of the training.

The duration of the training differed **by the types** of the centres (public or private) and **the specific training courses**. The document analysis revealed that the majority of the NFE centres provided the training **courses over 12 months**, meaning **a** whole year. However, for a short course in handcraft, the duration was three months, coupled with post-training support in small business incubation. In the case **of a training** course in information and computer technology, the duration was of three months combined with three extra weeks for self-practice in the computer lane to allow learners to get more experience. These extra weeks of skills practice gave **a chance to** the learners who intended to use the computer skills in the wage-employment. For learners who studied small medium and micro-enterprises (SMME) in the private NFE centres, trainers used to organise workshops on quarterly basis as a process of business incubation. The connection between graduates' skills training course studied and residence area was based on main expectations after graduating from NFE programmes.

#### **4.5 Graduates' main expectations after graduating from NFE programmes**

Adult learners are motivated when they know why they should learn a training course and what will be the outcome after completing it. Therefore, they will spend a significant **amount of time and great energy analysing what** they would benefit from learning a particular training course **at a NFE** centre and the disadvantages of them not learning it. They prefer to take a course which is based on

valid needs and reasons for learning at particular time and place. If the benefits of learning are clearly explained and learning activities are based around real work experiences, then adult learners actively engage in the process of learning.

In the case of the present study, graduates enrolled for a training course with expectation to meet certain needs of life. In this connection, in the questionnaire, graduates were asked to indicate whether the trainers or centre manager asked about his/her own expectations. The finding reveals that 50% (100/200) of graduates agreed that they were asked about their own expectations from learning including goal and objectives. Table 4.3 presents graduates' expectations from NFE according to their skills training course.

**Table 4.3: Graduates' expectation from NFE by skills training course studied (n=200)<sup>2</sup>**

Skills training course	Total within training course		To find a job		To open an own small business		To continue with higher education	
	n	%	n	%	n	%	n	%
<b>Agricultural technology</b>	55	27.5	-	-	46	83.6	9	16.4
<b>Ancillary health care</b>	52	26	20	38.5	5	9.6	27	51.9
<b>Small medium and micro enterprises</b>	31	15.5	8	25.8	15	48.4	8	25.8
<b>Travel and tourism</b>	6	3	5	33.3	-	-	1	16.6
<b>Information and computer technology</b>	27	13.5	21	77.8	2	7.4	4	14.8
<b>Craft</b>	24	12	3	12.5	20	83.3	1	4.2
<b>Sewing and fashion skills</b>	42	21	12	28.6	27	64.3	3	7.1
<b>Poultry</b>	17	8.5	-	-	17	100	-	-
<b>Co-operative</b>	17	8.5	-	-	17	100	-	-
<b>Totals</b>	271		69		149		53	

**Note:** Percentage within the training courses as some learners selected more than one course.

The analysis of Table 4.3 shows that among 27.5% (55/200) of graduates who studied agricultural technology and were located in rural area, 83.6% (46/55) hoped to open an own small business after graduating. The other 16.4% expected to continue with higher education at higher institution or TVET College. Responses for open question of the questionnaire indicated that the reality is that the majority of the graduates wanted to start their farming projects with the assistance from government agencies in terms of start-up capital. With regard to ancillary health care (26%,

<sup>2</sup> Frequency in the Table 4.3 reflects responses of a multiple questions and refers to the number of times each training course was mentioned by a graduate. Although few learners indicated only one of nine skills training courses, there were many who ticked more than one course.

52/200), 38.5% of the graduates **hoped** to find a job in the public or private sectors; 9.6% intended to create an own small business; and over half (51.9%, 27/52) expected to continue with higher education.

It is a **surprise to see that, of graduates who studied small** medium and micro enterprises (SMME), only 48.4% (15/31) intended to create own small businesses after completing the course. Others expected to find job or to continue with higher education. Among learners who studied craft, 83.3% expected to open an own small business. **However, 64.3% of graduates** who studied sewing and fashion skills (21%, 42/200), 64.3% of them intended to open a sewing workshop. This is why they also needed to acquire business skills and knowledge to run a small business. All those who studied poultry and co-**operative courses** expected to open a micro-enterprise in their specific area of training. So in total, 74.5 % (149/200) of graduates expected to start their own small businesses.

The qualitative findings also reveal that **graduates between 36 and 55 years old** from public or private centres, rural, peri-urban and urban areas who could not further their studies at TVET colleges, were expecting to open an own small business after graduating. A woman graduate of 45 years **from a public NFE centre in an urban area** said the following:

*I attended the training at our adult centre **so as to** gain skills, which would allow me to start a small business in our community. I wanted to become a self-employed in order to support my children with food and send them to school of good education. I decided to study SMME together with other courses, as it was required from the educators. Now I have completed my training, but I ask myself what business knowledge have I gained? The centre did not help me to start a small business. What I have benefited from our adult centre is only a certificate in adult education.*

A second graduate **from a** public NFE centre in **a** peri-urban area whose expectation was to open a small business said:

*As I was not qualified for a wage employment or any economic activities, I saw opportunities in our community to initiate profitable business in sewing women's clothes. Then, I joined the skills training programmes and registered for sewing and fashion design skills. I wanted to become a self-employed woman. I was thinking of being involved in sewing and fashion business. At very young age, I started to learn sewing from my mother.*

A third woman graduate from a private centre in a rural area who studied agricultural technology and SMME also reported by saying:

*I joined the adult training centre like other women in our community and selected to learn agricultural technology and SMME for one reason. I was already 48 years old and no one could employ me anymore. The only way I could survive and support my kids was to start a small business. When we completed the skills training, our trainers advised us to initiate poultry and vegetable co-operative.*

These qualitative findings are concurrent with quantitative ones that many learners joined the NFE programmes having clear needs and objectives. Both findings from questionnaire and semi-structured interviews with five respondents confirmed that the expectation of older graduates (between 36 and 55 years old to become involved in for self-employment in micro-enterprises after graduating. The combined analysis of the quantitative finding in Table 4.3 and the qualitative data from interviews (above) suggests that these adult graduates were interested to learn skills that would help them meet their needs and objectives. Therefore, they were keen to contribute to the learning process in order acquire skills and knowledge in a specific training course of interest.

The significance of examining expectations of graduates in relation to skills training course is to explore the challenges a trainer could face when delivering a training course to learners whose objectives differ from one graduate to another. For example, graduates who intended to find jobs in the public and private sectors would probably desire to see the connection between the approaches of training delivery and what prospective employers prefer as skills and abilities. Those whose expectation was to open an own small business or micro-enterprises would like the teaching and learning approach to be more practical and coupled with entrepreneurship skills in order to become independent workers in the informal economy. For the graduates who intended to continue with higher education, they probably would prefer the approach be academic-oriented in order to prepare them for final examination and get a certificate. Having raised these challenges, the next section will analyse the training delivery environments for skills acquisition to suit the three expectations of the NFE learners.

## **4.6 Training delivery internal environment for skills acquisition**

The purpose of this section is to answer the first research question concerning the approaches the NFE centres used for training delivery for skills acquisition, according to the **graduates' views**. In this regard, the researcher sought the view of the graduates as the target of the teaching and learning process. Because the researcher analysed data on the training delivery using of NFE programmes follows the steps of systems approach discussed **in Chapter Two**, which entails inputs, a transformation process, outputs and environment, the section presents human and material resources (inputs) for NFE delivery. Next, approach of training delivery for skills acquisition follows. As the first component of the systems approach to NFE teaching and learning, inputs lay a good foundation for the transformation process and outputs. For the focus and purpose of the present study, the outputs or results consist of skills acquisition and the learners' ability to work without supervision after acquiring skills.

### **4.6.1 Human and material resources for course delivery at NFE centres**

**The challenges in or the availability** of human and material resources can affect the effectiveness of the approach of training delivery for skills acquisition from NFE centres. However, this subsection does not present findings on financial resources, which is also very important, due the difficulties in accessing the data from the centre managers and ethical challenges. For the purpose of this study on delivery approach, the human resources entail qualified and skilled trainers in the field of adult education and training. As **discussed in Chapter Two**, the material resources entail the availability of teaching and learning materials in the NFE centres, instructional equipment and classroom infrastructures (including workshops) adapted to transmit the skills to adult learners.

**In the survey questionnaire**, graduates were asked to indicate the extent to which they agreed or disagreed with each listed statement about the availability of human and material resources at their respective NFE centres. Table 4.4 presents the human and material resources of NFE centres for skills acquisition.

**Table 4.4: Human and material resources for course delivery (N=200)**

Skills training course	Public centres (n=106)						Private centres (n=94)					
	Agree		Neutral		Disagree		Agree		Neutral		Disagree	
	n	%	n	%	n	%	n	%	n	%	n	%
Centre has sufficient learning materials for theory classes	19	17.9	2	1.9	85	80.1	68	72.3	19	20.2	7	7.4
Centre has sufficient learning materials for practical classes	5	4.7	11	10.4	80	75.4	62	65.9	18	19.1	14	14.5
Centre has sufficient basic tools and equipment in the workshop	17	16	12	11.3	74	69.8	63	67	9	9.6	6	6.3
There is a link between learning content and workplace	15	14.2	34	32	57	53.8	62	66	17	18.1	15	16
Teachers are motivated	67	64.4	7	6.6	16	15	65	69.1	10	10.6	19	20.2
Centre has qualified teachers	72	69.2	6	5.6	28	26.4	61	65	15	16	18	19.1

**Note:** The percentages are within the type of the NFE centre

Material resources of NFE centres play a major role in determining the training approach a trainer will use to transfer skills to the learners. To this end, in the survey questionnaire, graduates were asked to agree or disagree on statement regarding human and material resources and crosscheck their responses through the linkage between material utilisation in teaching and the workplace. With regard to public centres, as reflected in Table 4.4 above, graduates were asked to agree or disagree whether the centres had sufficient learning materials for theory classes. Responses indicate that 80.1% (85/106) of the graduates disagreed that their centres had sufficient learning materials for theory classes (not textbooks). Only 17.9% (19/106) of graduates agreed with the statement and 1.9% of them were neutral. Similarly, 75.4% (80/106) of the graduates disagreed that their centres had sufficient learning materials for practical classes. In addition, 67.5% of them disagreed on the statement.

Still on the public centres, graduates were asked to agree or disagree whether their centres had sufficient basic tools and equipment in the workshop. A large number (69.8%, 74/106) of graduates disagreed with the statement, and only 16% agreed that their centres had workshops furnished with sufficient basic tools and equipment. In order to test the reliability of their response, graduates were also asked for their views on whether there was a link between learning contents and work place. The statement also aimed at cross-checking the availability of materials and their utilisation in the teaching and learning process. Only 14.2% (15/106) of the graduates agreed on the statement, 33 % of them were neutral, and 53.8% (57/106) disagreed with the statement.

Thus, in the public centres **in the opinion of graduates**, there was insufficient link between learning contents and work place. In relation to the conceptual framework in terms of resources (inputs), these findings reveal the centres did not have adequate material resources entail the availability of learning materials, teaching tools, instructional equipment and classroom infrastructures adapted to transmit the skills to adult **graduates**. However, there were positive findings regarding the availability of qualified and motivated trainers which might contribute to the effectiveness of the training delivery approaches for skills acquisition. The findings revealed that 64.4% (67/106) of graduates agreed that the centres had qualified teachers, **whilst only** 15% of them disagreed **with the** statement. In addition, 69.2% (72/106) of respondents agreed that their teachers were motivated in the delivery the training courses, whether during theory in class, during practicum in the **workshop, or in fieldwork.**

With regard to private NFE centres, respondents were asked about their views on whether the centre has qualified teachers in the specific training course. The findings in Table 4.4 above reveal that **65%, (61/94) of graduates** agreed that their centres had qualified teachers, **and** only 19.1% of them disagreed on the statement. In addition, 69.1% (65/94) of respondents agreed that their teachers were motivated in delivery **of** the training courses, whether during theory in class, during practicum in the workshop, or in fieldwork (agricultural technology course), and 20.2% disagreed **with the** statement. While these finding on human resources are similar in both public and private centres, it is noteworthy to mention that trainers in the private centres had work experience in the industry. The analysis of evidence from the documents of training implementation and annual reports revealed that the private centres hired experienced trainers within the communities and NGO partners to teach specific training courses in the classrooms and workshops.

Concerning material resources in the private centres, 72.3% (68/94) of the graduates agreed that their centres had sufficient learning materials for theory classes. Only 7.4% of graduates disagreed on the statement and 22.2% of them were neutral. Likewise, 65.9% of the graduates agreed that their centres had sufficient learning materials for practical classes. However, 14.5% of them disagreed on the statement. A large number (67%, 63/94) of graduates agreed that their centres had workshops with sufficient basic tools and equipment. Only 6.3% disagreed on the statement. In contrast to public centres, the quantitative findings revealed that private centres had probably sufficient materials and workshops for practical training sessions (see Table 4.4 above). Furthermore, during semi-structured interviews, four out of five graduates who studied in the private NFE centres reported that their centres had sufficient training materials as opposed to public

centres. One female graduate from private NFE centre in the urban area mentioned the following regarding the availability of material resources:

*The training programme consisted of technical or practical skills in sewing and of business skills related to our training areas. With regard to the technical skills training, all the resources and materials for practical training were in the centre's workshop. Trainers focused on each learner to ensure that no one was left behind in understanding a particular task related to skills.*

A male graduate from a private centre in the rural centre stated the following:

*With regard to agricultural course, the centre received donation from an NGO to buy training materials for practical works in the farm. We received seeds and tools for the gardening project from the government.*

A **woman respondent** from a public centre **in a peri-**urban area reported the following:

*Our centre only has a room furnished with seven computers. It does not have workshops or farm for practical sessions. Our centre manager told us that it was very difficult to continue with our skills training programme because the centre lacked financial support to buy training materials and equipment.*

As inputs, human and material resources presented in this sub-section constitute the first step of the system approach of the adult NFE programme. According to the findings in Table 4.4 and qualitative findings, the majority of private **centres and few public centres** had sufficient materials for technical skills learning. In relation to the conceptual framework (**systems approach**), the significance of analysing the resources is that they lay a good foundation for skills teaching and learning process for skills acquisition. In other words, the majority of the graduates who studied in the private centres reported that their centres had sufficient basic tools and equipment in the workshops. The effect of the availability of human and material resources on training delivery is further discussed in the next section on transformation process for skills acquisition.

