PROSPECTS AND POSSIBILITIES OF ACCREDITATION STANDARDS AS A QUALITY MEASURE OF EARLY CHILDHOOD EDUCATION IN BOTSWANA

A Thesis Submitted in Fulfilment for the Degree of Doctor of Philosophy in Early Childhood Education in the Department of Primary Education, University of Botswana

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Abstract

Despite many efforts targeted at bringing quality in the provision of Early Childhood Education (ECE) globally, Botswana still lags behind. In order to regulate and monitor ECE programs to ensure quality standards are upheld, this study aims to recommend accreditation as a quality measure to improve ECE services in Botswana. Accreditation is the mark of excellence awarded to a program by an independent third party, proving that the program meets certain criteria and satisfies requirements. This means that during accreditation programs would be presented with a certificate of approval to show that they have fulfilled the requirements and are thus qualifying; whereas those that would not have fulfilled the requirements would be denied the certificate of approval, resulting in programs either closing or improving the standards depending on the outcome of accreditation assessment.

This study aims to use the Minimal Accreditation Model (MAM), which is a model that fulfils the minimal standards for setting up an ECE program. Since Botswana ECE has not been accredited before, this model, which will initially be seeking only the basics from the service providers, will be the appropriate way to kick-start the accreditation process. The minimal model requires a minimum set of accreditation standards to be followed, such as having a formal authorizing body, having specified goals regarding to what each program intends to achieve and using quantitative indicators such as teacher-pupil ratio, adequate space with regards to teaching rooms, computers rooms and the library.

Since, the Minimal Accreditation Model (MAM) requires service providers to adhere to the approved standards to ensure that quality provision is provided for children enrolled in the ECE programs, this study explored perceptions of ECE teachers in the South East Region of Botswana (Gaborone) regarding aspects necessary to be included in the model, recommendations that can be made to the authorities in Botswana regarding accreditation and whether participants attach any importance to having accreditation standards to monitor the provision of ECE in Botswana.

The study employed a mixed-method research design, i.e. the qualitative and quantitative approaches. Since the study was interested in the views and perceptions of teachers in ECE, it was important to use the qualitative approach, and this was done by means

of interviews. There were 13 interviews conducted and data was analysed using *NVivo 12* qualitative data analysis tool.

Data was also collected through a survey questionnaire. 89 questionnaires from 58 ECE programs in South East District were used in the study. The ECE programs were divided into four categories: privately owned programs, government owned, church owned as well as institution owned. The rationale for using a survey was to cover a large sample of data in a manageable time frame. Data was analysed through Principal Component Analysis (PCA). Data was further refined by Factor Analysis (FA), both descriptive and inferential statistics (Chi-Square) were used to interpret the data.

The rationale for the triangulation of the analytic techniques was to bring out certain aspects from each tool. In the PCA analysis, the study sought to bring out inferential statistics, how factors were associated, and through FA the most preferred aspects to be included in MAM were made evident. In the qualitative approach data was analysed using *NVivo 12*. A summary of all transcripts was compiled in which sub-themes were compared to come up with the overall themes that were later used to report the findings of the study.

The findings of the study indicate that participants from all the categories of ECE agreed that aspects most crucial to be included in the Minimal Accreditation Model are ensuring safety measures for children, mission and vision policies and establishing strong parental involvement and partnership through Parents Teachers Associations (PTA). Other factors considered essential were the quality of teacher training and monitoring and evaluation of teachers' performance. The study recommends that these aspects be included in the model to suit the Botswana context.

In conclusion some recommendations were made on how accreditation procedures could be improved which will in turn improve quality provision of ECE program in the country. The lessons learnt from this study are that teachers in Botswana are knowledgeable about ECE. ECE has advanced significantly in the past years especially in the privately owned programs as the majority of these programs are run by foreign nationals with solid background and qualifications in ECE.

Furthermore, there are adequate resources, facilities and trained teachers in the privately owned programs. Furthermore, the government and church owned programs have limited

resources and unqualified teachers, and this impacts negatively on the quality of the provision. There is need to improve on facilities/materials as well as the training of teachers in these settings in order to provide better services for young learners, because quality ECE is essential for the holistic development of children. As it is, there is need for an accreditation model that can assist in the regulation as well as the monitoring of the ECE provision in Botswana.

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This thesis has been examined an	d is approved as meeting the required standards of
scholarship for the partial fulfilme	ent of the requirement for the degree of Doctor of
Philosophy in Early Childhood Educa	ation.
Main Supervisor	Date
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Co-Supervisor	Date
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Statement of originality

I declare that the dissertation entitled 'Prospects and Possibilities of Accreditation Standards

as Quality Measure of Early Childhood Education in Botswana' was completed by the author

at the University of Botswana between January, 2010 and June, 2019. It is the original work

except where reference is made, and neither has it been nor will it be submitted for the award

of any other degree at any other university.

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Dedication

This work is dedicated to my deceased mother, Lesego Caroline Botshomanyane who would have loved to see me obtain a PhD degree. I dedicate this work also to my deceased siblings, Selbourne Tuna Sentshwe, Michael Nnene Motlhagodi and Portia Thabo Botshomanyane. My special dedication goes to my siblings Idiah Sentshwe, Elizabeth, Shimane, Thato and my nephew Lemo, as well as my nieces Kano and Tlotlo Botshomanyane.

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Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana

List of Acronyms

ECE Early Childhood Education

NDPC National Day Care Centre Policy

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations International Children's Emergency Fund

AEYC National Association for the Education of Young Children

DAP Developmentally Appropriate Practices

MAM Minimal Accreditation Model

BQA Botswana Qualification Authority

MAS Minimal Accreditation Standards

SDO Standards Development Organization

PCA Principal Component Analysis

NGO Non-Governmental Organisations

YWCA Young Women Christian Association

SPSS Statistical Package for Social Sciences

FA Factor Analysis

OECD Organization for Economic Co-operation and Development

PTA Parents Teachers Association

PRM Peer Review Model

PM Program Model

RM Regulatory Model

Chapter 1: Background and problem of the study

1.1 Introduction

This chapter addresses the following issues: Background of the study, policies governing Early Childhood Education (ECE) provision, ECE Stakeholders in Botswana, definitions of terms, scope of ECE, structure of ECE, context of the study, statement of the problem, research questions, objectives of the study, significance of the study and the research design. The research uses a mixed method design. This was because the researcher felt that using one method would not provide the depth of understanding needed to fully comprehend the phenomenon being studied (Shannon-Baker, 2016). In this study both qualitative and quantitative methods were used with the understanding that they complement each other in data collection and, the findings and interpretation of the findings.

1.2 Background to the study

In Botswana, ownership of Early Childhood Education (ECE) was initially owned by private institutions and individuals. In 2012 the government made ECE an integral part of the education systems of Botswana. The Education Training Sector Strategic Plan (ETSSP) of (2015) identified "lack of access to Early Childhood Development programs despite its importance on learner progression and pupil performance at schools as the early years prepare children for school readiness" (Republic of Botswana, 2015, p. 23).

The ETSSP underscores the fact that pre-primary education is largely provided by the private sector. It is also worth noting that during this period when ECE was in the hands of the private sector, majority of children eligible for ECE did not have access to such programs due to lack of finances. To increase access to ECE, the National Development Plan 10 (NDP 10) set a target of 40% increase in enrolment using a scale of 18.4% of children who entered Primary School Standard 1 level in 2011 who had attended Early Childhood Education at government run schools (Statistics Botswana, 2012, cited in ETSS, 2015). NDP 10 noted with contrast that 48.1% of children entering Standard1 in private schools had participated in early childhood program.

The first step by the Government of Botswana in increasing access in Early Childhood Education or Pre-primary education was to introduce orientation programs for prospective Standard 1 pupils in 2012 and reception classes in public schools in 2013. The orientation program was for a period of six weeks and was introduced in all public primary

schools. The program was to partly prepare children for learning and provided readiness activities, and also helped children settle into schools. A One-Year Reception Program was introduced in 115 out of a total of 756 public schools in January 2014. Currently, the Government has made a great commitment in regards to the provision of ECE (Republic of Botswana, 2015, p. 23) with the introduction of reception classes.

Early Childhood Education is basically defined as a branch of education which relates to the formal and informal teaching of young children until the age of about 8. It is sometimes called Nursery Education (Henniger, 2017). There are numerous benefits associated with quality ECE. Among these benefits is easy progression when they start primary school. For example children who underwent quality Early Childhood Education are said to have increased productivity over a life time, thus improving standards of living, saving costs on remedial education and care and higher earnings for parents, especially women who would be free to join the labour market (Henniger, 2017).

Investment in ECE also reduces social disparities as well as race and gender inequalities. ECE further has the potential to end the cycle of poverty (Meier & Marais, 2012). When children are enrolled in ECE programs, they are likely to learn valuable skills that could instil peace, compassion as well as issues of democracy, unity, self-reliance and *botho*, which in the case of Botswana denotes a well-mannered, courteous, humane and disciplined person who disapproves of anti-social, disgraceful, inhuman and criminal behaviour, and encourages social justice for all (Presidential Task Group, 1997).

Indeed, the benefits of attending Early Childhood Education have been mentioned by a number of researchers. (Henniger, 2017) for example, contends that children who receive high quality ECE have fewer problems progressing in school than those who received low quality care. They are said to score higher on tests gauging cognitive and academic achievement. Furthermore, children who attended Early Childhood Education pre-schools are less likely to engage in problem behaviours like fighting, arguing, being mean to others than those who received low quality care (Barnett & Belfield, 2010). These are some of the many benefits that make Early Childhood Education a priority in many countries, with Botswana included although it has just recently started supporting this sector of education.

The early years are critical for the development of human beings, and the first 8 years are characterised by rapid, physical, intellectual, social and moral development (Meier & Marais, 2012). During this period it is important for young children to be provided with quality Early Childhood Education that can develop them holistically. Little research has been done with regards to ECE but none of them has focused on accreditation standards as a quality indicator of Early Childhood Education in Botswana. Examples of some of these studies are presented below.

Maundeni (2013) found out that pre-schools in Botswana were faced with problems of lack of proper structures, overcrowded classrooms, lack of facilities, not following standards set by the 2001 Early Childhood Education and Care Policy where teachers without relevant qualifications or with inadequate preparation to teach at this level were used. As stated by Meier & Marais (2012, p.79) there is a positive correlation between teachers' qualifications and the quality of Early Childhood Education program. Monyatsi, Bose & Mberengwa (2012) state that teacher-pupil ratio in some schools tend to be higher than what is suggested in Early Childhood Education policies.

The 2001 Early Childhood Education Policy states that in Botswana a centre shall have a maximum of 25 children aged $2\frac{1}{2}$ -4 years per class, and a maximum of 30 children aged 4 to 6 per class. However, some schools are said to have high ratios of 50 – 60. In some of the schools, children are overcrowded with not enough space to move around to interact with others. Maundeni (2013) also reports lack of materials and other equipment that children can play with. As recommended by worldwide organisations that advocate for quality Early Childhood Education, such as National Association for the Education of Young Children (NAEYC), children need to be provided with age appropriate materials they can use for learning. This is seen as a contemporary approach to learning. As stated by Yiannouka, Whitebread & Kuvalja (2018) children's play is a natural avenue for learning, social experiences and emotional enrichment. As a result children cannot play without appropriate materials they could use for indoor as well as outdoor.

Hygiene was also identified as being compromised within ECE programs in Botswana (Maundeni, 2013). The scholar further states that most programs in Botswana do not meet the Early Childhood Education Policy requirements on health and safety standards. These

programs do not provide essentials such as warm water, liquid soap, hand-drying facilities and sanitary towels. Meals are also not good enough. Food is important in the holistic development of young children because without food children cannot function fully, let alone learn effectively. As noted by the psychologist Abraham Maslow, the basic needs of children need to be satisfied first in order for them to learn. Below is the hierarchy of needs as proposed by Abraham Maslow.

Self-actualization

Esteem

Love/belonging

Safety

Physiological

Figure 1: Maslow's Hierarchy of Needs

Adapted from Atkinson & Higard, (2016).

Figure 1, shows the hierarchy of human needs from the most basic, which is the physiological needs followed by safety needs, then love and belonging, self esteem and finally self actualization. As Abraham Maslow points out, physiological needs are the most basic and they need to be satisfied first (Atkinson & Hilgard, 2016). Thus all children need food, clothing and shelter. If families cannot offer these needs, the ECE program has to find ways of satisfying them.

The next stage in the hierarchy of needs is that of safety. Here schools as well as families need to protect young children from harm and danger. The love and belonging level requires that children be loved so that they can acquire a sense of belonging (Atkinson & Hilgard, 2016).

Self-esteem is yet another level of need suggested by Maslow. Self-esteem reflects an individual's overall subjective emotional evaluation of his or her own worth. It is the decision made by an individual as an attitude towards the self. Self-esteem encompasses beliefs about

oneself, as well as emotional state such as triumph, despair, pride and shame. Basically the self-concept is what we think about the self; it is the positive or negative evaluations of the self (Atkinson & Hilgard, 2016). It is therefore important for pupils to have a positive evaluation of the self because a negative evaluation can breed negativity, hopelessness and despair.

Last on the hierarchy is self-actualisation, here Maslow argues that self-actualization is where one gets fulfilled, and describes the good life as one directed towards self-actualization, the highpoint need (Atkinson & Hilgard, 2016). Self-actualization occurs when an individual maximizes their potential by doing the best they are capable of doing. It is difficult for an individual to progress through the hierarchy of needs if the previous levels are not met (Henniger, 2017). Children need to be self-fulfilled in order to have a better life now and in future. All practitioners in ECE should strive to satisfy the needs of young learners to enable them to reach their full potential as outlined by Maslow's Hierarchy of Human Needs.

1.3 Policies for ECE in Botswana

Various policies are used in the provision of ECE in Botswana. These policies have been aligned with global interest such as the 1990 Jomtein Conference *Education for All* which was held in Thailand. The most prominent are the following: The Revised National Policy on Education of 1994 and Early Childhood Care and Education Policy of 2001. Although these policies have assisted stakeholders in Botswana in the provision of ECE services, they seem not to be adequate in assuring quality ECE standards.

As mentioned before, Early Childhood Education refers to branches of education and care of young children from birth to 8 years (Meier & Marais, 2012). It is also referred to as pre-school, kindergarten, nursery and crèches. Early Childhood Education is an integral part of modern education systems in many countries, with the Botswana government having acceded to this need. In Botswana ownership has predominantly been within the context of private institutions and individuals. However, the Government of Botswana has now made a great commitment in this regard.

As it may be expected, increasing interest in and importance of ECE comes with public investments directed especially at improving the development of all young children (Sirag, 2015; Icenberg & Jalongo, 2010; Demma, 2010 and Aguilar & Tansini, 2011). A

number of benefits are cited for having quality Early Childhood Education. These include though not limited to positive effects on cognitive and social and emotional development (Gordon & Browne, 2013; Cohen & Best, 2013 and Ishimine & Tayler, 2014).

1.4 ECE stakeholders in Botswana

Although various stakeholders have been tasked with the responsibility of the provision of ECE in Botswana, they are facing considerable obstacles regarding the running of ECE. The following subsection presents these various stakeholders as well as their responsibilities and limitations in carrying out the mandate of coordinating ECE.

1.4.1 Ministry of Education

The role of the Ministry of Education (MoE) is to provide an enabling environment and make sure that the coordination of the ECE services is carried out efficiently by the various stakeholders such as private, not-for-profit and public sector. This notwithstanding, the MoE, through its smaller unit called the Pre-school Division, still faces challenges in the management, supervision and general coordination of ECE services. This partly stems from the fact that there is dual partnership between MoE and the Ministry of Local Government (MLG), and partly because of financial challenges on the part of the MoE (Botswana National Early Childhood Integrated Early Childhood Development Baseline Study, 2006). While the MoE sets the guidelines for running a centre, the MLG, through the Social and Community Development Department (Local Councils) register, inspect and supervise day care centres and nursery programs. What contributes to the difficulty is the fact that some centres do not allow the local councils to inspect them. Some of these centres self-evaluate themselves and their programs as *outstanding* and do not see any need for council inspection. Others refuse council inspection plausibly because they underperform and fear that their licence to operate maybe be suspended or rescinded.

1.4.2 Ministry of Local Government

The Department of Social Services which has been mandated with the responsibility of social welfare, safety and social protection of young children is under the Ministry of Local Government. The role of this Department is crucial in the education and development of young children. One of its duties is to ensure that the needs of orphaned and vulnerable are met. According to Botswana National Integrated Early Childhood Development Baseline Study of 2006, p. 35, the major role of the department is;

To develop, coordinate, facilitate, monitor, supervise and evaluate the implementation of social services programs throughout the country with a view to promoting social functioning of the individuals, groups and communities in order to improve the quality of life.

The Department of Home Economics at the University of Botswana has been tasked with the role of empowering families, especially women and young girls, and the coordination of ECE including supervision and monitoring of services. Currently, there is no system in place for parental education within the Department of Home Economics (Botswana National Early Childhood Integrated Early Childhood Development Baseline Study, 2006).

1.4.3 Ministry of Health

The role of the Division of Child Health under the auspices of the Ministry of Health focuses on the needs of a child such as health, immunisation and management of childhood illnesses. This follows the universal Millennium Development Goals which were developed in 2000 following the adoption of the United Nations Millennium Declaration. All member states subscribed to these goals (Botswana National Early Childhood Integrated Early Childhood Development Baseline Study, 2006). The goals are poverty eradication, education for all, empowering women and promoting equality, under 5 mortality rate, maternal mortality, curbing the HIV/AIDS and malaria and ensuring environmental sustainability. It was therefore imperative for Botswana to ensure that it has mechanisms in place to reduce the less than 5 mortality rate, consequently the birth of The Division of Child Health.

The Division of Child Health was mandated with assessing birth defects and developmental concerns that might affect education and care of young children. According to the Botswana National Integrated Early Childhood Development Baseline study of 2006, this Division seemed to be having a strong health care system with 99% children being immunised, and 85% of the population having access to health services in the 5-10 km radius (Botswana National Early Childhood Integrated Early Childhood Development Baseline Study, 2006).

1.4.4 Ministry of Labour and Home Affairs

The Women's Affairs Department within the Ministry of Labour and Home Affairs has been mandated with guiding the implementation of various gender development activities. In order to adhere to Universal Declaration on Human Rights, Botswana has put in place a National Gender Program Framework (NGPF) which seeks to address inequalities between men and women and further deals with issues of poverty, power decision, education and training

health and HIV/AIDS. These issues affect ECE children worldwide including those in Botswana, some of who go to school hungry, abused, ill and traumatised on a daily basis (Icenburg & Jalongo, 2010).

The Ministry has a lot on its hands since Botswana is facing problems due to the increasing numbers of orphaned and vulnerable children within the ECE programs. These children are particularly vulnerable because they are experiencing a lot of difficulties at a critical stage of their development. They need intervention from stakeholders to assist them to develop optimally. In short, the combined efforts stakeholders mentioned above can go a long way in helping children develop to their full potential.

1.5 Definitions

Having given a brief general background about ECE it is proper to explore definitions associated with the field.

ECE services are usually intentionally provided by people other than family members in settings outside the child's home (Meier & Marais, 2012). Such services are usually meant to influence the developmental changes in children from birth until the age of entering first grade (Gordon & Brown, 2016). This time period is widely considered the most vulnerable and crucial stage of a person's life, and needs systematic and effectual systems of learning to direct developmental changes. Such developmental changes may include effects on cognitive, social and emotional development.

ECE services are varied and include faith based program, in-school programs and public or private programs, child care centres, family childcare homes, home-based child care and private nursery schools. There are programs that are developed by organisations such as church and Non-Governmental Organizations (NGOs). There is also the school-based child care. The latter kind of care is usually located within a public school or private school and operates under the direction of the main school (Gordon & Browne, 2016). In Botswana there are a few corporate child care programs such as those owned by DeBeers. The University of Botswana owns a child care facility which accommodates staff children. Corporate facilities offered by businesses on site make it convenient for employees to bring their children when they come to work (Gordon & Browne, 2016). In terms of the length of time per day, most programs open in the morning and run either half or full day.

ECE programs should be run by professionals, who are basically personnel who have been trained for the job. These professionals also possess skills and knowledge to teach young children. Oxford Dictionary & Thesaurus (2017, p. 816) define professional as *an expert, accomplished, skilful, mastery, masterful, polished, competent, able and deft.* These professionals are referred to using different terms such as educators, teachers, assistant teachers, childcare providers and teacher aides. A teacher aide provides operational and clerical support to teachers and also supervises the pupils in the classroom or on the playground (Henniger, 2017). Qualifications of the professionals in these programs vary. Programs have teachers with qualifications ranging from Certificate to Master's degree in ECE.

There are lots of variations with regard to scope and structure in Early Childhood Education programs. Generally, scope deals with the extent of coverage of ECE. There are diverse programs serving various needs such as investment in human capital, supplement to care and education provided by families, remedial or compensatory service, research and teacher preparation, academic instruction and service to religious groups. These are briefly discussed in the following sub-section.

1.6 Scope of ECE

Scope is a term that denotes the varieties or the different types of ECE that are available for parents to enroll their children in (Oxford Dictionary & Thesaurus, 2017). The varieties of ECE programs are as follows:

Investment in human capital: When parents enrol a child in a centre they want to enhance the child's abilities in cognitive, psychological, emotional, social and physical needs. The child needs to acquire skills, talents, knowledge and abilities. The investment should be able to pay off in the end, such that the child should perform better at school and obtain a better job after completing their studies (Gordon & Browne, 2016).

Supplement to care and education provided by families: Centres are there to supplement the strengths and talents that parents have for caring for and educating young children. The centres act as a support system that needs to value parent-child bonding and attachment and work to strengthen these bonds. Centres must never be a substitute for parental nurturing and educating of young children (Gordon & Browne, 2016).

Remedial or compensatory service: Certain centres may enrol children with difficulties to remediate or compensate for the particular short coming, such as schools for the blind, deaf and physically handicapped (Henniger, 2017).

Research and teacher preparation: Some centres are organised to provide a group or groups of children for research, such as in Child Development, Child Psychology and Early Childhood Education. At other times these centres can be combined to meet the need for teacher preparation programs. These centres can be used to give tertiary students an opportunity to learn various skills necessary for the teaching of young children (Henniger, 2017).

Academic instruction: These programs develop literacy and numeracy skills and prepare children for entry into primary schools (Gordon & Browne, 2016).

Culturally and religious programs: These are church related programs that teach children religious dogma (Gordon & Brown, 2016). Examples of these in Botswana would be the Dutch Reformed pre-schools as well as the Roman Catholic Mission pre-schools.

1.7 Structure of ECE

Structure can be defined as how something is configured, organized, constituted or shaped. There are a variety of structures for ECE such as infant/toddler group, kindergarten and before and after school programs. These are discussed briefly.

Infant/Toddler Group: Gordon & Browne (2016) define infant as a human being at the stage between babyhood until he/she learns to walk. The same child will be called a toddler until they reach the age of 3 years. Although all children need quality education, this study focus is on the infant and toddlers only. In this age group, they should be able to understand the importance of the relationship (Gordon & Browne, 2016). The same authors state feeding, diapering and playing as the main curriculum for this group. Four year olds also need caring and warm relationships, but since they are older they need to develop cognitively. They need a variety of challenging activities for exploration, dramatization, role playing etc. to boost their development (Henniger, 2017).

Kindergarten starts at age 5. It is sometimes referred to as pre-school; it is also an important period. At this stage children can be enrolled in a centre for half a day, full school day every day, full school day alternate days and half a day. Due to the fact that these children would soon be entering primary school, they need a curriculum that can develop them holistically focusing on the needs of the child, skill development and their developmental abilities or capabilities (Gordon & Browne, 2016).

Before and after school program: These are schools that provide care for children before and after they finish their regular day at school (Gordon & Browne, 2016). These programs were created to assist parents who would be at work very early in the morning or who knock off later than normal working hours.