#### 4.6.2 Transformation process of NFE programme for skills acquisition

This sub-section 4.5.2 presents and analyses the findings on the transformation process of the system approach of the conceptual framework as outlined in Figure 1 of the conceptual framework discussed as the constructivist approach of learning (see Chapter 2., Section 2.3- Constructivist approach of learning). The tasks of NFE trainers involve applying various resources available for an effective skills delivery. The interaction between adult learners and trainers is a component of **the learning** process by which graduates become skilled individuals capable of utilising the skills in the world of work. Therefore, the purpose of this sub-section is to examine the approach of training delivery for skills acquisition **from the graduates' view point**. In other words, it focuses on presenting the views on the learning **in the classroom**, workshop or during field trips (learning process). **The researcher** compared these learning methods with the main their expectations after graduating from respective training courses (see section 4.4 and Table 4:3- Graduates' main expectations after graduating from NFE programmes). Specifically, the researcher attempted to find out whether the learning activities could help learner meet their expectations outlined above.

In this regards, during interviews, graduates were asked to indicate the extent to which they you agree or **disagree with statement about** the specific learning methods and activities used by their trainers. Table 4.5 below present the approach of training delivery by type of NFE centres. Public centre means the adult education and training centres managed by the provincial Department of **Education**, while private centres are those run by non-profit organisations such as NGOs, CBOs and Church.

**Table 4.5: Approach of delivery of training courses by type of NFE centres (n=200)**

Statement on the training approach	Public NFE centre, n=106						Private NFE centre, n=94					
	Agree		Neutral		Disagree		Agree		Neutral		Disagree	
	n	%	n	%	n	%	n	%	n	%	n	%
Learners have adequate time to practice skills at centre during training	40	37.7	8	7.5	58	54.7	83	88.3	4	4.3	7	7.4
Trainers use well the practical component of the skills training	28	26.4	17	16.1	61	57.5	74	78.7	8	8.5	11	11.7
Attention is given to link training and industries or workplace	20	18.9	9	8.5	77	72.6	64	68.1	6	6.4	24	25.5
The training consist of 75% practice	15	14.2	31	29.2	60	56.6	65	69.1	8	8.5	21	22.3
The training consist of 25% theory	14	13.2	17	16	75	70.8	5	5.3	7	7.4	82	87.2
Training focus on technical skills only	77	72.6	12	11.3	19	17.9	20	21.2	9	9.6	65	69.1
Each training focuses on both technical skills and business skills	23	21.7	19	17.9	66	62.3	75	79.8	5	5.3	14	14.9

**Note:** Percentage within respondent group

It was important to compare the approaches of training delivery across the two types of centres and determine which type utilised a suitable approach for skills acquisition to the graduates. Starting with the public centres, respondents were asked to indicate their views on whether they had adequate time to practice skills at their centres during the training period. The responses in Table 4.5 indicate that 37.7% (40/106) of the graduates agreed on the statement, and over half (54.7%, 58/106) disagreed that graduates had adequate time to practice skills at the centre during training. Similarly, only 26.4% of graduates agreed that trainers used well the practical component of the skills training well and 57.5% of them disagreed on the statement.

With regard to linking the learning approach to the real world of work, 18.9% of graduates agreed that during the learning process attention was given to linking training to industries or workplace. Whilst, 72.6% of them disagreed on the statement. In relation to the transformation process as an element of the systems approach in the conceptual framework, these findings reveal that the trainers of private centres did not adequately use the practical component of the training delivery approach to allow graduates to become skilled individuals (outputs of the systems), capable of utilising the skills in the world of work.

It was also important to analyse the time allocated between practice and theory in the public centres. Therefore, graduates were asked about their views on whether the training consisted of 75% of the time of practice in the workshop, fieldwork or elsewhere outside the classroom. The findings indicate that only 14.2% of the respondents agreed that, “The training consists of 75% practice”. Whilst 60% disagreed with the statement. Furthermore, to check the reliability of these responses, graduates were asked whether they agreed or disagreed that “the training consist of 25% theory” in class. The findings indicate that 13.2% of the graduates agreed with the statement; yet 75% of them disagreed that “the training consist of 25% theory” in class. The response means that learners had to spend most of their times on theory lessons in the classrooms. With regard to the focus of the training between technical and business skills training, 72.6% of the graduates agreed that the training focus on technical skills only and 17.9% of them disagreed with the statement. Furthermore, only 21.7% of the graduates agreed that each training focused on both technical skills and business skills, while the majority of them (66%) disagreed that there was a combination of technical and business skills. So, connecting these findings to the transformation process of the systems approach, the inference is that the insufficient use of the practical component of the training delivery could impede graduates to acquire skills at benchmark level (outputs of the systems) for their utilisation in the labour market.

With regard to the private NFE centres, Table 4.5 reveals that there is a huge difference in terms of training delivery approaches. Concerning the time for practice, 88.3 % (83/94) of the graduates agreed that there was adequate time to practice skills at centre during the training period. The analysis of Table 4.5 reveals that 78.7% (74/94) of the graduates agreed that trainers used well the practical component of the skills training and only 11.7% of them disagreed on the statement. Concerning linking the learning approach to the real world of work, 68.1% of the graduates agreed that during the learning process the attention was given to link training and industries or workplace. Only 25.5% of them disagreed on the statement.

In the private NFE centres (see table 4.5), the practical component dominated on theory lessons in terms of time allocation. The findings in the table 4.5 reveal that 69.1% of the graduates agreed that “the training consists of 75% practice in the workshop” venue or fieldwork. Only 22.3% of graduates disagreed on the statement. With regard to the time allocated to the theory lessons, only 5.3% of graduates agreed that, “The training consists of 25% theory” in class. However, 87.2% of them disagreed that, “The training consists of 25% theory”. These findings in Table 4.5 mean that there was a limited time for the theory classrooms. Concerning the focus of the training between technical and business skills training, only 21.2% of the graduates agreed that the training focused on technical skills only; yet 69.1% of them disagreed on the statement. Likewise, 79.8% of graduates agreed that each training focused on both technical skills and business skills, while only 14.9% of learners disagreed that there was a combination of technical and business skills. In connection with the transformation process of the systems approach in the conceptual framework, these findings suggest that the majority of trainers in the private NFE centres delivered the courses by adequately using workshops and project-based training. Graduates thought they had enough time to practice at their centres and to acquire skills to be utilised in the labour market.

Qualitative data below provide the views of the graduates and a better understanding on the training delivery approaches used by some NFE centres. During one-on-one interviews, graduates were asked to explain how they were learning in classrooms using materials for practical lessons. A graduate from a private NFE centre who studied a sewing and fashion course and whose expectation was to open a tailoring micro-enterprise said:

*My good skills in sewing and fashion design are due to the practice of technical and business skills acquired at my skills training centre. My trainers prepared me for the world of work in the future small business. My trainers were paying special attention to individual*

*learners* in class and in the workshop. They made sure that no one is left behind in mastering particular skills before introducing a new skill activity within a subject. Within six months of training process, I became capable and confident in sewing any type of garment fashion and operating all types of sewing machines in the workshop.

This indicates that the approach of the training delivery in the private centres was practice-oriented. Similarly, graduates were asked to explain how they were learning using tools and equipment outside the classroom. A second graduate from another private NFE centre who studied agricultural technology and SMME reported the following:

*I believe that my success in starting and managing a co-operative is because of the methods our educators used to teach us skills as adult people. The technical and business trainings were more practical than theoretical in order to prepare us for our future jobs in small businesses. As part of the training, we used to visit some small businesses in the local community and talk to the owners.*

This quote from a graduate who studied in a private centre indicates that they were attending some lessons away from their centres in order to get an exposure to the external world of work. **In this private centre**, offering agricultural technology in a rural area, the trainers took practical work seriously like in other training courses. However, **it is significant** to compare this view from a private centre' graduate with another who studied the same course in a public NFE. **During the** interview, a female graduate of a public NFE centre and whose formal education achievement was **Grade 11**, angrily said the following to the researcher:

*When I chose to study agricultural technology at our adult centre, I **wanted to** create my farming project of cabbages, carrots and tomatoes. I would sell my produce to the shops like Checkers, Cambridge Food, Jwayelani and Checkout and Cambridge. However, our trainers never taught us practical lesson in some farms in our community in order to learner better. We were learning about fertilisers, how to plant any type of vegetable in classroom only without practice in the field or farms. I feel disappointed by our trainers and centre manager because I have studied agriculture for a year without having practical skills in farming. I have wasted my time.*

This quote from a graduate who studied agricultural technology **in a public** centre suggests that public centres did not **take seriously** the practical component of training delivery of agricultural technology **course as** in private NFE centres. However, a fourth woman **graduate, of an SMME** a public centre in an urban area reported that the training **had a** practical aspect. She said the following:

*Our trainers were teaching us practical way of creating and managing a small business. I can say that our training was half-practical and half-theoretical. For example, they used to show us how to attract customers and communicate with them. Sometimes we used to visit some small businesses in our township and ask questions to the owners about how they manage their small business.*

A fifth graduate **from a private** NFE centre in **an** urban area explained the approach of the training delivery in his private centre as follows:

*Our training at adult education centre was not strictly about fashion design and sewing; it was about many skills that could help us in practical life. Each day had specific skills to learn. We had a timetable. For example, on Monday we used to have lessons on computer skills related to fashion and design. On Tuesdays, our educators used to teach us how to interact with customers in our future micro-enterprises. On Wednesdays and Thursdays, they teach us the actual sewing skills both theory and practice in the workshop where there were machines and materials.*

This quote highlights a different approach of training delivery consisting of a well-organised teaching and learning process similar to formal education system. There was a learning activity for each day so that each learner could prepare himself or herself in advance to bring a learning contribution in the class session. The use of timetable could create a motivation for learning because adults need to know in advance what and why **to learn** something.

In summary, it is significant to mention that from the evidence **of the** quantitative data (see section 4.5.1 above) and interviews with five self-employed graduates (see section 4.5.2- Transformation process of NFE programme for skills acquisition) the difference in training delivery methods does not **depend** on the geographic areas of the NFE centres. As Table 4.4, Table 4.5 and findings from the interviews reveal, the difference in the training delivery for skills acquisition **seems to rest** on

the type of the centre, whether public or private centre. As Table 4.5 and the qualitative findings show, the approach to training delivery in the public NFE centres focused more on theoretical training than practical skills in workshops and field irrespective of whether the centres are located in urban, peri-urban or rural areas.

Graduates from private centres in urban, peri-urban and rural areas viewed that the approach of training delivery fostering skills acquisition was practice-oriented. In both quantitative and qualitative data, majority of graduates from private NFE centre and 40% of their colleagues from public centres reported that they had sufficient time to practice skills at the centre during training and the practical component of the skills training was well used. Moreover, the analysis of data from Table 4.5 (see the variable “each training focuses on both technical skills and business skills”) and interviews reveals that in some centres the approach consisted of combining technical skills with entrepreneurial training as strategies for self-employment of the graduates.

Moreover, the interpretation of Table 4.5 above reveals that for the private centres in urban, peri-urban and rural areas, the training delivery approach for skills acquisition of NFE programme encompassed the use of workshops, project-based training similar to the world of work and the visits to the workshops, businesses and industries. The interview quotes from these graduates also confirm the quantitative findings in the Table 4.5. The next sub-sections thoroughly interpret the findings in line with the key concepts of the constructivist approach mentioned in the conceptual framework in Chapter Two. These concepts are: interactive learning, collaborative learning, facilitating learning, authentic learning, learner-centred learning and high quality of learning.

#### **4.6.2.1 Interactive learning**

One-on-one interviews with the graduates revealed that the trainers utilised several methods to teach skills such as “brainstorming, small group works, group presentations, class tests and assignments, practical work in the workshops” (interview with a graduate from a private centre in an urban area). Another graduate from private centre in peri-urban area explained the teaching method by saying:

*The methods used in the classroom motivated me to learn more and more. My participation was high because our educators used to ask us to give our opinions on particular issue. I do not know about other learners, but on my side, the method of teaching was useful to me*

*in helping me learning. This is because it helped me gain knowledge of the tools and equipment used in agricultural job.*

This quote reveals that the training delivery approaches had the aspects of interactive teaching in the classrooms for some NFE centres. There was an interaction between learners and trainers. The quote also reveals that trainers used facilitated-learning techniques, which helped the learners to understand the sequence of skills acquisition. As a result, trainers were creating good learning environments for learners to participate in both theory and practical lessons by asking questions for more insight.

Furthermore, the analysis of other graduates' responses indicates that there was an interactive learning. During interviews, a graduate from a private centre in a rural area who studied poultry, cooperatives and craft mentioned that the “*understanding of the terms in poultry training course depended on the extent to which they were interacting among themselves in a group whether in whole class or during the practical session*”. This means that the graduates in private centres from all geographic settings, were not learning in isolation from others, but they naturally learnt in groups and work collaboratively in the workshop, field, etc. In all three private centres respectively situated in urban, peri-urban and rural areas, the interaction included group works, discussions among themselves or between students and the teacher.