From the preceding discussion, it is clear that ECE is a complex undertaking. This complexity and diversity heightens the importance of monitoring for quality services (Ishimine & Tayler, 2014). All stakeholders, politicians, parents, governments around the world have taken a keen interest in issues of quality. President Barack Obama in his address to a joint session of Congress in February 24, 2009, for example, underscored the need for quality ECE by stating that in America, "we have dramatically expanded Early Childhood Education and will continue to improve its quality, because we know that the most formative learning comes in those first years of life" (NECTAC Quality Indicators of Inclusive Programs, 2010, p.13).

This research thus focused on the issue of accreditation of ECE, with particular attention on the issue of accreditation as pivotal. Accreditation means a quality assurance framework developed by a recognised body/agency to regulate/validate the content, processes, outputs and products of the programme offered (Follari, 2015). It gives credibility and standard to the program. Botswana is one of the countries that do not have an accreditation framework for ECE in place.

1.8 Context of the study

The current study was conducted in Botswana, which is a land locked country located in Southern Africa and shares borders with Zimbabwe, Namibia, South Africa and Zambia. Botswana was a British colony from 1885. In September 1996, exactly 52 years in 2018, it

gained independence under the leadership of Sir Seretse Khama, the first President of the Republic of Botswana.

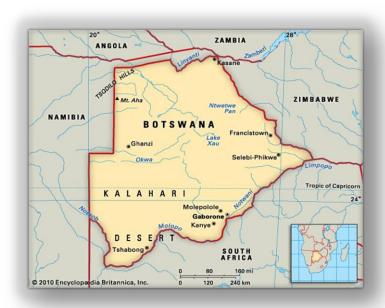


Figure 2: Countries bordering Botswana

Post-independence was a difficult time for the newly elected government as there was almost nothing the country had inherited from their colonial master in terms of robust educational systems. While mainstream schooling such as primary and secondary education existed thinly around the country, ECE was virtually non-existent. The Government of Botswana paid little attention to ECE at that time, preferring to concentrate on other developments such as infrastructure and roads, and regarding ECE as a "luxury" (Kamerman, 2006).

Due to the "lack of involvement" in Early Childhood Education by the Government this field was, with time, taken by private and non-profit organisations. The adopted structure of the programs resembled ECE programs from the colonial masters' countries of origin; and names such as pre-schools, nurseries, crèches and kindergartens were used, also having been adopted from colonial masters (Kamerman, 2006). However, ECE has been growing steadily since independence. Since 1960s, women in various parts of the country started gathering children in their homes for custodial care while at the same time teaching them various activities that stimulated their development (UNESCO, 2018). Complementing these efforts by women were various forms of day care centers, which were operated by voluntary

organizations such as churches, the Red Cross and private individuals (UNESCO, 2018). With the passage of time, concern was raised that some of the centers were not efficiently run. It was at that time when the United Nations International Children's Emergency Fund (UNICEF) started to develop interest in ECE in Botswana. The provision was then directed through the National Day Care Centre Policy (NDCP) of 1980, which has provided guidance in the management, protection and education of children of ages 2-6. NDCP has thus been the principal document used in day care programs in Botswana.

However, as the years went by, there was a rapid increase in the number of women who were employed outside the home. Moreover, the government took a conscious decision to pay attention to women's empowerment; hence women became active in productive economic activities more than ever in the history of the country. This then heightened the need for ECE provision. The economic boom also meant more disposable income, meaning that more and more people became eager to seek quality education for their children. This drove the social demand for ECE provision.

The need for ECE programs has also been necessitated by modernization which brought with it the disintegration of the traditional social setup in which the extended family was the basic unit within which children were cared for and socialized. The rise of the nuclear family, where both parents may be in employment, and the single-parent family, where the head of the family had to fend for the children, necessitated establishment of secondary institutions of socialization to play the role that was played by the extended family before ECE was a handy substitute.

The effects of these developments combined led to a mushrooming of pre-school centers which is already mentioned went by various names such as day care centers, nursery schools, crèches, pre-primary units, reception schools and kindergarten classes. As the demand for ECE increased, issues that needed attention became complex and multifaceted. Therefore, the Day Care Center Policy of 1980 proved to be outdated as it ran short of addressing issues such as standards and regulations, training of teachers, curriculum development, support and management of different types of programs such as children under the age of 2 years and community involvement or participation. This necessitated the formulation of the ECE policy of 2001. This policy attempted to provide a holistic approach

to developmental needs of children, in particular their healthy growth and preparation for primary education.

The objective of the ECE policy of 2001 is to create an opportunity for the establishment and development of professionals in the field of ECE. This policy further seeks to develop care and education so as to give women an opportunity to join the labor force. It also seeks to promote the rights of children. Education, especially ECE, is considered a right for all children and thus all children need to be provided with such (Jomtein Conference for All, 1990). At the same time, the ECE Policy of 2001 seeks to strengthen the support of identification as well as the referral of children with developmental problems.

Maundeni (2013) states that pre-school education in Botswana started after independence and has grown by demand ever since. Pre-schools were run by organizations like women's groups, churches, Red Cross and individuals without any policies. During that time pre-school was enjoyed by few children due to financial constraints experienced by some families. This view is also supported by Mwamwenda (2014) who argues that most children in the West attend pre-school programs while only a privileged few do so in Africa. The above depicts Botswana's situation. Until recently, pre-school education was available only to children whose parents could afford to send them to private day care centers; but currently the government has rolled out ECE programs throughout the country (See Appendix 3) in a bid to make ECE accessible to all. In spite of this, an overwhelming majority of children still have no access to pre-school programs (Mwamwenda, 2014).

Due to a high social demand for more widely accessible pre-school education in Botswana, there has been an increase in different kinds of pre-school provision since 1997. This necessitated the establishment of a Multi-Sectorial Reference Committee on Early Childhood Education in 1980 which was composed of representatives from the Ministries of Education, Health, Local Government and Lands, voluntary and religious organization. (UNESCO, 2018). The Committee's mandate was to look into the activities of pre-schools and draw up guidelines for their operation (UNESCO, 2018). Its work resulted in the adoption of the National Policy on Pre-Schools Centre in 1980. The policy was to provide guidance and reduce problems that were inherent in the uncontrolled establishment of pre-schools in the country.

The Ministry of Education has continuously made proposals since the late 1980s for a greater involvement of the education sector in the provision of pre-primary education. This was recognized by the Government in National Development Plan 7 where a commitment was made to prepare a comprehensive policy on pre-school education and to link it to the formal education system (Republic of Botswana, 1994). As mentioned earlier, in an attempt to improve on accessibility the government has rolled 226 ECE programs around the country in addition to the ones that have been run by both non-governmental organizations as well as private individuals. However, despite all these developments, no accreditation standards have been developed to guide the provision of ECE. The pattern observed from early provisions is that networking or coordination of providers has never been a main goal. Individuals and organisations work on their own. Evidently, not much has been done in terms of implementation of the Early Childhood Education Policy of 2001. A lot of decisions and types of provision are still left in the hands of the providers, there are bound to be a lot of variations as well as various levels of care around the country. The implications of this lack of coordination can include lack of standardization, lack of quality assurance and lack of monitoring of what goes on in each program. In the absence of strict enforcement of the implementation of the Early Childhood Education Policy of 2001, quality mostly likely becomes a casualty.

Meagre research conducted on ECE emphasised the need to develop a national framework for supporting ECE. These studies looked at various issues such as the need for high quality services and for a national framework that supports Early Childhood Education and Care (Maunganidze & Tsamaase, 2014). Other studies looked at parents perspectives regarding professional development of Early Childhood Education teachers (Monyatsi, Bose & Mberengwa, 2012). The authors state that parents want to have a comprehensive service provision that would include, among others, the government, parents, teachers as well as other stake holders. Maundeni (2013) found that pre-schools in Botswana were facing problems such as shortages of proper structures, overcrowded classrooms and lack of facilities for children with special needs. The study also revealed that centres were not abiding by the standards outlined by the 2001 ECE Policy with regards to teacher qualifications pupil-teacher ratio, classroom size, age appropriate materials as well as hygiene and meals.

Bose (2008) looked at, among other issues, the training of teachers in preschools. The findings of the study were that at least half of the teachers in the study were not qualified. In one of the recommendation she states that Botswana still needs to improve a lot with regards to engaging all those responsible in the provision of services of young children.

There is need to set up a framework that will assess quality standards and develop a framework for accreditation standards to regulate quality within these ECE programs. As mentioned before, only a few studies have been conducted in regards to assessment of quality standards in ECE programs in Botswana (Maundeni, 2013; Mauganidze & Tsammase, 2014), and there has been no study in regards to accreditation as a measure of quality standards in Early Childhood Education in Botswana and regionally.

Global efforts to coordinate research studies in ECE are many but one that seems to have acquired global prominence is National Association of The Education of the Young Child (NAEYC). NAEYC has come up with position statements used across the world. NAEYC promotes excellence in early childhood education for children from 0 to age 8. The position statements are guidelines used by professionals/practitioners to provide young learners with age appropriate developmentally, culturally-appropriate practices, and are commonly referred to as Developmentally Appropriate Practices (DAP). NAEYC states that all young children need to be provided with a safe, nurturing environment that promotes their physical, social, emotional and cognitive development while responding to the needs of families (Quality: What it is and why it Matters in Early Childhood Education, 2012).

In addition to the NAEYC recommendations the quality of a program is also dependent on the quality of the interactions between the child and the teacher (Henniger, 2017). According to NAEYC the teacher needs to have attained a 4-year degree in and a specific training in ECE. Children do not easily learn in environments where their physical and emotional well-being is not nurtured. Warm, secure and responsive environments promote learning and development. Cold, restrictive and unsafe environments retard children (Henniger, 2017).

Despite these many efforts targeted at bringing quality in the provision ECE, Botswana has lagged behind in developing standards to ensure quality provision. The Early Childhood Education Policy of 2001 is commendable though its impact is unknown today mainly because not much research if any has been conducted to examine this issue. However, policy framework is never a single tool used to regulate or monitor the provision of quality education, other standards are necessary. Some integral components of policy implementation include monitoring and evaluation standards, accreditation standards, training and development plans as well as financial strategies, just to mention a few. This study is interested in the issue of and seeks to make a recommendation on accreditation as a tool to ensure quality provision of early childhood education.

1.9 Statement of the problem

Although ECE in Botswana dates as far back as 1960, the Government of Botswana did not initially pay much attention to it. Private individuals and entities were the drivers. However, the Government has now made ECE an integral element of the educational system of the country. This has in turn brought many providers, a situation which calls for a more systematic coordination of the program. In light of this, it is imperative that accreditation standards be developed to address the uncoordinated provisions of ECE in Botswana and eliminate substandard provisions and mediocrity and some individuals who would want to use ECE provision as a quick financial gain. These sub-standard practices deny children opportunities to receive quality services that will impact their entire development in a positive way.

Early Childhood Education has clear goals. According to The Botswana Early Childhood Education Policy (2001, p.5) these include the following; "developing care and education services for children so as to promote opportunities for children's full physical, cognitive, social, emotional and mental growth and stimulation." As things stand, these goals may be or may not be compromised since nothing is in place to monitor implementation and assess worth or value. It is thus imperative for the country to monitor the education given to early learners to make sure it meets appropriate standards. This study emphasizes accreditation standards as paramount, in order that quality provision is not undermined.

1.10 Overarching research questions

The study seeks to answer the following questions:

- 1. What do participants understand regarding the importance of early childhood education, the meaning of accreditation, and the importance of accreditation?
- 2. Which aspects were considered high priority in formulating an ECE accreditation model?
- 3. What model of accreditation would be the most suitable one in Botswana ECE programs?
- 4. Do participants attach any importance to having accreditation standards to monitor the provision of ECE in Botswana?
- 5. What recommendations can be made to the authorities in Botswana about priority factors that need to be included in the accreditation model?

1.11 Objectives of the study

The objectives of the study are:

- 1. To find out the participants understanding of basic issues such as the importance of ECE, the meaning of accreditation and the importance of accreditation in ECE in Botswana.
 - 2. To identify aspects which were considered a high priority in formulating an ECE model suitable for Botswana.
 - 3. To identify from the participants which model of accreditation would be most suitable in Botswana,
 - 4. To assess whether participants attach any importance to having an accreditation model for ECE in Botswana.
 - 5. To identify recommendations that can be made to the authorities in Botswana about priority factors to be included in the accreditation model.

1.12 Significance of the study

The significance of the study will be discussed under the following sub-sections: Practice, Policy, Research and Economical Gains.

1.12.1Practice

From the practical point of view, the current investigation hopes to be of benefit to parents of the children who are the recipients of pre-school education. As things stand at the moment, the quality of ECE services is an issue that parents are grappling with. In some cases fees are extremely high and there is currently no obvious, transparent link between these exuberant fees and the quality of education. Once accreditation is put in place parents would have informed choice of where to register their children based on adherence of providers to approved standards. What currently obtains now is that it is unclear which schools offer

quality education and which ones are failing to provide such services; and as a result parents are denied the informed option of choosing where to register their children.

It is hoped that learners will also benefit from the findings of the study as consumers of the service. When accreditation is put in place, service providers would inevitably be expected to abide by approved standards to operate, knowing that they otherwise would be shut down, hence losing their reputation, money and clients. Therefore schools will not be comfortably lax because of accreditation requirements.

1.12.2 Policy

The study further hopes that the Government of Botswana will be pro-active in taking measures to ensure that young children, who constitute the future leaders and workforce, are given a solid foundation in education in accredited schools, which are tasked with equipping them with the necessary skills and knowledge for their future careers. The current study is thus significant in that it argues for the development of an accreditation model that would monitor and regulate ECE provision in Botswana to ensure quality education.

Further, the study sets out to investigate priority factors that may need to be included in the model for consideration by the accrediting body, in this case the Botswana Qualifications Authority. As already mentioned, an accreditation model for ECE does not currently exist in the country. This research undertaking could act as a baseline study for accreditation as policy makers may use the findings to improve the provision of ECE in Botswana using accreditation as a quality measure for ECE programs. This investigation might thus provide a foundation to kick-start the formulation of the ECE accreditation system.

1.12.3 Research

The study could also be a start for further research. Potential areas for future research could include the *Effects of Accreditation in Botswana ECE programs*. For such a study one would be interested in finding out whether there is a significant improvement in the quality of education for young children after the inception of the accreditation model. Such a study would note major developments and setbacks in order to improve the provision of ECE in Botswana.

1.12.4 Economic gain

Economically, Botswana could also benefit as a country. Research has pointed out that children who receive quality ECE are more likely to acquire steady jobs, own a home, have a car or more and are unlikely to be jailed (Henniger, 2017). The economic and social benefits of ECE are many, hence the importance of establishing accreditation standards. The whole of Botswana can benefit long-term, both financially and economically if accreditation in ECE programs throughout the country were to be made available.

1.13 Research design

The research uses a mixed method design. This was because the researcher felt that using one method would not provide the depth of understanding needed to fully comprehend the phenomenon being studied (Shannon-Baker, 2016). In this study both qualitative and quantitative methods were used with the understanding that they complement each other in data collection and, the findings and interpretation of the findings.

1.14 Conclusion

This chapter addressed background of the study on Early Childhood Education, policies governing ECE provision, ECE stakeholders in Botswana, definitions, scope of ECE, structure of ECE, context of the study, statement of the problem, research questions, objectives of the study, significance of the study and the research design. The next chapter will focus on the literature review.

Chapter 2: Review of Relevant Literature

2.1 Introduction

This chapter discusses the Theoretical Framework, limitations of the Framework, ECE provision, Quality Early Childhood Education, ways in which quality can be assessed, need for quality ECE, accreditation, benefits of accreditation, requirement for the preparation for accreditation and resource implications, the role of stakeholders and components of accreditation standards.

2.2 Early Childhood Education provision

ECE programs are seen as facilities that provide out-of-home education and care for young children aged 0-8. These services supplement the education and care parents give to children. The programs can run for a full day or half a day. They can also be for profit or non-profit. In this paper ECE will only include children from $2\frac{1}{2}$ -8. This is because in Botswana most children below the age of 2 years are cared for by parents, relatives or house-keepers and will not be enrolled in ECE.

Early Childhood Education is not a new field; the field can be traced back to the 1500s. As early as then, Comenius (1592-1670) came up with concepts that are still being used to date. These include the idea that children learn mostly through the use of the senses, thus advocating for exploration and active learning. After Comenius came other philosophers such as Locke (1632-1714), Rousseau (1712-1778), Pestalozzi (1746-1827), Froebel (1782-1852), Piaget (1896-1980) and Vygotsky (1896-1980) who came up with their own ideas or concepts on how children learn (Gordon & Brown, 2016). Maria Montessori whose philosophy has been used in Botswana is known throughout the world. Her approach is very good since it allows children to work on their own and at their own pace (Follari, 2015). But this is quite expensive and difficult to run especially in Botswana where programs run at shoe-string budgets. It is also disturbing that a lot of those trying to pursue the Montessori curriculum have totally distorted the method from its original structure to one that is not unrecognizable.

According to (Meier & Marais, 2012) the Montessori approach has many different versions which sometime do not resemble the original one. As it is, there are contemporary approaches to teaching young kids which could be less expensive and more contextual. These

are approaches such as such as the themes, projects and webs which can be used to teach young children as they are economic and could be set up in any environment (Jackman, 2016)

What remains clear is that all these philosophers were concerned with the quality of education and care for young children and introduced concepts or ideas that are still much a part of early childhood system today. Great ideas such as the use of child-sized material and equipment, the idea that young kids need to use self-correcting materials, sequential steps of learning, child-centred approaches to learning; integrated curriculum, the value of play in learning and many more are still appropriate and applicable to ECE to date (Henniger, 2017).

Because of all these ideas raised by the pioneers, Early Childhood Education has grown significantly worldwide, and with the growth there is agreement by all involved in the education of young learners that it is important that all young children need Early Childhood Education to develop holistically. This holistic development should provide kids with educational and nurturing experiences in all important domains such as physical development, cognitive development, social development and emotional development.

In addition to the pioneers who brought about these ideas, theorists also played their part in developing theories that are used world-wide to guide and inform all those involved with the education of young children. Maturationists and behaviourists theorists are some of the theorists who made significant contributions. Maturationists believe that human traits are determined by genetics and children mature with age. Behaviourists believe that human traits are acquired through experiences with the environment. Adults can purposively shape desired learning through positive reinforcement.

In addition to the theories mentioned above, global organizations such as the United Nations Economic Scientific and Cultural Organizations (UNESCO) and United Nations International Children's Emergency Fund (UNICEF), and Governments have taken a key interest in the education and care of kids. They argue that programs should among other things improve the quality and content, as well as training for all those that are involved (Trawick-Smith, 2018). Consequently, with the variety in theories, cultural dynamics, economic status there are so many variations and differences in the provisions and care of

young learners. In Botswana for example there are many varieties of ECE that differ in service delivery as evidenced in (Maundeni, 2013).

The National Association of the Education of Young Children (NAEYC) is an organisation that has gained international reputation with regards to the education and care of children worldwide. This organisation has come up with position statements called Developmental Appropriate Practices (DAP). Practitioners who use DAP use three important sources of knowledge based on what they know about children's development and learning (Gordon & Browne, 2016). These practitioners need to know about the strengths, needs and interest of children and the social, cultural contexts of the children.

2.3 The Theoretical Framework

When discussing issues of accreditation, a number of frameworks can be used depending on the context of the research and what the research intends to do. Since this study is on accreditation, it was therefore necessary to use theories on accreditation. Theories on learning, such as behaviorism, cognitive psychology, constructivism, social learning theory, experiential learning, multiple intelligence situated learning theory and several others were not found applicable as they focus on learning and not on accreditation (UNESCO, 2017). As a result the model adopted is mainly used for accreditation but not for learning.

Accreditation efforts in many countries follow specific models and these accreditation models may differ according to a country's level or growth or advancement of Early Childhood Education. Accreditation models are used as government regulations for ECE provision to ensure quality and standardization across different providers. The discussion below briefly explains the four models of accreditation borrowed from (Van Damme Model of Accreditation, 2004).

2.3.1 Regulatory Model (RM)

RM tasks policy makers with making recommendations about accreditation standards that require providers to strictly adhere to the core requirements to be followed by those engaged in Early Childhood Education. This accreditation model usually considers all aspects of quality provision, like human resources required such as expertise or training of teachers, managers and leaders as well as those who design the curriculum for early childhood learners (Donahue & Ostenburg, 2000). Set standards are to be strictly adhered to as compared to other models that do not consider a holistic picture of accreditation. The RM may not

necessarily be suitable to Botswana because ECE is currently getting the attention and support of the Government of Botswana. Thus models with lesser strict adherence expectations may be considered.

2.3.2 Peer Review Model (PRM)

PRM has become a mark of excellence achieved through schools selecting peers to form a team that would function as an accreditation body. Since this accreditation model is constituted by peers, it is possible that only a fraction of stakeholders with common interest can be used as regulatory check points for quality provision. While members may seek accreditation to demonstrate their commitment to excellence, they can also bring divergent or conflicting views or clash about philosophies relating to the education and care of the learners, and this may not be appropriate or ideal. With regard to the PRM, Van Damme (2004) states that accreditation can be made by private individuals because standards have not been set by the national body under the national government. This means that the PRM model may not be applicable for Botswana since policies are set by a national body, the BQA, which is under the government.

Another problem with this type of non-governmental, voluntary accreditation is the possibility that members may be chosen without a clear criteria, and this poses a number of challenges including selecting people who do not have the right expertise to be members of the accreditation body. Accreditation models, especially non-governmental regulatory others tend to be much more flexible because they are not bound by the rigidities of government rulemaking procedures. Care should be exercised when an accreditation model is chosen to ensure that it fits well and can function efficiently within the local setting. While there may be significant benefits in the Peer Review Model as an alternative to others, it may not be the best model for Botswana for the reasons pointed above.

2.3.3 Program Model (PM)

In the Program Model, the ECE programs appraise one another' Donahue & Ostenburg, 2000). For example, providers of infant/toddler preschool program accredit one another and kindergarten 3rd Grade program providers also accredit each other. Concentration in a single program for a whole course menu of ECE program would not give a holistic picture of what happens in the field of ECE and thus if programs appraise one another Donahue & Ostenburg, 2000), this may introduce compromise, which will in turn compromise quality.

It has to be noted that the choice of any accreditation model is driven by the desire to enhance quality provision. It may be possible that rigid adherence to standardization can work for some situations while other circumstances may need a more flexible approach. This notwithstanding, the PM model may not be appropriate for Botswana to adopt because regulatory standards in the country are determined by the government which is the main provider and sponsor of ECE.

2.3.4 Minimal Accreditation Model (MAM)

In the Minimal Accreditation Model, agreed upon criteria are put in place to be used to assess and compare ECE provisions or practices. The MAM calls for enough budgets to run the preschools and for infrastructure that can accommodate children and their need. It requires that the size and skill base of school and adequate coverage of the basic topics in the curriculum be established (Berliner & Schmelkin, 2010). In short the MAM wants providers to satisfy the basics, minimal core requirements in the provision of ECE services, such as having enough budgets, infrastructure for the program to run. It is mainly used as an appropriate way to start an accrediting body—hence its suitability for Botswana.

The essential features of the MAM include having a formal authorizing power (Berliner & Schmelkin, 2010). Having accreditation standards implies the existence of an accreditation body which acts as an authorizing power and reviews, assesses and gives permits to carry out ECE provisions. The Botswana Qualification Authority (BQA) is in place for issuance of accreditation and ECE Minimal Accreditation Standards (MAS) may be developed by the authority in consultation with relevant stakeholders. The presence of BQA gives this study an impetus to propose the use of the Minimal Accreditation Model as a Theoretical Framework. BQA already deals with setting up minimal standards to be adhered to by institutions of learning.

Furthermore, the MAM uses quantitative indicators like required number of teaching staff, adequate size of the establishment, reasonable teaching load, spread of responsibilities, size of teaching rooms and laboratory facilities as well as the availability of a library and computers. Yet another aspect of this model is that assessment is done in numeric value. For example, a minimum number of children with corresponding number of staff can be set for ECE programs to start running or continue the provision.