#### **4.6.2.2 Collaborative learning**

Graduates in sewing and fashion design, agricultural technology, craft and ancillary healthcare reported that the majority of learning activities required collaborative learning. In other words, it was a cooperative learning through group work projects assigned by the trainers. During the interview, one graduate from a private centre in an urban area who studied sewing and fashion design said:

*We were given the project to create and sew a model of fashion. In order to find good and latest fashion for the ladies around the world today, we used to research on the internet. The next stage consisted of being creative in sewing the garment in matching the fashion with a suitable fabric, followed by a group presentation in class. As we participated in a group presentation and explained to our classmates about our work, we gain more understanding of the new skills and knowledge.*

The analysis of this quote reveals that this ‘collaborative learning’ approach of teaching and learning helped the adult graduates to pursue knowledge from peers who may play a role of mentors. The analysis of all interviews revealed that this cooperative learning approach helped the graduates acquire knowledge and skills because of group interaction. In this learner-centred approach, the advantage of grouping learners was the decrease of failure, humiliation for low performing learners. It also encouraged those learners who were weak to learn particular skills. Graduates from sewing and fashion design courses reported that they had group leaders who were also learners, but advanced in knowledge. In **the** view of the respondents, the collaborative learning helped the learners to seek knowledge from these group leaders who played **the role** of mentor. The usefulness of having learning mentors is that learners collaboratively exchanged ideas and skills among themselves.

#### 4.6.2.3 Facilitating learning

Findings from interviews revealed that some NFE centres **used a discussion** approach to help learners to share their experience acquired during practical lessons. The discussion approach was used in both public and private NFE centres in rural, an urban and peri urban areas. One graduate from private centre in an urban area reported the method by saying:

*Our educators were giving us a topic with the objective of discussions. For instance, we could discuss the difference on how to compete with Chinese traders of cheap clothes. Everyone in the class had to be involved in the discussions and our educators could ensure there was order, and suggested that every learner contribute. I can still remember, in some occasions, our educators used to divide us into small groups and assigned us to solve certain problems of small business management to one word day in Durban central. After presenting our views according to each group, at the end of the discussions, an educator used to clarify some key points and concluded the discussions.*

Another graduate **from a public NFE centre in a peri-urban reported** the learning method by saying:

*Our educators used to give us a topic on how to compete with Chinese in the fashion shops. The task during the group presentation in the classroom was to demonstrate our abilities to sew specific garments allowing the local people to buy our products rather than going to Chinese shops. Each group presentation ensured that it demonstrate how to sew good*

*quality products, which will be very marketable as compared to others in the community. At the end of discussions, our trainers used to comment on the quality of our presentation by providing more advice.*

As one can discover from this quote, the discussions took the form of problem-posing learning. The analysis of this quote reveals that the discussion method appears to be a good approach in adult learning. This is because it provided a better understanding of skills and knowledge through peer activities as learners were learning from their classmates. The other reason is that learners discussed topics related to their needs, objectives and interests, while owning the discussions. When the learners finished their presentations, the trainers used to “take the occasion to clarify any outstanding points and engage learners in discussions” (interviewee from rural area). The findings show that the training was about not only specific skills, but also focused on life skills that could help learners succeed in practical life. In facilitating learning, learners were discussing topics related to their needs, objectives and interests, while owning the discussions. The trainer’s role as a facilitator was to guide the learners to learn through learning activities by means of a variety of processing skills and approaches to achieve measurable outcomes.

#### **4.6.2.4 Authentic learning**

In the context of this study, authentic learning means that learning must be realistic in order to meet real life experiences of the learners. In other words, authentic learning mainly stresses that learning should be lifelike. The summary of semi-structured interviews with the graduates revealed that some of the learning activities were in the form of authentic learning. These activities helped the graduates to construct new meaning which was connected to the prior learning experience. For instance in fashion design and sewing, poultry, agricultural technology, ancillary health care and SMME courses, building on prior knowledge and skills acquired from home and community helped to master new skills. Graduates were also asked to describe how the learning was related to their needs and objectives. One graduate from a private centre in a peri-urban area mentioned the following:

*Our skills training programme consisted of learning technical skills in the first stage, which we did well in theory and practice. The next stage concerned the entrepreneurship training. We learnt how to manage our small businesses and market the products in the local community and elsewhere. As we were learning technical skills, our educators kept*

*informing us about small business opportunities in our communities and marketing strategies. They were advising us to try our best to sew good quality garments, which would be marketable in the community. During the training period, we also used to attend workshops on small business marketing.*

A second graduate who studied sewing and fashion design in a private centre in **an urban area** described the learning as follows:

*Our centre manager and trainers used to organise visits and workshops outside for us so we might learn new skills related to fashion design and sewing and gain experience. We often travelled to conferences, workshops and clothing industries. We also visited fashion shops and stores having the latest clothes fashions or models. The field visits to clothing shops and places helped us to connect acquired skills from our training centre to the world of work due to the practical exposures.*

A third self-employed graduate from a private centre **in an urban area reported** the following:

*Our training centre always organised workshops as a part of the intensive training in entrepreneurship. The training programme also involved field trip activities to visit different small businesses and companies. We used to attend seminars on technology and marketing support. The seminars also helped us connect with prospective financial supporters. This is because the type of support I needed to start a small business was start-up capital. The most needed support was money to buy good quality machines and to purchase fabrics.*

The analysis of these three quotes from graduates of private centres indicates that the learning approach also involved field trip activities. In view of the respondents, field trips provided opportunities for the learners to be exposed to people and events, which enabled their connection with other entrepreneurs in the same small business. From graduates' point of views, one can understand that learning comprised the elements of 'learning by doing' through trips, which is similar to experiential learning. The activities helped them to link new knowledge and skills to prior learning experience. Thus, the quotes reveal that the training delivery approach helped graduates to learn skills related to their real life or work experience. In other words, the approach

helped the graduates to learn skills related to their work experience already accumulated from their local communities.

#### 4.6.2.5 Learner-centred learning

Although all four previous approaches concern learning-centred learning, nevertheless, this subsection focuses on the ownership of learning process by the learners and problem-solving **method of learning**. There was a need for learner-centred learning due to two challenges arising from the difference in demographic characteristics and expectations of the graduates from both private and public centres. The first challenge concerns the highest level of formal schooling. Chart 4.2 above (section 4.2) reveals that 16% of the respondents had some primary school, 8% completed primary school, and 14.5% of them had Grade 8 level of basic education **whilst 13%** of respondents indicated that they **left the formal education** system after Grade 9. Other 25.5% of them **had** completed a matric certificate. These findings on the level of formal schooling of the respondents prior to enrolment presents a challenge in teaching and learning due **to the uneven** level of educational achievement. As mentioned earlier, it is difficult to teach technical skills to learners with Matric Certificate together with those who have some primary school achievements. These different categories of **graduates may not be able learn** at the same pace nor acquire skills at the same level. Some learners who are quick to learn skills due to their prior formal education achievement may feel being delayed or held back by the slow learners.

The second challenge might come from graduates' expectations after graduating from NFE programmes. **Graduates had** three major expectations namely, to find jobs in public or private sectors, to open own small businesses or to continue with higher education and training. These expectations could also influence the training delivery approaches in order to satisfy each category of the learners. For example, learners who intended to find wage employment would **probably** like the training delivery approach be connected to what prospective employers want as competence. In contrast, those whose expectation was to open an own small business would prefer the teaching and learning approach to be more practical and coupled with entrepreneurship skills. In this situation, the question is "How can a trainer develop a learner-centred learning approach, suitable for all categories of learners?"

During one-on-one interviews, learners were asked to explain how the learning process was related to their training objectives for learning. One female graduate from a private centre in **an urban area** **explained her** learning experience by saying:

*Our educators were teaching us gradually to ensure that every learner has demonstrated a competence in specific skills. Though we differed from one another in terms of education, social background and objectives of doing the course, our educators and mentors paid attention to an individual learner before moving to another technical skill activity. Within six months of training, I was able to sew any type of garments. I am very confident of utilising the skills in sewing and fashion design learnt from my skills training centre.*

Another graduates from a public centre in a **peri-urban are** who studied travel and tourism indicated that the trainers used a learner-centred learning approach. She reported the following:

*In the skills training areas, for example in travel and tourism subject, we studied theory in class, and on practical side of it we used to go to the travel and tourism centre to get more knowledge and experience about the industry. As the initiators of the idea, we felt that trips were beneficial for those who wanted to find jobs in the Department of Tourism. The visits at tourism centres helped us to understand the industries before applying for jobs in tourism centres.*

The quotes do not reveal the difference between public and private centres in terms of learner-centred learning. The analysis of these quotes reveals that ‘learner-centred learning’, in both types of the centres, enabled the learners to be active rather passive, a fact which facilitated effective learning. The interpretation that one can get from the quotes is that graduates became more active in gaining skills and knowledge. Through the process of learning, graduates became more conscious of skills and knowledge they were learning and why they were learning them.

#### **4.6.2.6 High quality of learning**

While the authentic learning consists of learning in lifelike environments and encompasses learning by doing through simulation-based learning, high quality of learning concerns the training in the workshops and real world of work. The analysis of quantitative data on private centres in Table 4.5

above (Approach of training delivery by type of NFE centres) and the qualitative data from interviews with graduates, who studied in private centres in urban, peri-urban and rural areas, as presented above, reveals that learners were able to acquire skills due to the training approach. This is “learning by doing” approach made possible in the workshops or training trips. As four graduates from private centres in the urban, peri-urban and rural areas pointed out during interviews, there was a mixture of theory (25% of the time) and on-the job practical training (75% of the time). In addition, the approach could facilitate a transfer from skills acquisition to skills utilisation in the workplace after graduation. The findings indicate that graduates who studied at private NFE centres in urban, per-urban and rural areas received higher level of education and training than those in public ones, irrespectively the geographic settings.

In summary, the training delivery approach at some NFE centres, mostly private entailed aspects of self-directedness, interactive and cooperation between trainers and learners. The findings show that in the existence of qualified human and material resources, the learning approaches were one of the contributing factors for skills acquisition. The findings also point finger at ‘facilitating learning’ used in fashion design and sewing course as a learning approach fostering learners to learn new concepts and skills in such a way that they freely contributed ideas to other learners in the class lessons. The next section will review the methods the NFE centres used to assess the skills acquisition by the learners.

#### **4.7 The methods of training assessment at the end of the training programmes**

Through semi-structured interviews with the graduates and analysis of NFE centres’ documents, the researcher intended to find out the type of training assessment methods utilised in the six NFE centres. Though the graduates could not identify the assessment methods used in their training courses, the researcher could discover the type of assessment through graduates’ explanations. In addition, the researcher analysed the documents directly related to the training programmes, such as course curriculum and design, the training manuals, annual reports, monitoring and evaluation documents. For the purpose of the present study, the assessment process would help to confirm whether a learner could demonstrate an ability to work at the standard expected for a certain job (for the centres whose main objective was training for to self-employment). To this end, the researcher looked at the information on the assessment methods of courses in information and computer technology, craft, and sewing and fashion skills as designed by NFE centres.

The analysis of course design document and monitoring and evaluation documents for all six NFE centres reveals that the final assessment (summative assessment) was conducted by the trainers attached to the centre or jointly with organisations working in partnership with the centres. Similarly, during interviews all five graduates reported that the assessment consisted of written examinations and practical assessments **irrespective of** whether the centre is **in an urban**, peri-urban or rural areas. Monitoring and evaluation documents revealed that three private centres out of six NFE centres under investigation used practical assessments in the workshops or fields (vegetable gardens). All five graduates interviewed reported that their respective NFE centres assessed them using observation in **workshops**, observation in simulated workplace, role-play, written examinations and short answer assessment. However, the assessment had no recognised certification. The graduates further mentioned **that at the graduation** ceremony the centre managers offered certificates of attendance reflecting the training course and the duration. Table 4.6 presents the themes as a **summary of the methods of assessment at NFE centres as analysed from the training documents and provided by five graduates during one-on-one interviews.**

**Table 4.6: The methods of assessment at NFE centres**

<b>Key themes</b>	<b>Description of assessment method</b>	<b>Tools for the assessment</b>	<b>Type of centre</b>
Observation in workshop	Learner performs real work activities at the workshop and shows processes and the steps to produce a product in the way taught. He/she must demonstrate specific skills.	Trainers instruct the learner what is expected as result. Then, trainers and other assessors observe the performance of the learner as they use a checklist.	Private
Observation in simulated workplace	Learner is involved in real work activities in a simulated work environment and proves the steps to produce a garment, artefact, or attract customers in business.	Trainers explain to the learner the objective of the test and the outcome. Assessors observe the performance of the learner using a checklist.	Private
Role-play	Learners were assigned roles and situations to produce responses to specific challenges (e.g. client complaints for sewed garment).	Trainers instruct the learners what is expected. Roles are explained to each learner involved in the assessment.	Private
Written and/or oral assessment	Trainer asks questions relevant to type of skills and knowledge studied. (e.g. “Please explain the steps of sewing machine maintenance.”).	For written assessment, trainers distribute questionnaire paper. For oral assessment, there was a list of set questions to choose from.	Private & public
Short answer assessment	Trainers set questions requiring one-paragraph answers.	Trainer explains to the learners how to answer the question in a concise paragraph.	Private & public

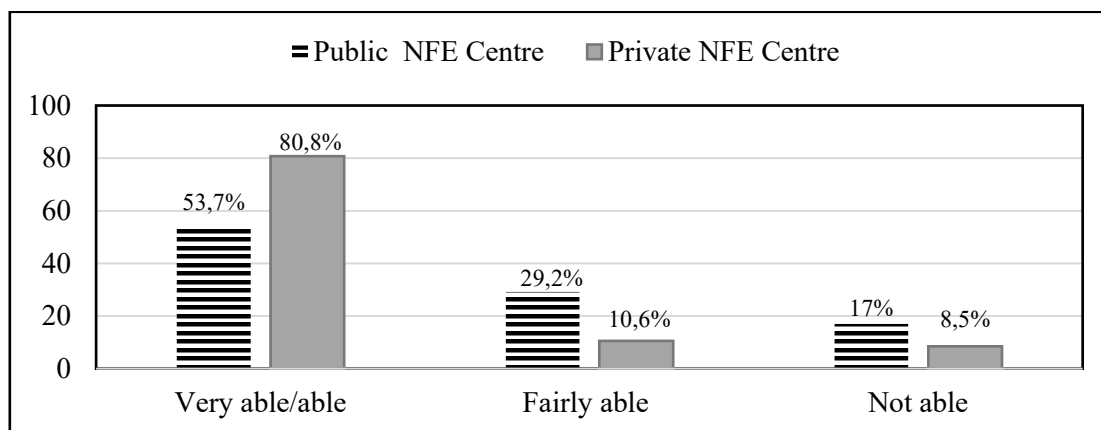
The analysis of the themes in the Table 4.6 reveals that NFE centres used various methods to assess the extent to which learners acquired skills. It was also important to have the views of the graduates on the training delivery. The next section will focus on the effectiveness of the training delivery approaches contributing to skills acquisition. It is important to mention that findings from one-on-one interviews revealed the trainers role-play assessment to test entrepreneurial skills acquisition. The setting or environment was structured situations in which adult learners had to demonstrate their abilities to deal with customers and solving business problems.

#### **4.8 Technical and entrepreneurship skills acquisition by the graduates**

This section presents data on the effectiveness of the training delivery approaches on skills acquisition on different courses in NFE centres. In order to examine the effectiveness of the training delivery environment, particularly, the approaches thereof, graduates were asked for their general view on the skills acquisition. To this end, the examination of skills acquisition in a particular training course focused on two significant indicators: the extent to which the graduates felt able to work for others without supervision, and business skills knowledge. However, it is important to note that the assessment of graduates' occupation in the labour market after the training programmes was beyond the scope of the study. The researcher understood that it would be very interesting for the reader to see how many graduates became wage employed or created their own micro-enterprises as the outcomes of the NFE programmes. A further study with broad focus would be needed to answer such questions. This is because many learners enrolled for NFE programmes with expectations of finding a job or opening an own small business (see section 4.2 and Table 4.3 above). In this section, the effectiveness of the training delivery approaches is limited to technical and business skills acquisition only.

With regard to technical skills acquisition by the graduates, the study examined the views of the graduates on the abilities and competence to utilise the skills acquired. It is significant to note that researcher was able to visit some of the graduates at their respective work place for observation purpose. Chart 4.3 presents the views of graduates on their abilities to work without supervision in relation to the type of centre (public NFE centre and private NFE centre).

**Chart 4.3: Being able to work without supervision by centre type (n=200)**



**Note:** Percentages are within a centre type

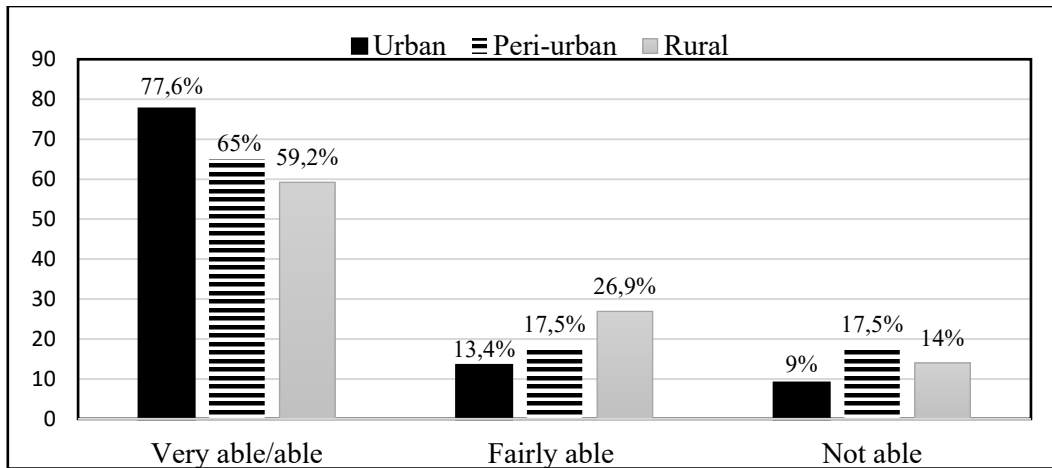
Graduates were asked to indicate the extent to which they felt they have acquired technical skills and gained competencies to work without supervision. With regard to private NFE centres in Chart 4.3, among graduates who studied in the centres, 80.8% (76/94) felt very able or able to work without supervision; 10.6% (10/94) of them felt fairly able. **Only 8.5%** (8/94) were not able to work without supervision. These positive findings are justified by the training delivery methods used in the private centres as revealed in Table 4.5 above (Approach of delivery of training courses by type of NFE centres). With regard to public centres, 53.7% (57/106) felt that they could work for others without supervision. While 29.2% (31/106) of graduates reported to be fairly able to work without supervision, 18% felt that they were not able at all.

It is **important to** interpret these findings on public centres in conjunction with Table 4.4 (Human and material resources for course delivery and skills acquisition) and Table 4.5 above (Approach of delivery of training courses by type of NFE centres) above. As revealed in these tables, the lack of material resources for practical sessions in the classroom, workshops and trainers with expertise in a specific training course (not teaching qualification in adult education) seems to impact negatively on the training delivery approach. As result, 53.7% of graduates acquired technical skills allowing them to be able to work without supervision. In contrast, graduates who studied in the private centres were likely to acquire skills in high percentage (80.8%) may be because of the availability of material resources and experienced trainers.

In addition, it was also significant to analyse the findings on effectiveness of training delivery approach in relation to geographic areas. The analysis intended to determine from which area (urban, peri-urban and rural) graduates were likely to acquire skills **to a large extent** and be able to

**work without supervision.** Chart 4.4 below presents the views of graduates on their abilities to work without supervision in relation to the centre areas (urban, per-urban and rural areas).

**Chart 4.4: Being able to work without supervision by centre area (n=200)**



**Note:** Percentages are within a centre area (urban, per-urban and rural areas)

The analysis of the extent to which graduates seemed to acquire technical and entrepreneurial skills and work without supervision (Chart 4.4) reveals a difference of 18.4% between urban and rural graduates. Graduates (77.6%, 52/67) from urban centres were most probably very able or able to work for other without supervision in their field of training courses. The availability and access to materials resources inside the training centres and in the community of Pietermaritzburg seems to justify this high score. Next, were graduates (65%, 26/40) from peri-urban centres, followed by those from rural areas (59.2%, 55/93). It is also significant to consider graduates who felt fairly able to work without supervision after graduating from urban centres (13.4%), peri-urban (17.5%) and rural areas (26.9%).

It is important to note that **the extent to which** graduates acquired skills should be taken with caution because the information collected from the NFE centres' documents and interviews with the graduates revealed that the centres managers or trainers did not involve external assessors. The external assessors would objectively help determine the degree of a graduate's ability to perform a job at benchmark. Only the three private centres assessed their learners by the means practical work in the designed **workshops, whereas the** three public centres used written examination (see Table 4.6 above - The methods of assessment at NFE centres). In this case, it is difficult to draw a general **conclusion the great majority** of the learners became able to work independently after graduating from NFE programmes.

Regarding entrepreneurship skills acquisition by the graduates, it is significant to note that some graduates studied small medium and micro- enterprises (SMME) as a training course on its own in order to acquire entrepreneurship skills. In urban, peri-urban and rural areas, 15.5% (31/200) of learners enrolled for SMME. For those who studied SMME as an area of skills training, the majority (77.4%) of the graduates indicated that they were very able or able to start and manage a small business after graduating; only 9.6 % of the graduates felt they were not able. The graduates who studied technical courses such as tailoring, handicraft, agricultural technology, poultry and co-operatives, also expected to open an own small business after graduating from their respective NFE programmes. For example, the analysis of Table 4.3 above reveals that 27.5% (55/200) of learners who studied agricultural technology, of these 83.6% (46/55) intended to create an own small business after graduating. In the case of private NFE centres, the provision of entrepreneurial skills training was together with technical courses or after completing the technical training.

Findings from interviews indicate that many learners from the age of 36 and above, their main interested in NFE programmes was to become self-employed. Therefore, they would prefer that the training delivery approach enable them to acquire entrepreneurship skills. In the survey questionnaire, learners were asked to indicate the extent to which they have acquired knowledge, skills and competencies necessary for managing small businesses. Table 4.7 below presents the results on business skills acquisition. This variable helped to answer the question: How effective was the training delivery approach of NFE in fostering business skills acquisition? For the purpose of this section, Table 4.7 presents the association of the finding on business skills acquisition with “expectation to open an own small business”.

**Table 4.7: Entrepreneurship skills acquisition by expectation to open an own small business (n=64)**

Business skills acquisition	Knowledge and skills on completion of programme							
	Good		Average		Poor		Very poor	
	n	%	n	%	n	%	n	%
<b>To start/ grow a business</b>	46	71.9	11	17.2	2	3.1	5	7.8
<b>Managing a small business</b>	45	70.3	14	21.9	2	3.1	3	4.7
<b>Marketing of small business</b>	38	59.4	14	21.9	10	15.6	2	3.1
<b>Financial management</b>	36	56.3	13	20.3	11	17.2	4	6.3

As Table 4.7 presents, the analysis of business skills acquisition by graduates who expected to open an own small business reveals that the majority of learners felt they had a good level of skills to start/ grow a business (71.9%, 46/64) and to manage a small business (70.3%). A small number of

graduates felt that their knowledge of starting or growing a business was poor (3.1%) or very poor (7.8%). Similarly, only 3.1% and 4.7% of learners reported that their level of managing a small business was poor and very poor respectively. Other 59.4% of the learners reported that they have acquired good knowledge of business marketing skills. Next, 56.3% of learners viewed that they have gained financial management skills which scores at a good level.

As the analysis of Tables 4.4; 4.5; 4.6 and Chart 4.3 above reveals, the training delivery approach of combining technical training with business skills enabled the learners to acquire business skills. This means that the approach was learner-centred and directly aimed at enabling graduates to become self-employed through micro-enterprise creation. During interview, one graduate from public centre in a peri-urban area, who started a poultry cooperative with a group of five graduates, reported the following:

*We received training in SMME in order to know how to manage our small business after completing the training. Trainers taught us how to market our products and manage the business. The business training was related to poultry or farming. The training focused on managing a poultry and vegetable garden, marketing strategies, financial management and quality insurance of our products. Today we are very able to manage our poultry alone. What we need is the business money to expand the project.*

Though the researcher did not interview all graduates whose objective was to open small businesses and whether they acquired business skills, Table 4.7 and the above quote suggest that the learning approach enabled graduates to acquire business skills. The meaning of this quote is that what made the training delivery approach more effective to meet expectations of the learners intending to open an own small business was not only the technical skills training, but also the combination of technical and entrepreneurial training components.

During one-on-one interviews, the researcher sought the general views of the graduates on the effectiveness of the training delivery approaches on technical and entrepreneurial skills acquisition in NFE centres. Therefore, graduates were to explain how they were able to work on their own without supervision. One self-employed graduate from a private centre in an urban area in sewing and fashion design micro-enterprise said:

*I believe that my success in managing the sewing workshop is due to the practice of technical and entrepreneurship training. The trainers prepared me to start and manage a small business. My trainers were paying a great attention to individual learners. After six months of training, I became competent and confident in technical skills in sewing any type of fashion garment and operating any type of sewing machine. The centre also trained me in business skills. The business training focused on entrepreneurship, managing a workshop, marketing strategies, basic bookkeeping and quality insurance of our products.*

A second graduate **from a private** centre in an urban explained the effectiveness of the training delivery approach as follows:

*My achievement in the micro-enterprise is due to the method of skills training at my centre and centre's support. The curriculum consisted of technical or practical skills in sewing and of business skills related to sewing industry. With regard to the technical skills training, all the resources and materials for practical training were in the centre's workshop. Trainers focused on each learner to ensure that no one was left behind in understanding a particular task related to skills. The business skills training component entailed training in entrepreneurship, marketing, and drawing up a business plan.*

A third graduate from a public **centre in a peri-urban area** who studied SMME also said:

*To be honest, I succeeded to establish a micro-enterprise like this because of the teaching methods our trainers were using. In the first phase, we were trained in technical or practical skills in sewing. Towards the end of the training programme, we studied SMME related to sewing business. The training centre has a workshop, which has electrical sewing machines, tools, and fabrics we needed for practical sessions. Trainers focused on each individual learner to ensure that at the end of the lesson everyone understands and does the work by him or herself.*

The analysis of both quantitative and qualitative findings reveals that **the majority** of the graduates acquired technical skills to work without supervision. However, one should be cautious with positive result on technical skills acquisition because no NFE centres conducted a workplace assessment using external stakeholders or experts in the field of the training course.