The MAM determines basic characteristics of the school and program. This model is often numeric and regulation based, focusing on basic questions such as: Does the school satisfy basic legal requirements? Does the school have enough budget, infrastructure and reserves to conduct the program? The MAM ascertains that the fundamentals in a school setup are in place. In relation to accreditation standards for establishing quality in ECE, the fundamentals may include a prescription for a minimal core provided by MAM. This model recommends adhering to the 'minimal' philosophy; thus, it can be an appropriate way to start the processes of accrediting the provision of ECE in Botswana. It can also factor in policies and documents already in place, such as the Early Childhood Education Policy of 2001, to ensure that it is comprehensive in assessment.

The MAM as a Theoretical Framework chosen for this study helped in the choice of appropriate research questions. Creswell (2014, p. 50) states that, "the selection of a theory should depend on its appropriateness, ease of application, and explanatory power". Creswell (2014) further advises that a Theoretical Framework should help the researcher to specify key variables that can highlight what the researcher is interested in examining about the phenomenon. While there may be a number of areas of foci in relation to accreditation standards that researchers may be interested in, the MAM theory that will be used in this study permit the research to focus on minimal requirements for accreditation.

Thus MAM supports and strengthens this study in different ways: a). It can help practices pertaining to learners in terms of characteristics like family backgrounds: b). It will assesses learning environments with regard to whether they are healthy, safe, protective and adequate: c). It assesses the relevance of content and other learning materials—for example, whether learners are provided with numeracy and skills for life: d). It will examine teaching approaches—whether they are child-centered and if skillful assessment is used: e) It will also identify learning outcomes—whether they encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society (UNICEF, 2000).

The MAM framework helped the researcher to limit the scope of the relevant data by focusing on specific variables and defining the specific viewpoint framework that the researcher took in analysing and interpreting the data that was gathered (Cresswell, 2017). Furthermore, it was a means by which new research data can be interpreted and coded for

future use (Creswell, 2017). The author further states that a Theoretical Framework provides a means for prescribing or evaluating solutions to research problems, and of discerning certain facts among the accumulated knowledge that are important and which facts are not important. Creswell (2017) furthermore says that a Theoretical Framework should provide a means to guide and inform research so that it can, in turn, guide research efforts and improve professional practice.

2.4 Limitations of the framework

The following are the limitations of the Minimal Accreditation Model.

2.4.1 Positive relationships between teachers and pupils

While the MAM requires providers to satisfy the basic minimal core requirements, other issues that are also important in the provision of quality ECE provision may be left out. One of the issues excluded is that of *building of positive relationships between the teachers and the pupils*. Positive relationships are those that are warm, supportive and caring (Henniger, 2017). This is an important aspect in the education of young children. When children are given positive relationships they will in turn develop positive self-esteem necessary for positive development (Follari, 2015).

2.4.2 Multicultural, bias-free environment

Another aspect that may be left out by MAM is the multicultural, bias-free environment that is necessary in ECE environment. Culture is important in ECE because it embodies many constructs including ethnicity, family structure, religion, family and cultural traditions (Follari, 2015). All these are necessary attributes especially for ECE children. ECE programs should learn about culture, accept it and respect the various cultures represented in their schools (Gordon & Browne, 2016). Currently, schools have diverse cultures that call for multi-cultural anti-bias environment. It is therefore an important aspect in children's lives which has been omitted by MAM.

2.5 What is quality Early Childhood Education?

While there is agreement that all children need quality education, professionals have disagreements about what quality is, what makes a quality programme, which programmes are of quality, which programmes are more likely to meet quality requirement and which ones fall below the quality bench mark. Some of the professionals currently debating about this include Heckman (2011), Heckman, Pinto & Savelyer (2013) and Litjens & Taguma (2010).

Quality should be decided upon by individuals looking at the political and the socioeconomic status, as well as the cultural background of the children. A ready-made or an imported definition would be problematic to adopt since it would not fit into the conditions of those countries.

What is more is the fact that personal values about quality child care vary depending on the values, beliefs, cultural and social context and also who is making the judgement. The National Forum of Early Childhood Program Evaluation and National Scientific Council on the Developing Child (2007) have identified several ways in which quality can be assessed. These are discussed in the next sub-section.

2.6 Ways in which quality can be assessed

The following are some of the ways quality can be assessed:

2.6.1 Through the eyes of children

With regards to children, a high quality program would mean feeling accepted for who they are irrespective of their capability or culture. For children it means having friends and responsive adults, being emotionally and physically comfortable and the possibility of having fun, and having interesting activities (Henniger, 2017).

2.6.2 Through the eyes of parents

For most parents, quality child care safeguards a child's health, safety and happiness. The program should also be conveniently located and be affordable. On the one hand, many parents regard high quality care as the key to balance work and family so as to have peace of mind while they are at work. In addition, some parents may see high quality care as incorporating school readiness activities, such as early learning or learning to count, or highlighting learning social skills such as cooperation. On the other hand, some may see high quality child care as an environment in which their child is happy, makes friends, has interesting and positive experiences and learns a wide variety of things (Henniger, 2017).

2.6.3 Through the eyes of teachers

Research examining early childhood teachers' beliefs about what constitutes good practice seems to be in line with differentiated beliefs of practice using either child-centred and or teacher-directed instruction or learning (Williford, Maier, Downer, Pianta & Howes, 2013). I believe that child centred learning is the best since it gives the child the freedom to learn by

doing, rather than teacher directed learning that makes children passive learners who receive knowledge from the teachers.

NAEYC provides guidelines to assist teachers in making decisions about what constitutes appropriate teaching and learning for young children (Bredekamp, 2013). The author recommends that teachers serve primarily as facilitators to children's self-initiated activities, providing open-ended opportunities for children to explore concrete materials and to interact with each other. At the same time basic-skills teaching using drill, practice workbooks and worksheets is discouraged; instead basic skills are supposed to be embedded in everyday, meaningful activities (Williford, Maier, Downer, Pianta & Howes, 2013).

A minority of teachers however endorse a greater emphasis on basic skills using direct, highly structured teaching approaches. These teachers see the teaching of basic skills as the teachers' top priority. They also believe that children learn basic skills better through repetition and review. These teachers also believe that practicing letters and their sounds is the best way children learn to read. Children should be given formal instruction in number skills even if they show little interest in them. Children should work silently and independently. Teachers should emphasize the importance of quality in final products. If a child is not doing well in kindergarten, time should be set aside every day after school to practice school work. It is important for preschool children to become good at counting and recognizing numbers. Giving rewards and extra privileges for good performance is one way they motivate children to learn (Ishimine & Tayler, 2014).

While there is no single definition of quality in ECE, there are some overall elements of ECE that are identified as critical to the wellbeing of children. Health and hygiene are very important elements regarding quality early childhood provision. It is important that children are kept in environments that promote good health and good hygiene. Good hand-washing practice reduce the incidence of diseases such as pneumonia, trachoma, scabies, skin and eye infections as well as diarrhoea-related diseases like cholera and dysentery (Meier & Marais, 2012).

Good nutrition is also one of the most important elements of a quality ECE. For children to be able to function well, learn, play and interact with others they need to have eaten a balanced meal that could aid them in their holistic development (Hearron & Hildebrand, 2011).

A well-maintained environment set up for children is an important element of an ECE program. Children need a favourable environment that will assist them in learning. An environment needs to be well maintained and free from any hazardous equipment and materials. As a result both indoor as well as outdoor equipment needs to be regularly checked and maintained (Hearron & Hildebrand, 2011). The ECE Education Policy of 2001 states that outdoor as well as indoor equipment should be safe for children to use at all times (Early Childhood Education Policy, 2001, p.24)

Teacher-pupil ratio is critical in the provision of ECE. This is so because children need space for exploration and also need one-to-one interaction with the teacher for individual attention. When children are overcrowded it will be difficult for them to explore, interact with others and they will not be able to use the equipment and materials for playing properly (Meier & Marais, 2012).

Play is central to learning in an ECE program (Trawick- Smith, 2018). Children need equipment to play in both indoor as well as outdoor environments. When children play they need to develop in all areas at the same time. Play allows them to engage in speech or to communicate with others, and thus acquiring language. It further allows them to manipulate objects, to be creative, to construct and to do role acting. They also learn from pretence play and symbolic. All these elements are crucial in the development of each child. Gordon & Browne (2016) state that young children need play in order to develop social and emotional skills, physical motor skills, creative skills, cognitive as well as language skills. Children need to be provided with opportunities such as indoor and outdoor play areas.

Children need to be provided with areas of quietness after a fun day so that they can rest. They also need to be provided with opportunities for developing motor, social, language and cognitive skills through play. Moreover, children need to develop positive interactions with adults. They would benefit from having relationships that are crucial in their overall development. Children further need warm, sensitive relationships. Every program should make sure children develop a sense of self-worth and of belonging which they need in order

to be a part of the community (Gordon & Browne, 2016). They will also be able to cooperate with others and thus building good social relations. They would also benefit more if they are placed in safe and secure environments.

Facilitation of emotional growth and positive emotions are crucial in the development of kids. According to Atkinson & Hilgard (2016), positive emotions comprise joy, contentment, interest and love. While negative emotions comprise fear, anger, disgust and shame. According to these authors positive emotions broaden our thinking and actions. "Joy cerates the urge to play, interest the urge to explore, contentment the urge to savour, and love a recurring cycle of these urges" (Atkinson & Hilgard, 2016, p. 409). On the contrary negative emotions such as fear and anger make us experience certain bodily changes such as rapid heartbeat, heavy breathing, dryness of the throat and mouth, perspiration, trembling and a sinking feeling in the stomach (Atkinson & Hilgard, 2016). Children would therefore need environments where positive emotions are developed rather than negative emotions.

Support for and communication with parents and programs need to tap from the intense knowledge that parents have about their children. Several studies have been done to show the importance of parental involvement as well as partnership of parents and teachers in the education of young children. These studies have highlighted the importance of such relationships (Hartas, 2010; Gordon & Browne, 2016). According to these authors, parents who are in tune with what their kids are doing in school are better able to connect what kids have done at school and what is taking place at home. These parents are able to extend the experiences the child has at school to real life experiences at home, creating learning that is in context (Morrison, 2014). The author also found out that parent involvement in children's schooling predicts academic achievement in ECE through to High School.

It is essential that programs respect the different cultures within the community. Botswana has different nationalities accommodated in our schools and these nationalities need to feel welcome and respected. These different nationalities bring diversity of cultures within the ECE programs. Reid and Sharon (2015) state that no one can ignore diversity, least of all those who work with young children; consequently, we must prepare learners to live with diversity and to celebrate it.

The issue of gender equality has been widely debated. Rousseau (1762) wondered whether the sex differences defined the social order. For example, the issue of contrasting the women's breasts and the rounded figures as being good for child bearing, with the slim and tough bodies of men which are designed for work in order to provide for the family, is a view that is out-dated. Programs are encouraged to be gender sensitive by providing activities and tasks that are not gender biased, and which allow boy-children to do girl-children activities and verse-versa (Henniger, 2017).

There is another definition of quality that goes beyond narrow academic gains such as literacy, numeracy to social, emotional, cultural as well as artistic and physical goals. This definition by NAEYC describes a high quality program as providing a "safe, nurturing environment that promotes the physical, social, emotional and cognitive development of children while responding to the families" Oxford Dictionary & Thesaurus (2017). According to NAEYC, components of high quality program include the development of policy guidelines. Such guidelines include an approach to teaching that is grounded in the research on how young kids develop and learn and what is known about effective early education. This framework is designed to promote optimal learning and development in the young learners. DAP requires that teachers meet young learners where they are (by stage of development), both as individuals and as part of a group, embrace the child's cultural background and help each child meet challenging and achievable learning goals.

Pugh & Duffy (2010) define quality as comprising two components namely process quality and structural quality. They look at process quality as a concept that deals with learners actual experiences, such as the warmth and responsiveness of the interaction with staff and the activities they engage in. Structural quality deals with the more stable aspects of the environment, for example adult-child ratios, group sizes or qualifications of the teachers. They see process quality as a strong predictor of child outcomes even though it is difficult and time consuming as it requires in-depth observations. Although there is strong evidence that process quality is stronger, there is however evidence that structural characteristics do influence child learning outcomes. There is also evidence that structural elements have an indirect effect on learners' outcomes via the effects of process quality (Pugh & Duffy, 2010). Structural quality, although less related to child outcomes, is still seen as important. It is easier to assess and can also be clear to define and reliably measured across the different

types of ECE settings. The two components that define quality are often seen as highly correlated.

Another definition of quality by Griesmer (2011) outlines the attributes that constitute quality ECE programs as follows. *Safe and nurturing environment*: The daily program should be that which offers an environment that is both safe and nurturing. *Physical development*: The program has to offer a variety of physical activity in the classroom and on the playground. *Emotional development*: Children who enrol in ECP might enter ECE being emotional since this would be their first time to leave the home environment, as a result they would need a program that offers a warm and friendly environment. *Intellectual development*: The intellectual development of children needs to be encouraged through the use of appropriate activities. Children further need an environment that is rich in print and classroom labels to develop their vocabulary and reading skills.

A quality ECE program should also include social development; since social development is one of the primary goals of an ECE program, learners should be given an opportunity to interact with peers and adults positively when doing their daily activities. There should also be frequent and positive interaction between teachers and youngsters and age-appropriate activities should also be done. The activities need to be aligned to the ages of pupils so that they can handle them without difficulties. Low teacher-to-child ratio, as already mentioned, is important. There should be a safe and healthy environment and age-appropriate materials throughout the classroom. Nutritious meals and snacks should be available. Open classroom policy and frequent communication with parents are essential. Goals and values of the program should be clearly stated.

McCullough, Peters & Whaley (2017) also look at the issue of how quality can be realised. The authors state that the following elements can contribute to quality: Organisation of physical space, an appropriate and adequate supply of materials, appropriate teacher qualifications, effective instructional strategies, collaboration between team members and families and individualisation within daily routines. In dealing with quality assessment eight dimensions have been suggested by these authors (Pascal & Bertram, 1991, cited in Pascal, 1993). These relate to the following issues: Teaching and learning styles, planning and

assessment and book keeping, ratio of trained staff, physical environment, relationship and interaction, equal opportunities, parental involvement, monitoring and evaluation.

Looking at the above criteria/definitions for identifying high quality ECE programs, the criterion that is most appealing is the one by UNICEF that states that a quality ECE should have: environments that are healthy, safe and protective and are gender sensitive, and those which provide adequate resources and facilities. UNICEF defines a high quality program as one that has content that is reflecting in relevant curricula. This content should have materials to allow children the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace. UNICEF also seeks to have processes such as child-centered teaching approaches in well managed classrooms, assessment to facilitate learning and reduce disparities (UNICEF, 2018).

The following are reasons why I chose quality standards set by UNICEF (2018). They support learners who are healthy, well-nourished and ready to participate and learn, and who are supported in the learning process by their families and communities. Maslow states that only when basic needs are satisfied will the individual have the time and energy to devote to aesthetic and intellectual interest (Atkinson & Hilgard, 2016). The implication of this theory is that kids need healthy food to give them the energy to start the learning process, failing which they may find it difficult to learn and interact with other kids. Environments for youngsters should be safe and protective and gender sensitive, and have adequate resources and facilities. Children further need content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in areas such as gender, health, nutrition, HIV/AIDS prevention and peace.

The quality definition by UNICEF (2018) is appropriate in the context of Botswana due to the issue of relevant curricula and materials that kids need to be provided with in order to learn effectively. Studies have reported that the Botswana syllabi and curricula are unsuitable. They are "often advanced, they are to a great extend irrelevant and alien to the needs of the Botswana community and very little related to the development of the country" (Swedish, Development Agency, 1972, p. 42, cited in Yoder, 1992). Botswana has recently

experienced a decline in the literacy and numeracy of children throughout primary as well as secondary education. There is need to provide youngsters with a strong foundation in ECE. As already indicated earlier, research has shown that children who benefit in quality ECE have higher cognitive gains (Aguilar & Tansini, 2012).

One of the most approved approaches of teaching young learners is through child centered methods. This way a child is involved in his/her learning and can be able to use all their senses. The Constructionist Theory by Piaget sees children as 'scientists' who are out to explore and learn more about the environment by interacting with it using their own senses. Piaget's theory, also known as the Cognitive Developmental Constructivists Theory, views knowledge acquisition as an active, dynamic cognitive process in which children build, rebuild, discard and change their ideas (Follari, 2015). Montessori, a leading psychologist realized that kids need a conducive learning environment that they can interact with in order to learn (Henniger, 2017). The Reggio Emilia Program in Italy, the 'epitome of exceptional practice in teaching young children' (Follari, 2015, p. 211), sees children as active learners who need to interact with their own environment in order to learn more. It is therefore important not to deny kids the opportunity to construct knowledge through active exploration of materials as it is the most appropriate way they can learn.

Outcomes that encompass knowledge, skills and attitudes are linked to national goals for education and positive participation in society. A disturbing situation in Botswana is that our education is highly knowledge based (Botswana Curriculum Framework Basic Education, 2011) This type of education does not prepare children to acquire skills, attitudes, appreciation and value for national goals as well as inculcate a spirit of positive and active participation in our society. It only equips them with knowledge of how to do mathematics, science and other subjects. It is therefore important to find a definition of quality that will recognize the current needs of our society, in particular the challenges in our social system, and incorporate them in our education system so that we produce a well-educated child who can be able to have knowledge, skills, attitudes, national pride and be able to participate in the contemporary society in a positive manner (Botswana Curriculum Framework Basic Education, 2011).

Due to increase in quality research, a wide range of quality definitions have emerged. According to Dahlberg, Moss and Pence (2007), quality is a totally subjective matter which cannot be defined or evaluated. The more traditional viewpoint sees quality as an objective concept that can be scientifically and systematically measured and rationalised. Criticising the objective concept of quality, European quality researchers identify quality as a subjective, value-based, relative and dynamic concept. As a subjective matter quality is dependent on time and context (Dahlberg et al., 2007; Moss & Pence, 1994).

2.7 The need for quality Early Childhood Education

A child's readiness for school depends on meeting his/her comprehensive needs, which includes physical and motor development, language and literacy, social and emotional development, approaches to learning and cognitive development. If the child enters school with problems in these areas, it will be difficult for the child to learn. Half of the failures in school are attributed to gaps in early care and development (Follari, 2015).

Several studies have indicated the long term effects of high quality ECE. The Perry Pre-school Project involving Berrueta-Clement, J., Schweinhart., Barnet, W.S., Epstein, A., & Weikart, P.P. (1984) have suggested that children exposed to quality ECE did significantly better on social responsibility (detained or arrested, teenage pregnancies), progression through school completion (attending college) and socio-economic success (employment, receiving welfare assistance). A similar view is held by Yiannouka, Whitebread & Kuvalja (2018), UNESCO (2015) and Britto, Yoshikawa & Boller (2011).

Research has also indicated that children in their prime years, 0-6 are in their most receptive stage of learning hence it is important to provide them with high quality education in order to make use of the receptive stage or the critical stage of development (Yiannouka, Whitebread & Kuvalja, 2018,. It is at this stage that many argue that a holistic approach can be most effective in developing children. The holistic approach could help instil and enhance variety of skills such as linguistic, emotional, social, physical and cognitive (Britto, Yoshikawa & Boller, 2011).

Research by Kelton, Talan & Bloom (2013) and Aguilar & Tansini (2012) has pointed out that high-quality early childhood programs for low income families can have long lasting effects such as greater school success, higher graduation rates, lower juvenile crime, and

decreased need for special education services later and lower adolescent pregnancy rates. By comparison low quality care can have harmful effects on language, social development and school performance that are difficult to ameliorate, especially for schools with fewer resources (American Academy of Pediatrics, 2005).

In addition, it has already been mentioned that children who receive high quality care are better in maths skills prior to school entry; and that pupils who received high quality child care had fewer problems than those who received low quality care. They further showed that children who received lower quality child care during the first three years were rated "more difficult" by their teachers. Also those who received high-quality child care scored higher on tests gauging cognitive and academic achievement. They further stated that teenagers who received high quality child care were less likely to engage in problem behaviours like fighting, arguing, being mean to others than those who received low quality care. Other authors talk about the impact of quality ECE on children's academic, emotional, social wellbeing more powerfully than any other phase of education (Yiannouka, Whitebread & Kuvalga, 2018).

The quality of ECE environments and children's experiences while in care are important contributors to their development (Henniger, 2017). Further, the quality of preschool experience can predict children's readiness in school. As children enter primary school they should be prepared with the foundation for reading, writing and basic comprehension of content areas, skills and developing important decisions towards learning (Yiannouka, Whitebread & Kuvalga, 2018). It is in this regard that we need to make sure of the quality of the educational environments we subject our children to in Botswana. The only way this can be achieved would be through an accreditation model that this study seeks to propose.

2.8 What is accreditation?

Accreditation is the action or process of officially recognising someone as having a particular status or being qualified to perform a particular activity. It is also defined as a mark of excellence that is awarded by an independent, third party organization to a centre that proves continued maintenance of high standards of quality (Wikipedia, the free encyclopaedia) Berliner & Schmelkin (2010) define accreditation as a particular form of quality assurance, with the distinctive characteristics that leads to the formal approval of an institution or a

program that has been found by a legitimate body to meet predetermined and agreed upon standards, eventually resulting in an accredited status granted to the provider or program by responsible authorities (Van Damme, 2004). According to Berliner & Schmelkin (2010), accreditation can be a gatekeeper, without the accreditation one cannot operate.

Accreditation is both a status and a process. As a status, accreditation provides public notification that an institution or program meets standards of quality set forth by an accrediting agency. As a process accreditation reflects the fact that in achieving recognition by the accrediting agency, the institution or program is committed to self-study and external review. The external review would be done to meet approved standards and to continuously seek ways in which to enhance quality in provision (Van Damme, 2004; Berliner & Schmelkin, 2010).

To earn accreditation a program goes through a rigorous evaluation process to ensure it meets standards of excellence that go above the minimum licencing standards. In ECE, a program that is accredited will make more effort in meeting high national standards in teaching strategies, curriculum, assessment of children's learning, health and safety, developing relationship with families, community involvement and teacher qualifications (Van Damme, 2004; Berliner & Schmelkin, 2010).

2.9 The accreditation process

Accreditation usually goes through defined processes. Here the centre seeking accreditation status prepares materials that effectively display the program's accomplishments. At the same time the program must also prepare a written report of its accomplishments according to standards set by the accreditation organization. The following are some examples of the process of accreditation.

Peer review-: Administrative and program peers conduct an intensive review of the prepared material, written report, and general workings of the centre seeking accreditation status. Teams of peer reviewers visit the centre. Most of the accreditation boards are populated by administrative peers in the field (Winterbottom & Piasta, 2015).

Visit and examination-: In addition to the visits made by the peer reviewers, most accreditation organizations also constitute a visiting team that visits the centre seeking

accreditation. This team is often made of peers and members of the public who volunteer their time because of strong interest in the quality of standards of early childhood education programs (Berliner & Schmelkin, 2010).

Judgement action made by accreditation organization:-When the previous steps are completed the accreditation organization calls upon the commission to review the steps and affirm or deny accreditation status for the centre under scrutiny. By accepting accreditation status, a centre agrees to undergo a review on a rotating basis every few years. A program is usually required to go through all the steps of the accreditation process each time it is reviewed (Van Damme, 2004; Berliner & Schmelkin, 2010).