## 4.9 Summary

It is widely known that adult learners are motivated to join NFE programmes if they will meet their needs and objectives. In the case of the present study, the findings in this chapter revealed that many graduates enrolled for training courses with hope or expectations of finding wage employment or opening an own small business. A small number of younger graduates (18 to 35 years old) expected to continue with studies at training colleges after graduating. Both quantitative and qualitative findings confirmed that the expectation of older graduates was to become self-employed in micro-enterprises after graduating. Graduates' expectations had an impact on training delivery approach and skills acquisition. Analysing the expectations of the graduates was significant because for instance, those whose expectation was to create a micro-enterprise would like the learning approach to be more practical combined with entrepreneurship skills.

Human and material resources lay a good foundation for training delivery for skills acquisition. According to the graduates, there was insufficient resources in the public NFE centres. However, the majority of the graduates who studied in the private centres in urban areas reported that their centres had sufficient basic tools and equipment in the workshops. These graduates viewed that there was also a link between learning contents and workplace. With regard to human resources, the majority of the graduates in both public and private centres agreed that had qualified teachers in the specific training course.

There were different views between graduates from private and public centres on training delivery approaches. A few graduates from public centres and the majority of those in private centres reported that the training delivery approach for skills acquisition included the use of workshops and project-based training similar to the world of work, visits to the workshops, to businesses and industries. In many private centres, the training consisted of 75% practice in the workshop venue or fieldwork and 25% of theory in the classrooms. Concerning the time for practice, 88.3 % of learners agreed that there was adequate time to practice skills at the centre during training. The findings from one-one with five graduates reveal that the dominant approach of training delivery was of facilitating learning.

Both quantitative and qualitative data revealed that the training delivery was more practical than theoretical in the private NFE centres. However, according to the graduates, the approach of training delivery in the public NFE centres focused more on theoretical aspects of the training

course than practical skills in workshops and field. Graduates viewed that they had to **spend most of their time on theory lessons** in the classrooms. However, for the private NFE centres, the approach of the training delivery focused more on practical skills in workshops and field than on theory. This means that the approach of training delivery fostering skills acquisition was practice-oriented. The reality is that graduates from private NFE centres received higher levels of education than those in **public centres**.

The findings also revealed that the training delivery approach encompassed the key concepts of constructivist approach, which are interactive learning, collaborative learning, facilitating learning, authentic learning, learner-centred learning and high quality of learning. Mostly in the private centres, the discussion approach in the classrooms or workshops helped learners to share their experience acquired from their communities prior to the enrolment for the training courses and during practical lessons at the centres. The qualitative findings reveal the discussions took the form of problem-posing learning. While the learners owned the discussions, the topics for discussions related to their needs, objectives and interests in real life.

The methods of training assessment at the end of the skills training for the majority of private centres consisted of observation in **workshops**, observation in simulated workplace, role-play, written examinations and short answer assessment. However, the assessment had no recognised certification. Graduates viewed that the training delivery approaches were effective in fostering skills acquisition.

The acquisition of technical and entrepreneurship skills by the graduates and the ability to work without **supervision differed according to the type** of the centres (public and private) and geographic areas. A majority of graduates (80.8%) who studied in private centres felt that they **had** acquired technical skills to work without supervision. It seems that these graduates from private centres were more likely to acquire skills in high number because of the availability of material resources and experienced trainers. More than half (53.7%) of graduates who studied in public centres felt that they acquired technical skills allowing to work without supervision. This low result as compared to private centre counterpart may be due to the lack of material resources for practical sessions, workshops and trainers with expertise in a specific training course which impacted negatively on the training delivery approaches.

With regard to geographic areas, graduates (77.6%) from urban centres were **most confident about their ability to work** for other without supervision in their field of training courses. Next, were

graduates (65%) from peri-urban centres while graduates from rural areas were the last (59.2%). Therefore, graduates who studied in the private centres in urban areas were more likely to acquire technical and entrepreneurial skills enabling them to work without supervision. In many centres the training delivery approaches consisted of combining technical training with business skills in order to enable the graduates to acquire business skills. The majority of the graduates who expected to open an own small business after graduating felt that they **have acquired** business skills to start or grow a business, **manage a small** business **and market of small** business at high level. The examination of how the graduates succeeded to grow small businesses and to manage them sustainably is beyond the scope of the present study. **The final chapter** will now discuss the findings, draw conclusions and suggest some recommendations.

## CHAPTER 5: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Introduction

This chapter wraps up the study by discussing the key findings and concluding the study. Each finding is discussed in line with the conceptual framework and previous studies on training delivery of adult NFE programmes. Another aspect of the chapter is the explanation of how the study has achieved the purpose and the objectives as anticipated in **Chapter One**. The first objective of the study was to conceptualise the training delivery environments for skills acquisition in adult non-formal education centres within the context of **a systems** approach and constructivist approach of learning. The second objective consisted of finding out the approaches of training delivery for skills acquisition. The third objective sought to investigate the mode of training assessment at the end of the training programmes. Lastly, the study aimed at determining the ability of learners to work without supervision after acquiring skills. The chapter contains three main sections. The first section discusses key findings of the study presented in **Chapter Four**. The second section deals with the purpose and objectives of the study, while the third section concludes the study by providing the practical implications of the findings. Finally, the researcher **suggests** some recommendations arising from the study.

### 5.2 Discussion of the main findings in relation to conceptual framework

This section focuses on discussing the key findings in relation to the four elements of **a systems** approach (inputs, transformation process, outputs and environment) from which the research questions are tailored. It discusses the key findings as responses to the research questions of the study. The researcher **highlights** a key finding revealed in the presentation of the data, then follows **this with a discussion around** it by incorporating, comparing and contrasting it with other results from previous studies on the issue. Therefore, the section discusses the inputs (resources) under the first part of ‘The approaches of training delivery for skills acquisition’ (5.2.1). The elements of transformation process are discussed under the second part of ‘the approaches of training delivery for skills acquisition’ (5.2.1) and ‘the mode of training assessment at the end of the training programmes’ (5.2.2). The outputs of the training (the extent of skills acquisition) are discussed under ‘graduates’ ability to work without supervision after acquiring skills’ (5.2.3). It is significant

to note that this study does not deal with the outcomes of the NFE programmes which are wage and self-employment, and change of living conditions of the graduates.

### **5.2.1 The approaches of training delivery for skills acquisition**

This sub-section concentrates on the approaches of training delivery. After summarising the findings, the following paragraphs broadly discuss them in shedding more light on the meaning in the context of adult NFE programmes.

- The majority of the graduates viewed that trainers were qualified and motivated to teach specific courses whether during theory in class or practicum in workshops or fieldworks.
- The majority of the graduates from the private centres in urban areas reported that their centres had sufficient basic tools and equipment in the workshops.
- Graduates from private centres and a few from public centres in the urban areas viewed that the approach of training delivery fostering skills acquisition was practice-oriented, meaning there was a mixture of theory and on-the job practical training.
- The training delivery approaches had the aspects of interactive teaching in the classrooms for some NFE centres, particularly in the urban areas, specifically in private centres.
- The ‘collaborative learning’ approach of teaching and learning helped the learners to pursue knowledge from peers who may play a role of mentors.
- As facilitating learning approach, the discussions in the classrooms or workshops had a form of problem-posing learning and the topics related to their needs, objectives and interests, while owning the discussions.
- In the authentic learning approach, graduates learnt skills related to their work experience already accumulated from their local communities.
- In the private centres in urban and peri-urban, the approaches had high quality of learning because they were practice-oriented and created a link between learning contents and workplace.

The majority of the graduates viewed that trainers were qualified and motivated to teach specific courses whether during theory in class or practicum in workshops or fieldworks. Although the trainers were not part of the participants in the study in order to ask for their educational qualification and work experience, the opinions from the graduates serve as evidence of trainers’ ability to teach adult learners. In contrast, the study conducted by Hussein (2013) in the context of

Nigeria revealed that the lack of trainers with information and communication technology skills across the NFE centres hindered the effectiveness of the training delivery. In addition, the Nigerian centres included in the study appointed of trainers who were not qualified or trained in androgical techniques in order to teach adult learners. However, in the context of the present study, the analysis of training implementation documents and annual reports revealed that the private centres hired skilled trainers for a number of skills areas within the communities, NGO partners and retired experts in the field of training as external resource persons. The fact that there were qualified and motivated trainers to teach specific courses in most of the NFE centres means that they could effectively use their work experience during the training delivery of theory and practical lessons for skills acquisition. The finding supports the view of Care and Anderson (2016), who argue that the availability of qualified trainers in the adult training centres is the first step when designing a relevant curriculum for NFE programmes.

The majority of the graduates from the private centres in urban areas, reported that their centres had sufficient basic tools and equipment in the workshops. This is a positive finding because NFE programme is a practice-oriented training for adults who need to gain practical skills for immediate utilisation in the world of work. Without necessary tools and equipment, the NFE can just be for a certificate, meaning academic knowledge rather that for jobs or self-employment. In this regard, Gasperine and Acker (2009) note that the link between skills acquisition from adult training programmes and their utilisation in the labour market cannot be achieved without considering the issue of quality of NFE. According to their argument, the quality of adult NFE comprises factors such as the qualifications and expertise of trainers and the quality of training materials.

The present findings are also different from those by Manuel, et al. (2017) in the context of adult non-formal vocational education and training (NFVET) in Mozambique. Manuel and others reported that the programmes faced major challenges in delivering the courses because the training centres did not have adequate teaching support and learning resources. However, in the present study, one respondent from private centre reported by saying, “*With regard to the technical skills training, all the resources and materials for practical training were in the centre’s workshop.*” The availability of material resources in the majority of the NFE centres constituted an enabling factor for skills acquisition on the side of the graduates. Thus, graduates from private centres were likely to learn skills in practical way because of the existence of sufficient basic tools and equipment.

Graduates from private centres and few from public centres in the urban area viewed that the approach of training delivery fostering skills acquisition was practice-oriented, meaning there was a mixture of theory (25% of the time) and on-the job practical training (75% of the time). The component of the training encompassed firstly, the use of workshops, fieldwork, and the visits to **workshops**, businesses or industries. The inference from this finding is that the trainers ensured that the learning process for skills acquisition occurs in the real situation similar to the future workplaces of the graduates. Similarly, these findings concur with those by Cedefop (2016) in which many adults were learning relevant skills that were required in the future jobs. In other words, the curriculum design and implementation contained concrete contents in order to yield good results on skills acquisition. In this connection, Blaak et al. (2012) further argue that for the training delivery to become effective there should be a match between the delivery approaches and the specific tasks in prospective job activities of the graduates.

Secondly, in order to produce capable graduates for self-employment in micro-enterprises, each training course emphasised both technical skills and entrepreneurship. These findings concur with those in Pantea's (2016) study in which the NFE centres also combined technical with entrepreneurial training as a successful strategy allowing graduates to enter self-employment by establishing micro-enterprises. Moreover, during the process of teaching and learning particular skills, the approach also motivated learners because it aimed at solving their real life problems. Pantea (2016) points out that integrating entrepreneurial skills training in NFE programmes is relevant for a curriculum design **for adults and due** to the lack of skills. The present findings support the argument of Fennes and Otten (2008), Gasperine and Acker (2009), who note that the quality training under adult NFE programmes is also accomplished when the component of curriculum (with clear learning objectives), learning resources and learning approaches are designed to be appropriate to workplace realities of the adult learners.

**Combining** technical training with entrepreneurial training in adult NFE curriculum is a pertinent finding from this study. The entrepreneurial training is not only a factor motivating adult learner to take seriously **learning processes** for skills acquisition, but it is justified by the low quality and non-accreditation of the skills training. In this connection, Weyer (2009) points out that adult NFE programmes provide vocational skills for only lowest-level occupations **because they do** not have the legitimacy to offer accredited qualification lie in the formal education systems and credentials necessary to gain access to professional jobs. Similarly, Betcherman and Khan (2015) state that entrepreneurial training in adult NFE programmes is significant because most of learners were

unemployed prior to the training intervention and did not have the relevant formal education and training required in the labour market. In the context of current findings on effectiveness of technical skills delivery due to availability of human and materials, Arko-Achemfuor (2014) supports that that NFE programmes provide courses that equip adult graduates with skills for self-employment hence include the entrepreneurship in the curriculum design.

In both public and private centres irrespective the geographic setting, the ‘collaborative learning’ approach of teaching and learning helped the learners to pursue knowledge from peers who may play a role of mentors. This approach of teaching and learning allowed the learners to exchange idea and experience during theory and practical lessons. During class sessions, the approach helped the learners to seek knowledge from classmates who may play a role of guides. Following the view of Khanal (2014), the inference for the finding is that this approach to learning also helped the adult learners to become keen to acquire more information from classmates who had advanced knowledge in the training course. In other words, the trainers utilised this cooperative learning approach to help the learners acquire skills through group interaction.

A similar study by Ngusa and Makewa (2014) in the context of Tanzania revealed that this approach produced good results when the teachers motivated the learners to engage in group-learning experiences or actively participate in classroom activities. The result was that the learners became able “to connect new learning with already existing knowledge and actively seek solutions to problems and share ideas of what they constructed themselves” (Ngusa and Makewa, 2014, p.7). As a constructivist principle, the usefulness of this collaborative learning to the training delivery approach in the NFE centre in KZN was that it encouraged the learners to participate in class or workshop activities and being creative in the teaching-learning process while using a problem-solving approach.

Mostly in the private centres, facilitating learning approach in the form of the discussions in the classrooms or workshops consisted of problem-posing learning and the topics related to their needs, objectives and interests, while owning the discussions. Discussions helped learners to share their experience acquired from their communities prior to the enrolment for the training courses. In order to achieve outcomes on skills acquisition, the trainers played the role of facilitators consisting of guiding the learners through planned learning activities in the classroom, workshops or fieldworks. These findings concur with those in Ngusa and Makewa’s (2014) study in which learning strategies were based on discussions of their objectives for learning a particular skill, interests and problem-

posing by the learners. Their study revealed that the teachers created opportunities for the learners to participate actively in the discussions, which aimed at finding means and reasons to applying the skills in the world of work.

Although the difference seems to exist between the types of education in Ngusa and Makewa's (2014) study which focussed on academic knowledge and the present on non-formal vocational skills, the findings correlate. Ngusa and Makewa (2014) point out that the discussions resulted in the improvement of learners' level of skills acquisition compared to the benchmark. In the context of the present study, the facilitated learning approach was achieved by giving adult learners time to discuss and contribute important matter related to skills and their application in the labour market. Thus, the trainers let them become key players in the training delivery process, allowing them to link newly acquired skills with previously existing knowledge. The other role of the trainers was to guide learners in class or workshops to search for solutions to problems related to the field of training, allowing them to discover new knowledge by themselves through several learning several activities.

In the authentic learning approach, graduates learnt skills related to their work experience already accumulated from their local communities. Learning activities helped them to construct new meaning which was connected to the prior learning experience. The authentic learning strategy was more common in private centres than in the public centres. The learning approach also involved field trip activities. Under the guidance of trainers, field trips consisted of visiting various companies, workshops and business from which adult learners could be exposed to external world of work. These findings support the view of Khanal (2014, p.98) who argues that, "Authentic learning always encourages students to expose themselves to that environment, allowing them to have a real experience by the process of learning-by-doing". The present findings demonstrate that authentic learning approach was effective for adult learners in NFE, as they preferred to learn skills through practical experience.

Moreover, the present findings imply that the training delivery approach of authentic learning offered graduates with experiences ranging from vocational skills to real-life problem solving. In a similar vein, Ngusa and Makewa (2014, p.3) point out that "Field trips and other activities that take place outside the classroom are powerful means through which learners can be actively involved in practical learning". In connection with the present study, the findings infer that field trips provided opportunities for practical learning outside the NFE centre by exposing learners to economic

activities, people and challenges encountered in practicing a particular occupation in the local communities. Therefore, **field trips** appear to be a significant delivery approach in NFE programmes, which foster learners' active participation in the teaching and learning process and good result of skills acquisition.

In the private centres in urban and peri-urban **areas**, the approaches had high quality of learning because they were practice-oriented and created a link between learning contents and workplace. It is significant to mention that graduates from private NFE centres were likely to receive practice-oriented training and achieve higher level of skills training than those from public centres. The current findings are different those reported by Cedefop (2016) and Islam, et al. (2012). The findings revealed that the training delivery in many NFE centres lacked the connection between the programme contents and useful skills required in the future works after graduating. **As a result**, the training delivery failed to be effective. Moreover, the present findings are different from those revealed in the study conducted by Blaak et al. (2012) in NFE programmes of Uganda. Blaak and others reported that most NFE centres provided skills at very basic level and the approaches of training delivery were not practice-oriented in order to create a link between learning contents and workplace.

The present findings further reveal that training delivery approaches in workshops, in the world of work and learning through field trips reflect a high quality of learning which encompass practice-oriented approach of adult NFE programmes. This is a “learning by doing” approach of training delivery. These findings support the argument of Fennes and **Otten (2008) and Gasperine** and Acker (2009) who state that quality in NFE is achieved when learning methods are designed to be relevant to workplace realities. Therefore, in connection with the present findings, the researcher is of view that high quality of learning is about learning in real-life situation and practice in the workshop, work field and field trips. To this end, the relevance of training delivery is recognised through a careful curriculum design which takes into consideration the needs and objectives of the learners before and after graduating from adult NFE centres.

### **5.2.2 The mode of training assessment at the end of the training programmes**

The analysis of the mode of training assessment revealed that all six NFE centres used two or three of the following approaches. The study revealed some inventive **elements** of assessment of the training delivery as discussed below.

- Only the private centres conducted the assessment method of observation in workshop or simulated workplace and this consisted of learners performing real work activities at the workshop and showing the steps to produce a product in the way taught.
- The private NFE centres also utilised the role-play assessment in which learners were assigned roles and situations to produce responses to specific challenges.
- Both private and public centres used written and oral assessment whereby trainer asked questions relevant to type of skills and knowledge studied.

Only the private centres conducted the assessment method of observation in workshop or simulated workplace and consisted of learners performing real work activities at the workshop and showing the steps to produce a product in the way taught. Following the view of Khanal (2014), the analysis of the findings revealed that the focus of this practical assessment was on performing a task in a real-life environment, constructing and applying the skills. This type of assessment method suggests that the private centres used practical assessments in the workshops or fields to ensure that graduates demonstrate that they have acquired knowledge, and developed a set of employability skills. As a result, they can apply the skills in a ‘real life’ situation in order to solve actual problems. This finding support the view of Gasperine and Acker (2009) who argue that quality of adult NFE programmes entail a good method of summative assessment.

A thorough analysis of this assessment method of observing adult learners performing real work activities in a workshop or simulated workplace reveals that trainers used authentic assessment. The findings imply that the private NFE centres did not only use authentic teaching and learning approach (see Huang, 2002 and Khanal, 2014), but also authentic assessment to ensure the graduates have acquired skills. According to Mueller (2005, p.2), an authentic assessment “is a form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills”. The authentic assessment in the present findings revealed that the graduates performed tasks as if they were in the real-world challenges of work (Linh, 2016; Allen, n.d.). In other words, the assessors could request a learner to demonstrate the mastery of skills they needed to apply in the labour market. Therefore, during the assessment, the authentic tasks consisted of requesting the learners to use knowledge and skills to produce a product (for instance a garment, artefacts, traditional attire).

The private NFE centres also utilised the role-play assessment in which learners were assigned roles and situations to produce responses to specific challenges. The analysis of the findings in

Table 4.6 reveals that the assessors used the role-play simulations to determine entrepreneurial skills acquisition. The findings concur with the view of Barry and Trapp (2016) who state that role-play ‘simulations’ involve a realistic situation or working condition. The present findings suggest that during the role-play simulations, adult learners were assigned to act as a small business owner dealing with customers’ complaints, market competition in the city and other challenges. In the context of NFE in KZN, this method of assessment appears to be effective because the assessor can determine learners’ competencies in mastering the content of skills. The findings further support the view of Barry and Trapp (2016, p.2) that role-play simulation exposes learners “to active, experiential, reflective and contextual learning approaches such as simulated environments, students can see the direct relevance of their educational experience to their future practice”. The inference from the present findings is that the role-play simulations as a method of assessment **might have helped graduates** to determine the level of practical skills they acquired from their respective training course.

Both private and public centres used written and oral assessment whereby trainer asked questions relevant to the type of skills and knowledge studied. This mode of assessment has some advantages, such as showing **the extent** of adult learners’ knowledge and understanding of the content of the course. However, in the context of Adult NFE in KZN, some learners may not be able to write concisely in the essay format because of their level of formal school achievement. Similarly, oral exams **have** advantages in showing the degree of knowledge (Gasperine and Acker, 2009). In addition, oral assessment can show a good practical experience towards presenting an own small business to the donors or interview situations for those graduates interested in wage employment. As Linh (2016) argues that adult learners take oral presentations seriously. The other advantages of oral assessment could be the fact that question and answer method in the form of follow-ups can help learners develop skills as they learn from peers’ presentations.

### **5.2.3 Graduates’ ability to work without supervision after acquiring skills**

For the purpose of this study, the effectiveness of training delivery environments was measured in terms of acquiring ability to work without supervision after graduation. The type of the centres (public and private) and geographic areas (urban, peri-urban and rural area) constitute enabling or **disabling** environments for **skills acquisition** and the ability to work without supervision. The following were the key findings:

- A majority of graduates (80.8%) who studied in private centres felt that they have acquired technical skills to work without supervision.
- With regard to geographic areas, graduates (77.6%) from urban centres were most confident about their ability to work for other without supervision in their field of training courses.
- Combining technical training with entrepreneurial skills was a learner-centred approach of training delivery and directly aimed at enabling graduates to become self-employed in micro-enterprise.
- The majority of the graduates who expected to open an own small business after graduating felt that they have acquire business skills to start or grow a business, to manage a small business and to market a small business.

A majority of graduates (80.8%) who studied in private centres felt that they have acquired technical skills to work without supervision. Both quantitative and qualitative findings revealed that the graduates, particularly in the urban centres, acquired technical skills to work without supervision. The fact that the majority of graduates from private centres gained competences, implies that the training delivery environments in these adult NFE centres was effective in contributing to technical skills acquisition. Moreover, the training delivery approaches for skills acquisition was effective. Similarly, Tekle (2010), Blaak, Openjuru and Zeelen (2012) and Islam et al. (2012) reported the effectiveness on skills acquisition by the NFE graduates without explaining the main causes of the effectiveness, such as the availability of resources and training delivery approaches and assessment methods utilised by the NFE centres (see discussions in 5.2.1 and 5.2.2 above).

In order to achieve the effectiveness of adult NFE programmes, the present findings further suggest that there is a need to connect training delivery approaches to labour market reality. Fennes and Otten (2008) note that the connection between the training delivery approaches of adult NFE programmes and the labour market reality makes sense because it leads to the skills acquisition that are useful in the labour market. This argument implies that adults are motivated to acquire skills because they will immediately utilise them for economic activities in the community or solve their life problems. However, Gasperine and Acker (2009) goes further by arguing that the connection between skills acquisition and labour market reality is achieved by considering the elements of quality of adult NFE programme. In this sense, the quality elements, which foster effective skills acquisition, comprise the qualifications of trainers and their expertise, existence of suitable

materials for teaching and learning and appropriate methods of formative and summative assessment relevant to workplace realities.

With regard to geographic areas, graduates (77.6%) from urban centres felt that they were most probably able to work for other without supervision in their field of training courses. Graduates from peri-urban centres came the second (65%) and those from rural areas were the least confident of this (59.2%). Graduates who studied in the private centres in urban areas were more likely to feel that they had acquired technical and entrepreneurial skills enabling them to work for other without supervision. The approach of training delivery, which consisted of 75% practice and 25% theory, seems to explain the positive outcomes on skills acquisition. The findings mean that there was an aspect of “learning by doing”, and “learning by producing” were closely integrated (Khan, 2015; Cedefop, 2016; Lihn, 2016). As interview findings reveal, another explanation is that during the delivery approaches for skills acquisition in the private centres, the learners had opportunities of on-the-job training in the workshops, businesses and practical work in NGOs or community (in the case of ancillary healthcare). The present findings are in contrast with those by Manuel, et al. (2017) in the context of Mozambique whereby learners did not acquire relevant skills due to many challenges in delivering the courses because the trainers had to provide without being properly trained themselves and the lack of learning resources. Many training materials were usually of low quality, learners had little access to up-date equipment mostly in rural areas and training materials were inadequate.

The present findings on practical skills acquisition from the private centre at high level allowing graduates to work without supervision, point at the extent to which private centres used authentic learning. The findings indicate that some of the learning activities were in the form of authentic learning enabled the learners to construct new meaning which connected their prior learning experience to future economic activities in the adult learners’ real world of work (Khanal, 2014). In addition, the findings revealed that the learning entailed elements of ‘learning by doing’ through trips. The findings are congruent with Iucu and Marin’s (2014) view who note that authentic learning is linked to approaches such as personalised learning, project-based learning and community-based learning, role-playing exercises and practical activities. Following the view of Iucu and Marin (2014, p.414), the approach allowed the learners “to become comfortable with the real-world problems and in order to do that they have to be engaged in activities where students take part in activities directly relevant to the application of learning and that takes place within a culture similar to the applied setting.” The present findings imply that the results of the authentic

learning on NFE graduates was the improvements in motivation for skills acquisition and their preparation for future economic activities.

Combining technical training with entrepreneurial skills was a learner-centred approach of training delivery and directly aimed at enabling graduates to become self-employed in micro-enterprise. The graduates who studied technical courses such as tailoring, handicraft, agricultural technology, poultry and co-operatives, could find the courses relevant because the training delivery facilitated a transition from skills acquisition to skills utilisation in micro-enterprises. However, this transition could also **require to start-up capital**. Similarly, combining technical training with entrepreneurial skills also proved effective in the study conducted by Pantea (2016) in the context of Romania. The combination of technical with entrepreneurial training was an effective approach allowing adult graduates to become self-employed through the establishment of micro-enterprises in their local communities. The approach also helped learners to become active in the process of training delivery for skills acquisition because it motivated them to find solution to their real life problems of unemployment. Pantea (2016, p.52) concluded that “integrating entrepreneurial skills training in NFE programmes is relevant for a curriculum design for unemployable adults due to the lack of skills”.

The findings do not only mean that combining technical training with entrepreneurial skills was a learner-centred approach, but also that the curriculum contents as a product was suitable to satisfy those graduates who expected to open an own small business or micro-enterprises after graduating. Based on the highest formal educational achievement of the graduates (see Chart 4.2 in Chapter 4), providing entrepreneurship skills alongside with technical skills curriculum is also justified by the lack of the accreditation of adult NFE programmes. Weyer (2009, p 265) argues that NFE offers work-related skills only to “the lowest-level jobs because it does not have the legitimacy to grant school-based diplomas and credentials required gaining access to white-collar and professional jobs”. In a similar vein, Betcherman and Khan (2015) point out that entrepreneurship training in adult NFE centres is important because most of the adult learners do not have the suitable formal education and training that are required by the employers in the labour market. Arko-Achemfuor (2014) joins the discussion by suggesting that NFE programmes should provide training courses that prepare adults with employability skills and inclusion of entrepreneurship in its curriculum allowing them to become self-employed in the local communities.