2.10 Benefits of Accreditation

Accreditation is a tool that allows for consistent national standards, meaning that parents can be assured that their children are provided with quality education whose standards have been approved nationally. Accreditation helps build a stronger team of teachers, administrators and families working together to improve the quality of education for children. Team building is important because it can boost the morale of teachers which can in turn increase success in teaching. It can also facilitate better communication between teachers and management and thus improve relationships and the quality of work done. It motivates teachers. Team leadership and team building go hand in hand. The more comfortable teachers are to express their ideas and opinions, the more confident they will become. This motivates them to take on new challenges. Furthermore, accreditation promotes creativity:-taking a team outside of an office setting and exposing it to new experiences will force members to think outside of their normal routine. Working together with team members can ignite creativity and fresh ideas, which are great qualities to bring back to the school (Van Damme, 2004; Winterbottom & Piasta, 2015).

Accreditation develops problem-solving skills:-In public relations a crisis can happen at any time. Team building activities that require teachers to work together to solve problems can improve the ability to think rationally and strategically. Teams that are able to determine when a problem arises and know what they can do about it can then effectively take charge when a real crisis occurs. Accreditation also breaks the barrier:-Team building increases the trust factor with teachers. Team building exercises gives the leader the opportunity to be seen

as a colleague rather than a boss, which can do wonders for employee morale (Van Damme, 2004; Winterbottom & Piasta, 2015).

Accreditation also does the following: It improves standards for the program. High standards attract more families to enrol their children in the program. It is a proven method for improving school performance. It also eases the transfer of pupils from one accredited program to another. Students get quality education. Alumni share their experiences and participate in curricular updates in view of emerging technology and tools. There is also the Development of realization of efforts, the opportunity to attempt more complex problems, career advancement and consultancy and exchange of views—opportunities tend to supplement each other. Institutions build up a brand continuous improvement toward excellence. Accreditation also assures parents, the business community and the public that a program is committed to raising pupil achievement, providing a safe and enriching environment and maintaining an efficient and effective operation (Van Damme, 2004; Winterbottom & Piasta, 2015).

Accreditation also assists parents in making the right choice when making decisions about where to place their children. Further it offers the government a process that supports systematic planning, focuses on student learning and provides a vehicle for meeting accountability requirements. Accreditation ensures continuity in planning for improvement because each centre's improvement goals must complement those of the district.

Accreditation also recognises and validates the improvement efforts of the centre, district and the community and generates recommendations for further improvement. Accreditation provides school boards with independent, non-governmental validation that the centres they oversee are effectively using public funds to deliver quality education for the children (Van Damme, 2004; Winterbottom & Piasta, 2015).

2.11 Requirements for Preparing for Accreditation and Resource Implications

An accreditation standard call for staff that is knowledgeable about related matters of philosophy, policies and techniques together with appropriate facilities for the development of standards. The Standards Development Organization (SDO) shall identify the number of staff members directly involved in the preparation of standards and the functions they will perform within the organization, provide a biography of senior members of staff involved in the preparation of standards and describe the physical resources needed for the development

and maintenance of standards. The SDO shall have the ability to provide adequate secretariat support. The cost of the typical program depends on the magnitude of the record keeping procedures, the quality of the authentication and monitoring efforts, and the number of candidates participating in the program (Van Damme, 2004; Winterbottom & Piasta, 2015).

2.12 Role of Stakeholders in Supporting Accreditation

The SDO shall also define procedures for preparation, review, publication and distribution of standards including user notification procedure when a standard is withdrawn or altered, constitute a committee of expects to oversee the standards development work, formulate standards within a specialised area, a technical committees of expects will be constituted and will include sub-committees and panels and *ad hoc* expert groups. The committees shall have defined scopes of work, have a chairman and a member secretary besides members representing all interested parties, be assured that balance of interest is maintained and no single interest will dominate. The committees may co-opt experts to assist them in their work, ensure that membership on voluntary standards preparation committees will be open to all interests, be subject to maintenance of reasonable balance and size of the committee and identify the organization's procedures which support criteria to be prepared, and shall confirm willingness to make provision for public examination of committee membership rosters on request (Van Damme, 2004; Winterbottom & Piasta, 2015).

2.13 Conclusion

This chapter dealt with the review of literature and the following issues were discussed: The Theoretical Framework, limitations of the framework, ECE provision, Quality Early Childhood Education, ways in which quality can be assessed, need for quality ECE, accreditation, benefits of accreditation, requirement for the preparation for accreditation and resource implications and the role of stakeholders in supporting accreditation.

Chapter 3: Research Design and Methodology

3.1 Introduction

This chapter presents the research paradigm, research design and approaches used in this study. Furthermore, the population of the study and the sampling procedures are explained. Data collection and analytic tools, techniques and procedures used in this study are presented. The study used a mixed-method design: a combination of qualitative and quantitative research approaches to acquire comprehensive data. Ethical concerns and measures to provide trustworthiness are also discussed. The chapter concludes with issues of methodological limitations.

The paradigm used for this study was the pragmatic paradigm. Kivunja (2017) defines a paradigm as a conceptual lens which the researcher uses to determine the research methods, data collection and data analysis tools that were used for the study. The rationale for choosing the pragmatic paradigm was that it incorporates mixed method designs which this study used (Kivunja, 2017; Baker, 2016). The pragmatic paradigm further places value on communication and shared meanings to create practical solutions to social problems (Shannon-Baker, 2016).

3.2 Rational for using mixed methods as a research design

The mixed method design was used for this study. The rationale for using mixed method design is because the researcher felt that using one method would not provide the depth of understanding needed to fully comprehend the phenomenon being studied (Shannon-Baker, 2016). In this case, the use of a qualitative approach on its own would not have been sufficient to provide the researcher with the priority aspects that participants felt were necessary to include in the accreditation model proposed by the study. This study sought to understand, among others, teachers' views about factors that could be included in the accreditation model. Consequently, the qualitative approach as a form of communication tool was used as suggested by Shannon-Baker (2016).

As stated by Cresswell (2017), the qualitative method acquires non-numerical data from participants, and this includes experiences, opinion, descriptions and definitions, etc., and this study was interested in exploring participants' opinions, perceptions and experiences of the teachers of ECE. At the same time, the study was also interested in numerical

quantitative data to triangulate the qualitative data, with the belief that the numerical data would complement the non-numerical data (Cresswell, 2014).

3.2.1 Justification for the Quantitative Approach

The rationale for using the quantitative approach was that, because of wide coverage of questions and the huge number of questionnaires, it was important to find a technique that could reduce the number of aspects according to the level of priority or need allocated to each aspect. In this manner the researcher was now able to distinguish which aspects were of high priority as per participants' responses. If this technique was not used it would have been problematic to prioritise the aspects accordingly or precisely.

3.2.1.1 Quantitative Data Analysis

The study also used mathematical and computational techniques. The level of significance was tested using SPSS. Among other things SPSS generated a technique known as *Principal Component Analysis* (PCA). This is a technique used to emphasize variation and bring out strong patterns in a dataset. It is often used to make data easy to explore (Albers, 2017). Basically PCA is a way of identifying patterns in data, expressing data in a way to highlight the similarities and differences because these may be difficult to highlight in data of high dimension (Maxwell, 2013). One major advantage of PCA that prompted the researcher to particularly choose this technique was that PCA has the potential to reduce the number of dimensions without much loss of information (Spector, Merrill & Elen, 2013). Since the study had many variables, 50 questions and 89 questionnaires, it was important to find a technique that could reduce the number of variables according to the percentages that participants viewed the particular aspect.

The researcher was thus able to prioritise the aspects that would be highly recommended by participants in the accreditation model because of percentages the particular aspect accumulated. A technique known as Factor Analysis (FA) was adopted to analyse the variables. Factor Analysis is not designed to test a hypotheses, it is included in the SPSS package to reduce data (Pallant, 2016). This technique takes a large set of variables and looks at a way that the data may be reduced or summarised using a smaller set of factors or components.

According the (Pallant, 2016) Factor Analysis (FA) encompasses a variety of different, although related techniques, one being PCA. PCA assisted the researcher by inferential statistics, which is basically the association between variables e.g. age and work or

sex of participants and type of employment, while the FA distinguished between variables that stood out and those that were least considered important in the minimal accreditation standards. Prioritisation of data was necessitated by the need to identify most preferred aspects to be included in the accreditation model. Factor Analysis was conducted using the following procedure; first data that was rather mixed up, was entered into the SPSS. Secondly, FA was selected and commanded to prioritise the factors. FA then analysed and rank ordered the factors, thus enabling the researcher to see which aspects were highly prioritised and the ones that were not.

3.2.1.2 The rationale for using Factor Analysis

One of the research question that this study is based on is "Which aspects do the participants consider necessary in establishing Minimal Accreditation Model?" Due to the fact that there were many aspects as evident in Chapter 4, it was necessary to reduce them to align them with MAM used as a Theoretical Framework in this study. As explained earlier, MAM calls for basic characteristics focusing on basic requirement such as finding out if providers have infrastructure, teacher-pupil ratio, the curriculum etc. Basically this model requires providers to satisfy minimal core standards since Botswana has not had any accreditation model for ECE before. This is a foundation that can be used to kick start the process of accreditation in Botswana, or the base to formulate a more comprehensive accreditation model.

3.2.1.3 Questionnaires

According to Oxford Dictionary & Thesaurus (2017, p. 842) a questionnaire is a set of questions, usually with a choice of answers provided, used for a survey or statistical study. This study used the questionnaire as a method of data collection because of the following reasons. (a) The questionnaire gave respondents time to consider answers carefully without interference from, for example, an interviewer; (b) they also cut costs, it was possible to provide questionnaires to large numbers of people simultaneously. As in this case, schools were simultaneously given these questionnaires; (c) they gave the study uniformity; each respondent received an identical set of questions. With closed-form questions, responses are standardized, which can assist in interpreting data from large numbers of respondents; (d) the questionnaire addressed a large number of issues and questions of concern in a relatively efficient way, with the possibility of a high response rate. In this study there were 50 questions; and lastly (e) they also permitted anonymity, which in turn increased the rate of

response and also increased the likelihood that responses reflect genuinely held opinions (Cresswell, 2017).

As mentioned above, this investigation had many variables, 50 questions and 89 questionnaires. There was therefore need to find a technique that could reduce the number of variables according to the percentages that participants viewed the particular aspect, and this was done by means of Principal Component Analysis and Factor Analysis.

3.2.2 Justification for the Qualitative Approach

The relevance of a qualitative approach to this study was guided by the Theoretical Framework used for this study, that is, the Minimal Accreditation Model (MAM), which calls for simple descriptive values of what is explored. In terms of this study, these descriptive values were related to obtaining views and perceptions of teachers regarding issues such as their understanding of the concept accreditation, the importance of accreditation, resource implications that exist in preparing for accreditation, the role of stakeholders in supporting accreditation and whether contextual differences should be considered for accreditation etc.

In addition to these descriptive or narrative data, this study also explored perceptions on availability of other necessary resources. Participants commented on the necessity of these aspects in relation to providing accreditation in ECE. They considered aspects such as need for comprehensive materials, outdoor equipment, materials etc. These comments came from experiences, opinions and general understanding of practitioners involved in ECE provision. As Eraut (2011) stated, this part of the study was interested in practitioners' experiences that cannot be measured in numerical form, but only understood in verbal qualitative data.

Weitzman & Levkoff (2000) and Roller & Lavrakas (2015) explain that qualitative research is about systematic collection and analysis of subjective narrative data organised in a natural fashion. Denzin & Lincoln (2017) further explain that the situation within which the experiences take place is usually unique for each participant, constituting rich knowledge and insight that brings out the unique social context and nuances of that which has been experienced.

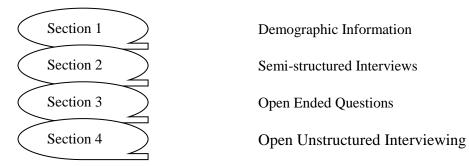
3.2.2.1 Interviews

In this study, data was collected through interviewing the research participants. Interview is defined as "a short term, secondary social interaction between two strangers with the explicit

purpose of one person's obtaining specific information from the other" (Cresswell, 2017 p. 292). Interview comprises structure or unstructured questions. In the study, structured questions were avoided, because they tend to restrict responses to predetermined answers. They were used mainly in the demographic section. Interviews, for example, were organized in five sections.

Section 1 explored basic demographic information like qualifications and years of experience. The rest of the section comprised unstructured or open ended questions that mainly seek for experiences, opinions and other ideas. Consider Figure 3.