The training delivery approach of NFE was effective in fostering business skills acquisition. These findings are different from those in Blaak, Openjuru and Zeelen's (2012) study in the context of Uganda. The study revealed that the training delivery for skills acquisition was not effective because there was a mismatch between the approach of training delivery and the specific tasks in prospective business activities of graduates who expected to **open their own** small businesses. Both public and private centres did not provide any business skills nor motivated graduates to explore existing opportunities for starting small businesses. The present findings concur with the argument of Pantea (2016) who suggests that integrating entrepreneurial training is important for a relevant curriculum design aiming at empowering unemployable adults through NFE programmes. Furthermore, following the view of Jiyankhdjaev (2011), the present findings imply that the training delivery approaches for business skills acquisition were job-oriented. In other words, the curriculum design and its delivery approach had aspects of demand-driven NFE programme.

The majority of the graduates who expected to open an own small business after graduating felt that they had **acquired the necessary** business skills to start or grow a business, to manage a small business and to market a small business at high level. These findings are different from those reported in Harkema and Popescu's (2015) study in entrepreneurial education for adults in the context of Romania. Although these adults had enormous willingness and inspiration to learn skills, the main hindrance for skills acquisition was that the adult learners were not very motivated to learn because they were not interested in the approach and could not see the importance and the need for learning. Another important barrier to learning was the lack of self-esteem of the target group, which negatively affected their learning process and the acquisition of competencies in entrepreneurial skills (Harkema and Popescu, 2015). What drove the effectiveness of entrepreneurial training delivery in the present study is the learner-centred **approach whereas in** the study conducted by Harkema and Popescu (2015) the trainers used teacher-centred approach. In the present study, a learner-centred approach consisted of taking into account the various characteristics (age, gender, level of formal education, etc.) of all learners with specific focus on low-performing learners and their socio-economic backgrounds.

Another explanation for high level of business skills acquisition to start or grow a business, to manage a small business and to market a small business can be that fact that entrepreneurial training approach was based on action and practice (see chapter 4, section 4.7). The analysis of the extent to which the training delivery environment facilitated graduates to acquire business skills illustrates the case. Since the majority of older graduates expected to open an own small business,

trainers emphasised on teaching and learning approaches linked to self-employment outcome. In order to provide useful business skills, the trainers utilised ‘action-based entrepreneurship’ training which helped graduates to understand about business opportunities and contributed increasing the spirit of entrepreneurship (Pantea, 2016). Therefore, the findings imply that the teaching and learning approaches were practical and effective in **helping graduates** to acquire entrepreneurship skills to open and manage an own small business. As result, in the existence of start-up capital and enabling SMME policies, graduates would be able to utilise skills in the income-generating activities or micro-enterprises.

In summary, this section has discussed the key findings in the light of previous studies on the topic. The discussions reveal that this study has shed more light on innovative adult NFE delivery approaches. Though there are many specific findings pertaining to this study, the researcher can mention five major innovative elements identified in this discussion section. Firstly, the curriculum design and implementation entailed concrete contents in order to yield good results on skills acquisition. Secondly, the NFE centres also combined technical with entrepreneurial training as successful strategy allowing graduates to enter self-employment by establishing micro-enterprises. Thirdly, authentic learning approach also involved field trip activities. Field trips consisted of visiting various companies, workshops and business from which adult learners could be exposed to external world of work. Fourthly, the assessment method of observing adult learners performing real work activities in a workshop or simulated workplace means that private NFE centres used authentic assessment. Finally, in order to provide useful business skills, the trainers utilised ‘action-based entrepreneurship’ training which enabled graduates to explore business opportunities and to contribute to increasing graduates acting as entrepreneurs.

### **5.3 The purpose and objectives of the study**

The **purpose** of this section is to assess whether or not the research objectives **were** achieved throughout the study. The research purpose was to assess graduates’ views on the effectiveness of training delivery environments for skills acquisition in adult non-formal education centres in KwaZulu-Natal. The achievement of this purpose of the study is supported by the realisation of the objectives. The achievement of the research sub-objectives helps to answer the research sub-questions.

### 5.3.1 Objective 1

The first objective, which sought to conceptualise the training delivery environments for skills acquisition in adult non-formal education centres within the context of systems approach and constructivist approach of learning, was achieved in Chapters 2, 3 and 4. Chapter Two discussed a conceptual framework of the study by examining the contribution of systems approach and constructivist approach of learning to the understanding of the effectiveness of training delivery environments for skills acquisition in adult non-formal education centres in KwaZulu-Natal. Four elements of a systems approach (inputs, a transformation process, outputs and environment) proved useful to analyse the effectiveness of training delivery for skills acquisition in adult NFE centres. The constructivist approach helped to illuminate “transformation process” of the systems of approach on adult teaching and learning practice aiming at fostering skills acquisition. The same Chapter **Two reviewed** previous studies on the effectiveness of training delivery for skills acquisition in adult NFE centres.

The discussions of the key findings in relation to the conceptual framework reveal the constructivist approach is the transformation process of the system approach of NFE programme. The significant elements of system approach for skills acquisition, specifically for training delivery process in NFE centres is its ability to help analyse and improve the NFE programmes. However, the analysis and interpretation of the findings suggest that there should be a relationship between relevant inputs and transformation process in order to obtain desirable outputs. Furthermore, there must be the right mix of curricular objectives, contents, methods and assessment in order to produce competent and confident adult graduates for employment.

### 5.3.2 Objective 2

The second objective was to find out the approaches of training delivery for skills acquisition from the graduate’s perspectives. This objective was achieved in **Chapter Four** and the study utilised several variables at different levels to examine the approaches of training delivery for skills acquisition. Significant variables for this second objective were on human and material resources for NFE delivery (section 4.5.1 and Table 4.4) and approach of training delivery for skills acquisition (section 4.5.2 and Table 4.5). The findings revealed that in the private NFE centres and few public centres, the existence of qualified human and material resources **and** the learning approaches were the factors contributing to skills acquisition. The availability of relevant human

and material resources for training delivery depended on type of the NFE centres and on the geography settings (urban, per-urban or rural areas)

A few graduates from public centres and the majority of those in private centres reported that the training delivery approaches for skills acquisition included the use of workshops and project-based training similar to the world of work, visits to the workshops, to businesses and industries. In all three private centres (urban, per-urban and rural area, the training delivery approaches focused more on practical skills in workshops and field than on theory.

### **5.3.3 Objective 3**

The third objective, which sought to investigate the mode of training assessment at the end of the training programmes, was achieved in Chapter Four, section 4.6 and Table 4.6. The findings revealed that the mode of summative assessment of the skills training for the majority of private centres consisted of observation in workshop, observation in simulated workplace and role-play. The assessment in the form of simulated workplaces consisted of learners performing real work activities and showing the steps to produce a product in the way taught. Both private and public centres in urban, peri-urban and rural areas used written examinations to assess the learners.

However, differently from public centres, the private centres in urban, peri-urban and rural areas further used **three additional** the assessment methods. Firstly, they assessed the acquisition of skills of the learners by the means of observation in workshop, which consisted of observing a learner performing real work activities at the workshop and demonstrating specific abilities. Secondly, the summative assessment consisted of observation in simulated workplace (fashion design and sewing course). This method involved placing an adult learner in real work activities in a simulated work environment and the assessors could watch to see whether he/she has mastered the skills taught at benchmark level. Thirdly, private centres used the method of role-play ‘simulations’, which involved a realistic situation or working condition. In the context of NFE programmes, this method of assessment appears to be effective in helping the assessor to determine learners’ competencies in mastering the content of skills.

#### 5.3.4 Objective 4

The fourth objective, which sought to determine the ability of graduates to work without supervision after acquiring skills, was achieved in **Chapter Four** section 4.7, Chart 4.3, Chart 4.4 and Table 4.7. The effectiveness of the training delivery approaches on skills acquisition was measured on technical and business skills acquisition. The findings showed that **the** majority of the graduates **believed they had** acquired technical skills to work without supervision. However, graduates who studied in private centres in urban areas were most likely to feel they had gained competences and were able to work without supervision than their **counterparts in public centres**.

#### 5.4 Conclusions

This study was confined to mainly examine graduates' views on the effectiveness of training delivery environments for skills acquisition in adult NFE centres in KwaZulu-Natal. It focussed on four elements of systems approach of training delivery for skills acquisition, namely inputs (trainers, learning materials, tools and existence of workshop), transformation process (teaching and learning approaches, learning activities, conducting assessment) and outputs (acquisition of technical and business skills). The centres under investigation were those that provide technical and entrepreneurial skills to rural and urban adults. The research gap that informed the present study was to know the extent to which the approaches of training delivery in the NFE centre contributed to skills acquisition of the NFE graduates. There was insufficient knowledge about the views of NFE graduates on the link between training delivery approaches and their ability to work without supervision in their future paid jobs or self-employment. In other words, little attention has been focused on finding out the approaches of training delivery and the mode of training assessment in order to understand the nature of the problem.

Concerning the inputs, the study found that in the private centres and a few of the public, the existence of adequate tools and equipment for learning in the workshops for practicum fostered training delivery for skills acquisition. In addition to this, the availability of qualified and motivated trainers to teach theory lessons in class, practicum in workshops or fieldworks, laid a good foundation for relevant training approach for skills acquisition. With regard to the transformation process, the majority of graduates, mostly from private centres, viewed that the approach of training delivery fostering skills acquisition was practice-oriented in the real situation similar to the future workplaces. As result, firstly, the approaches of training delivery had high quality of learning because they were practice-oriented and created a link between learning contents and workplace.

Secondly, the approaches **used the form of the authentic** learning because trainers linked the teaching and learning processes to learners' prior experience and involved field trip activities, which fostered learners' active participation and skills acquisition. Concerning the mode of training assessment at the end of the training programmes, the study found that private NFE centres used an assessment method of observing adult learners performing real work activities in a workshop or simulated workplace, which is also an authentic assessment. Moreover, the method of assessment of the role-play simulations helped graduates to determine the level of practical skills they acquired from their respective training course.

Regarding the outputs of the training delivery, the majority of the graduates reported that **they had acquired** technical skills and competence to work without supervision. The reality is that graduates from private NFE centres received higher levels of education than those in the public **centres**. The findings mean that the training delivery environments and approaches in adult NFE centres were effective in connecting training contents to the labour market reality of the graduates. This inference makes sense because the training delivery approaches resulted in technical and business skills acquisition that were useful on the labour market. However, graduates who studied in the private centres in urban areas were more likely to acquire technical and entrepreneurial skills enabling them to work for other without supervision.

In light of the present findings, it is justifiable to conclude that without necessary tools for teaching and learning process, and qualified trainers, the NFE programmes can just be for a certificate, meaning academic knowledge rather than for jobs or self-employment. The authentic learning approach enabled the graduates to construct new meaning which connected their prior learning experience to future economic activities in their real world of work. The researcher concludes that the relevance of training delivery is recognised through a careful curriculum design which takes into consideration the needs and objectives of the learners before and after graduating from adult NFE centres.

The practical implication of the study findings is that the public and private sectors need to welcome NFE programmes as a crucial strategy to improve human capital. The NFE programmes will enable unskilled adults to acquire employability skills for income-generating activities. Relevant and effective training delivery of NFE programmes coupled with post-training support will help reduce social exclusion of unemployable adults in the communities. This study contributes to the field of adult NFE literature by demonstrating the importance of high quality

authentic learning approaches and authentic **assessment to the effectiveness** of training delivery environments for skills acquisition in adult NFE centres.

## **5.5 Recommendations**

In light of the findings, conclusions and limitation of the study, **the researcher** suggests the following recommendations to improve the effectiveness of training delivery environments for skills acquisition in adult NFE centres in KwaZulu-Natal. The recommendations are in line with the training delivery elements of the conceptual framework presented in **Chapter Two**.

### **5.5.1 Material and human resources for inputs**

- At the planning phase, a NFE centre manager and other stakeholders should ensure that the NFE curriculum is tailored according to learners' background, age, formal education achieved, experience and immediate wage and/or self-employment possibilities.
- The centre manager and other stakeholders should ensure that curriculum content is tailored to providing required skills in the specific economic activities.
- During the planning phase of the NFE course, the centre manager should ensure the availability and accessibility of the facilities of workshops, project-based training and on-the-job training according to the type of the training course.
- Where a centre lacks **training tools**, workshops and trainers for practical sessions, the NFE centres should expose learners to the available material and human resources in the local communities.
- The recruitment of the trainers should be based on their qualification, levels of expertise, and any experience with short-term NFE approaches to job-related training.
- The recruited trainers should have owned a small business or worked in an enterprise.
- Where a centre lacks trainers for practical sessions, the NFE centres should expose learners to the available human resources within the in the local communities.
- If the NFE centre lacks knowledgeable trainers in entrepreneurship training, the NFE centre manager should refer their learners to Business Development Services available in the communities.

### **5.5.2 Transformation process**

- The trainers should emphasise practical hands-on training rather than theory.

- For learners to acquire employability skills and marketable skills, the centre managers should make the technical training delivery be 25% theory and 75% practical by means of workshops, on-the-job training and project-based training.
- The trainers should ensure that the theory component of an adult NFE programme cover the conceptual knowledge on the specific training course.
- The practical component of an adult NFE programme should focus on preparing/ producing the products and visiting the market where the products or services are sold.
- To deliver the training effectively, the **trainers should** use training delivery methods for adults such as discussion, demonstration, role-play, case studies, practical exercises, group and individual presentation, practical field **visits** and experience sharing.

### 5.5.3 Outputs in acquisition of technical and business skills

- Like in the private centres, public NFE centres should also base the delivery approaches on the principle of ‘learning by doing, learning by producing’.
- As in many peri-urban and rural areas of KZN formal jobs opportunities are scarce, a combination of technical skills with business skills in the training delivery approach would help graduates to open own small businesses.
- The public centres should also consider assessing their learners using different modes, such as observation in **workshops**, **simulated workplaces**, role-play simulation in order to ascertain that learners have acquired skills at benchmark.

### 5.5.4 Further research

In order to ensure that no significant aspects of the assessment of the effectiveness of training delivery environments for skills acquisition in adult NFE centres in KwaZulu-Natal are missed, the researcher suggests the following for further research:

- Further study on the similar topic should use multiple **data collection** methods (survey, interviews, observation and document analysis).
- The study should involve learners, trainers and centre managers in order to compare and contrast the views of different stakeholders and test against each other.
- The assessment of the effectiveness of training delivery environments for **skills acquisitions** should also focus on the skills utilisation in wage employment or self-employment of NFE graduates **across training** courses, urban and rural settings and gender.

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**Annexure**

**Appendix 1A: Questionnaire for Graduates**

**QUESTIONNAIRE FOR GRADUATES**

**Office use only**

**Respondent**  
No.....Centre Code.....

r.1	
r.2	

The goal of the study is to assess the training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal.

You have been identified as a key person to contribute to this study through your honest answers to the questions.

The instructions how you should answer the questions are indicated at each question.

Researcher: Celestin Mayombe  
Cell: xxxxxxxxxx; e-mail: xxxxxxxxxxxxxxxx

**BASIC CENTRE INFORMATION**

1. Tick (✓) the type of the Centre: [1] Public (KZN-AET) or [2] Private (NGO, CBO, Church).  
2. District: \_\_\_\_\_ 3. Area of the Centre: [1] urban, [2] peri-urban or [3] rural  
4. Your skills training duration: \_\_\_\_\_ months. Today's date: \_\_\_/\_\_\_/2013

- v1
- v2
- v3
- v4.1
- v4.2
- v4.3
- v4.4
- v4.5

**Section A: Biographic profile of the trainee (All participants must complete this section)**

1. Indicate all vocational/ occupational skills training course you took at your centre.

Agricultural technology	1	Sewing and fashion skills	7
Ancillary health care	2	Poultry	8
Small medium and micro enterprises	3	Co-operative	9
Travel and tourism	4	Basic paramedic	10
Information and computer technology	5	Beauty training	11
Craft	6	Other (specify).....	12

- a1.1
- a1.2
- a1.3
- a1.4
- a1.5
- a1.6
- a1.7
- a1.8
- a1.9
- a1.10
- a1.11
- a1.12

2. Gender 

Male	1	Female	2
------	---	--------	---

a2

3. What is your age? .....years

a3

4. Race

African	1	White	4
Coloured	2	Asian	5
Indian	3	Other (specify).....	6

a4

5. Marital status

Single	1	Widow/widower	4
Married	2	Living with a partner	5
Divorced	3		

a5

6. Which area are you from?

Urban formal (city, town)	1
Urban informal (informal settlement, shacks)	2
Peri-urban (location, township, eg. Umlazi)	3
Rural (village/farm community)	4

a6

7. What is the highest level of formal schooling that you completed?

Some primary school	1
Primary school completed	2
Grade 8	3
Grade 9	4
Grade 10	5
Grade 11	6
Matric Certificate (grade 12)	7

a7

**Section B: Access to the Adult Education and Training programme centre**

8. What is/was your **main hope**/ expectation after graduating from Adult Education and Training? (**Please tick only one**).

To find a job (in public or private sector)	1
To open an own small business	2
To be linked with job opportunities	3
To continue with higher education	4
Other, (specify): .....	5

b8

9. Before you joined/ signed up for the training, were you asked about the following? (**Please tick all the answers that apply**).

I was asked about my own needs for training	1
I was asked about my own learning goal and objectives	2

b9.1

b9.2

**Section C: Training delivery environments**

10. Indicate the level (extent) that you agree or disagree with the following statements about the challenges facing your centre to prepare learners for the world of work.

Statements								
		1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree		
1	There is sufficient provision of learning materials for theory lessons						c10.1	<input type="checkbox"/>
2	There is sufficient provision of learning materials for practical lessons						c10.2	<input type="checkbox"/>
3	There is sufficient provision of basic workshop tools and equipment						c10.3	<input type="checkbox"/>
4	Great attention is given to link learning and work place						c13.4	<input type="checkbox"/>
5	Teachers are encouraged/motivated						c10.5	<input type="checkbox"/>
6	The centre has qualified trainers						c10.6	<input type="checkbox"/>

11. Indicate the level (extent) that you agree or disagree with the following statements about the centre where you trained.

Statements								
		1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree		
1	There is sufficient practical skills training for learners						c11.1	<input type="checkbox"/>
2	Learners have sufficient time to practice skills at centre during training						c11.2	<input type="checkbox"/>
3	The practical component in technical curriculum is well used						c11.3	<input type="checkbox"/>
4	The learning consist of 75% practice						c11.4	<input type="checkbox"/>
5	The learning consist of 25% theory						c11.4	<input type="checkbox"/>

12. How the learning was related (relevant) to your needs and objectives?

Very related (relevant )	1
Related (relevant)	2
Fairly related (relevant )	3
Not related (irrelevant)	4
Neutral	5

c12

13. How able are you to work for others without supervision?

Very able	1
Able	2
Fairly able	3
Not able	4

c13

14. How do you consider (rate) yourself, regarding obtaining the following knowledge and skills, after completion of the programme?

Knowledge and skills						
		1. Excellent	2. Good	3. Average	4. Poor	5. Very poor
1	To start/ grow a business					
2	Managing a business					
3	Marketing of business					
4	Financial management					

c14.1

c14.2

c14.3

c14.4

15. If you have any specific comments or suggestions on adult education and training programmes in KZN that could assist the researcher, kindly list them below.

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**THANK YOU FOR YOUR TIME TO COMPLETE THIS QUESTIONNAIRE**

## Appendix 1B: Interview Schedule for Graduates

### INTERVIEW SCHEDULE FOR THE GRADUATES

Respondent No..... Date:...../...../20.....

#### Goal of the study:

The goal of the study is to assess the training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal.

#### A. Biographic information

1. Gender:  Male  Female
2. Your age: ... years
3. Your training course at the adult centre is: \_\_\_\_\_

#### B. Training delivery environments

1. Please explain how you were learning in classroom using materials for practical lessons.
2. Please explain how you were learning using tools/equipment outside the classroom.
3. Please explain how your learning process was related to your future job.
4. What were you doing during the time of skills practice at your centre?
5. Please explain how you were assessed in class and workshops.
6. Please explain how the learning was related to your needs and objectives?
7. Please explain how you are able to work on your own without supervision.

**APPENDIX 2: Informed Consent Form: Graduates**



**College of Humanities**  
Private Bag X01  
Scottsville, 3209, South Africa  
Telephone: +27 (0) 033 260 6189  
Facsimile: +27 (0) 086 516 3947

**DECLARATION OF CONSENT**

**PROJECT TITLE: An analysis of training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal**

**RESEARCHER**

Full Name: Celestin Mayombe  
School: Education.  
College: Humanities  
Campus: Pietermaritzburg  
Proposed Qualification: Master’s degree  
Contact: xxxxxxxxxxxxxx  
Email: xxxxxxxxxxxxxxxxxxxx

**PROJECT LEADER**

Full Name of Supervisor: Mr Zamo Hlela  
School: Education  
College: Humanities  
Campus: Pietermaritzburg  
Contact Details:  
Email: xxxxxxxxxxxxxx

**HSSREC RESEARCH OFFICE**

Full Name: Prem Mohun  
HSS Research Office  
Govan Bheki Building  
Westville Campus  
Contact: 0312604557  
Email: mohunp@ukzn.ac.za

I, Celestin Mayombe, Student no. 206500699, am a student, in the School of Education, at the University of KwaZulu-Natal. You are invited to participate in a research project entitled: An analysis of training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal. The aim of the study is to assess the training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal. Through your participation, I hope to understand your perceptions on the effectiveness of the training delivery environments (teaching approaches and resources) of the NFE centre contributing to skills acquisition. I guarantee that your responses will not be identified with you personally. Your participation is voluntary and there is no penalty if you do not participate in the study. Please sign on the dotted line to show that you have read and understood the contents of this letter. The questionnaire will take approximate 10 minutes to complete.

**DECLARATION OF CONSENT**

I..... (Full Name) hereby confirm that I have read and understand the contents of this letter and the nature of the research project has been clearly defined prior to participating in this research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Participants Signature: .....

Date:.....

**APPENDIX 3: Consent Letter Permission for Audio Recording**



**College of Humanities**  
Private Bag X01  
Scottsville, 3209,  
South Africa

Telephone: +27 (0) 033 260 6189  
Facsimile: +27 (0) 086 516 3947

Dear Participant,

**INFORMED CONSENT LETTER**

My name is Celestin Mayombe. I am a student in the School of Education, University of KwaZulu-Natal, Pietermaritzburg Campus. I am interested in learning about training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal, of which you are/ were a part. To gather the information, I am interested in asking you some questions.

Please note that:

- Your confidentiality is guaranteed as your inputs will not be attributed to you in person, but reported only as a population member opinion.
- The interview may last for about 1 hour and may be split depending on your preference.
- Any information given by you cannot be used against you, and the collected data will be used for purposes of this research only.
- You have a choice to participate, not participate or stop participating in the research. You will not be penalized for taking such an action.
- Your involvement is purely for academic purposes only, and there are no financial benefits involved.
- If you are willing to be interviewed, please indicate (by ticking as applicable) whether or not you are willing to allow the interview to be recorded by the following equipment:

	willing	Not willing
Audio equipment		
Photographic equipment		
Video equipment		

I can be contacted at:

Email: xxxxxxxxxxxxxxxxxxxx

Cell: xxxxxxxxxxxxxxxxxxxx.

My project leader is Mr Zamo Hlela who is located at the School of Education, Pietermaritzburg Campus.

Contact details: email: xxxxxxxxxxxxxxxx.

Thank you for your contribution to this research.

**DECLARATION**

I..... (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT

.....

DATE

...../...../.....

## **APPENDIX 4: Request for Permission to Conduct Research**

xxx xxxx Avenue  
xxxxx Park  
Durban North  
4051

Ref: Celestin Mayombe  
Tel: xxxxxxxxxx  
E-mail: xxxxxxxxxxxx

11 January 2017

The Director  
Office of the Head of Department  
KZN -Department of Education  
Anton Lembede Building; 247 Burger Street;  
Pietermaritzburg, 3200

Dear Sir,

### **REQUEST FOR PERMISSION TO CONDUCT RESEARCH**

I hereby wish to request permission to conduct research towards my master's studies. I am a student at the University of KwaZulu-Natal in pursuit of a Master's degree in Adult Education in the School of Education (Pietermaritzburg Campus) under the supervision of Mr Zamo Hlela. I am undertaking a research study on the following topic: "An assessment of training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal, South Africa". The goal of the study is to assess the training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal. The researcher will only consider programmes which are linked to livelihood skills and entrepreneurial training for unemployed people. The sample will consist of 20 centres in the educational districts of Umlazi, Pinetown, ILembe and uMgungundlovu.

The study will use quantitative data collection methods. The field observation will focus on practical work training, material resources such as the training venue. Self-administered questionnaires will be used to collect data from the learners. In addition, I request permission to access and analyse reports and documents relevant to my study. The data collection will be conducted outside of the working hours or scheduled classes in order to avoid disruption of learning and teaching.

I kindly request the KwaZulu-Natal Department of Education's written permission to use all the above-mentioned data collection methods in order to obtain ethical clearance from the College of Humanities' Ethics Committee. For any further information or clarification, you are welcome to contact me at the above-mentioned telephone number or e-mail address.

I look forward to your favourable response.

Yours sincerely,

Celestin Mayombe  
Researcher

## APPENDIX 5: Permission Letter to Conduct Research



education

Department:  
Education  
PROVINCE OF KWAZULU-NATAL

Enquiries: Phindile Duma

Tel: 033 392 1041

Ref.:2/4/8/1142

Mr C Mayombe  
PO Box 184  
Durban  
4000

Dear Mr Mayombe

### PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: **“AN ASSESSMENT OF TRAINING DELIVERY ENVIRONMENTS FOR SKILLS ACQUISITION IN ADULT NON-FORMAL EDUCATION CENTRES FOR EMPLOYMENT IN KWAZULU-NATAL, SOUTH AFRICA”**, in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the Intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from 23 January 2017 to 07 June 2019.
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Miss Connie Kehologile at the contact numbers below
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

Umlazi District

Pinetown District

ILembe District

UMgungundlovu District

**Dr. EV Nzama**  
**Head of Department: Education**  
**Date: 26 January 2017**

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#### KWAZULU-NATAL DEPARTMENT OF EDUCATION

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## APPENDIX 6: Ethical Clearance



UNIVERSITY OF  
KWAZULU-NATAL  
INYUVESI  
YAKWAZULU-NATALI

22 June 2017

Mr Celestin Mayombe (206500699)  
School of Education  
Pietermaritzburg Campus

Dear Mr Mayombe,

Protocol reference number: HSS/0637/017M

Project title: An analysis of training delivery environments for skills acquisition in adult non-formal education centres for employment in KwaZulu-Natal

### Approval Notification – Expedited Application

In response to your application received on 29 May 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

**PLEASE NOTE:** Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....  
Dr Shenika Singh (Chair)

/ms

Cc Supervisor: Dr Zamo Niela  
Cc Academic Leader Research: Dr SB Khoza  
Cc School Administrator: Ms Tyzer Khumalo

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Humanities & Social Sciences Research Ethics Committee

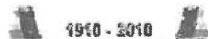
Dr Shenika Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

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