Figure 3: Types of Questions in the Interview



As Figure 3 indicates, the interviews were predominantly open ended questions. These types of questions gave participants an opportunity to freely respond to questions (Neuman, 2003). Some of the advantages of open ended questions were that they permit an unlimited number of possible answers; respondents could answer in detail and qualify and clarify their responses. At the same time they also revealed the respondent's logic, thinking process and frame of reference (Cresswell, 2017). They constitute what is usually referred to as in-depth interview. This is what was needed in this study, clarity of issues pertaining to accreditation in ECE.

Marshall & Rossman (2016, p.112) qualify in-depth interview when illustrating the relationship between the researcher and the participants. In quantitative approach, for example, the researcher mainly observes; but in qualitative methods, the researcher engages in an intense dialogue with the participants in the study. The researcher becomes an important component of data collection processes, interacting and building a relationship that promotes in-depth collection of rich and thick data.

As already indicated, the type of interview that brings out good data is open unstructured interviewing (Cresswell, 2017). The goal for the current investigation was to "actively enter the world of people and to render those worlds understandable from the standpoint of a theory that is grounded in behaviours, languages, definitions, attitudes and feelings of those studied" (Marshall & Rossman, 2016). It is about obtaining lived experiences as well as true views and feelings of participants about the phenomenon being studies (Marshall & Rossman, 2016). For a more systematic interviewing approach, the researcher used guidelines developed by (Roller & Lavrakas, 2015). They outline the process of conducting in-depth interviewing as presented in Appendix 10.

3.2.2.2 Qualitative Data Analysis

Thirteen (13) teachers were interviewed following the interview schedule (Appendix 8). The interviews lasted from 30min to 1hour per interview. All participants were teachers of ECE programs. A tape recorder was used to capture the interview and the interviewer also took notes during the interview process. The researcher listened and took notes of the interview as well as clarifying questions that seemed difficult. The researcher allowed interviewees time to feel comfortable and relaxed to answer the questions.

The qualitative data was collected through single interviews which were audio taped and transcribed into *MS Word 2015*. Once all the data were entered in the form of script, the researcher content analysed the responses individually. Qualitative analysis requires some creativity, for the challenge is to place raw data into logical, meaningful categories, to explain them in a holistic fashion; and to find a way to communicate this interpretation to others' (Simon, 2011).

The data was then analysed using *NVivo 12* (Marshall & Rossman, 2016). *NVivo 12* is a qualitative data coding system that places emphasis on the actual spoken words of the participants (Manning & Kunkel, 2014). This form of coding can be especially helpful when researchers interact with participants from a particular culture, in this instance a culture of Early Childhood Education Teachers. It highlights the voices of the participants and relies on the participants for giving meaning to data (Denzin & Lincoln, 2017). The information gathered after coding gave the researcher information that was missing such as the need for accreditation, benefits of accreditation, contextual differences in accreditation, etc. A summary of all transcripts was compiled in which sub-themes were compared to come up with the overall themes that were later used to report the findings of the study.

3.2.2.3 Bracketing

The role of the researcher was a special one in building a trusting relationship or using good interpersonal skills to create a relaxed environment for participants and allow them to provide genuine reflection of their opinions. The researcher has been involved in ECE as a primary school teacher, teacher trainer, student supervisor during practice for 4 decades. The researcher thus needed to minimise her interference by means of the 'emic perspective' and 'bracketing'. Bracketing is a method used in qualitative research to mitigate the potentially deleterious effects of preconceptions that may taint the research process (Denzin & Lincoln, 2017).

In this study emic perspective is associated with how best the researcher who in this case has a vast understanding of early childhood activities would be able to objectively respect the perspectives and words of the research participants (Ritchie & Lewis, 2013). This was done by the use of a questionnaire, and this allowed the participants to express their views without interference of the researcher.

3.3 Population and Sampling

This section discusses the population of the study, population sites selection and recruitment procedures, ethical considerations and methodological limitations.

3.3.1 Population

The population of a study means all people who meet the criteria for inclusion in the study (Burns & Grove, 2016). For the purpose of this study, eligible participants were teachers, head teachers and teacher aides currently employed in ECE programs throughout Botswana as indicated Figure 4.

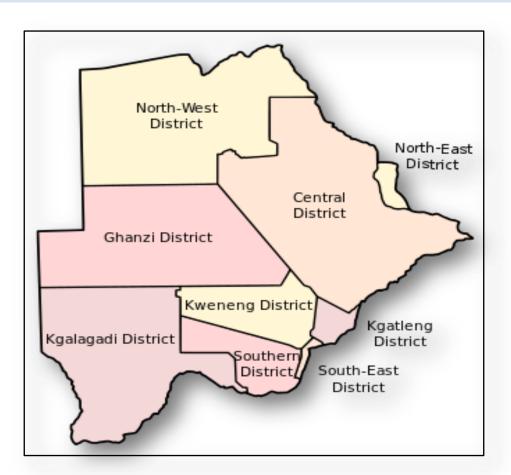


Figure 4: Population Sites

However, bearing in mind that there were many pre-schools in every district of Botswana, it was not possible for the researcher to cover each and every district in the country, so the focus was on the South East district. This region comprises a number of villages, towns and the city of Gaborone. Basically, the research purposively chose the city of Gaborone because in addition to it being her place of work and residence, it has different types of ECE providers. These included NGOs such as Young Women Christian Association (YWCA), private individuals, churches and institution owned programs. The Government of Botswana has rolled out a total of 382 preschools throughout the country and many of these are in Gaborone (See Appendix 2). But due to the distances between the schools and the limited resources only the pre-schools in Gaborone were studied as they were near the researcher's work place.

Sampling Strategies Used Pre- Schools in Botswana Preschools in Purposive Sampling Purposive Sampling Gaborone Government Non-Profit Privately Owned Organisation Owned Stratified Purposeful Sampling Actual Size

Figure 5: Sampling Approach

The sampling strategies used were multi-staged. Purposive sampling was used to select pre-schools in Gaborone only. Purposive is explained as "a type of sampling in which the researcher consciously selects specific elements or subjects for inclusion in a study in order to ensure that the elements have certain characteristics relevant to the study" (Cohen, Manion & Morrison, 2013, p.153). Purposive sampling is a sampling technique in which the researcher relies on his or her own judgment when choosing members of population to participate in the study (Creswell, 2017). In this study the researcher chose teachers in the ECE programs because of their experience in the field.

In addition to purposive sampling, convenient strategy was used to choose participants and sites close to the researcher's place of residence and work. Convenience sampling is a sampling approach where the researcher selects subjects/participants that are near to participate in the research (Creswell, 2017). In this case the researcher used teachers in Gaborone as they were conveniently near to her workplace and place of residence.

Because there were many ECE providers in Botswana (Appendix 3) which included government owned, private and non-profit organizations like churches, cluster sampling was used to ensure that each of the types of providers were accommodated. Cluster is a sampling method that involves separating the population into groups or clusters (Creswell, 2017). ECE

in Botswana is divided according to clusters of ownership of the programs that is privately owned, church owned, institution owned and government owned. These became clusters representing the population of ECE in Botswana.

The study intended to engage 20 ECEs but ended up using 58 schools with a total of 89 participants (See Table 1). Selection was based on the number of schools found in the area and proportional sampling was used. Probability proportional to size (PPS) sampling includes a number of sample selection methods in which the probability of selection for a sampling unit is directly proportional to a size measure (Creswell, 2017). In this study the sample selected was proportional to the programs found in the area. In a location where there was one or two schools sampling was not done, but all the schools were considered, and this was done to allow all areas to be represented. Table 1 shows the number of schools that were sampled.

Table 1: Targeted Schools in Gaborone

Location	No. of ECE	Sample Size
Phase 1	9	8
Phase 2	9	9
Phase 4	4	4
Block 3	4	4
Block 5	1	1
Block 6	1	1
Block 7	2	2
Block 8	4	4
Block 9	4	4
Extension 2	5	5
Extension 3	3	3
Extension 4	1	1
Extension 5	3	2
Extension 7	1	1
Extension 9	4	3
Extension 10	3	3

Extension 19	1	1
Extension 25	3	3
Extension 27	1	1
The Mall	1	1
White City	1	1
Village	5	5
Gaborone North	3	2
Broadhurst	5	5
Old Naledi	2	2
Phakalane	3	2
Partial	2	2
Maruapula	2	2
Ledumang	5	3
Tawana	2	2
Ginger	1	1
Sebele	1	1
Gaborone North	1	1
University of Botswana	1	1
Bontleng	1	1
Total	99	89

As Table 1 indicates, more than half of the pre-schools in Gaborone were targeted.

The following criteria were used to select participants. Participants should have taught in ECE settings for two or more years to be able to articulate both the pros and cons of providing early childhood education in Botswana. They should have received some training or education in ECE to be conversant with both the theoretical and practical realities of the operations of ECE and finally they should be willing to participate in the study.

3.3.2 Selection and recruitment procedures

This section discusses the exclusion criteria, research sites, selection criteria for sites and data collection and analysis.

3.3.2.1 Exclusion criteria

Newly recruited ECE teachers with less than one year of experiences were excluded. The reason for the exclusion of newly recruited teachers was that they did not have enough experience of teaching and learning and were unfamiliar with the policies that govern the ECE programs in Botswana. It was assumed that their lack of experience may not richly inform decisions on whether there is need to develop accreditation standards to govern/regulate provision of ECE in Botswana, and which aspects could be used to develop minimal accreditation standards. Unqualified teachers were also not included regardless of years of experience. Teachers without qualifications may lack the theoretical understanding to guide practice (Roller & Lavrakas, 2015).

It should however be noted that any form of training, be it pre-service, in-service, short courses or workshop with clear certification of knowledge acquired were accepted. Finally, those who met the eligibility criteria but expressed their reservation to participate and were uncomfortable with signing the consent forms were not forced to participate. Further, those who declared their unavailability during the time of the field work or data collection phase were also excluded.

3.3.2.2 Research Sites

ECE schools in Phase 1, 2 and 4, Block 3, 5-9, Extension 2-5, 7, 9, 10, 19, 25, 27, White City, The Village, Broadhurst, Phakalane, Maruapula, Bontleng and Old Naledi as well as the Pre-school at the University of Botswana were covered. Although in 2015, the Ministry of Education indicated that there were 99 ECE schools in Gaborone (See Appendix 5), this number may have increased by now. Three schools were used for the interview, and 13 interviews were done. The rationale for using different participants from the same sample was that the researcher did not want participants who had answered the questionnaire to inform those who were interviewed with information. Consequently different participants were interviewed.

3.3.2.3 Selection criteria for sites

Pre-schools that have been in existence for more than 3 years and operating in Gaborone were selected. Purposive sampling was used to ensure that both government, church owned, private ECE schools and institution owned were used, and the number was proportional to the programs found in the area. In a location where there were one (1) or two (2) schools,

sampling was not done, but rather all the schools were considered. In a location with 3 to 5 schools only 2 schools were selected. There were locations with more than 5 schools, in these cases, only 3 schools were included. Table 2 shows the selection.

3.3.2.4 Data collection

Data was collected by means of questionnaires and interviews. There were 89 questionnaires distributed to pre-schools in Gaborone for quantitative data. There were also 13 interviews that were conducted to collect the qualitative data. The qualitative data was collected to supplement quantitative data.

3.3.2.5 Analysis of data

The study used mathematical and computational techniques in the analysis of quantitative data. The level of significance was tested using SPSS, which, among other things generated a technique known as *Principal Component Analysis* (PCA). PCA emphasizes variation and brings out strong patterns in a dataset. It was helpful in the prioritisation of data which was necessitated by the need to identify the most preferred aspects to be included in the proposed accreditation model. Factor Analysis, which is also within SPSS became necessary to use in the prioritization of data as discussed in Section 3.2. For the analysis of qualitative data, *NVivo 12* was used (Marshall & Rossman, 2016). This is a coding system that places emphasis on the actual words spoken by the participants (Manning & Kunkel, 2014). In this study it was thus used to capture the actual words of the participants (Cf. Section 3.2).

3.4 Validity and Reliability

The questionnaire and the interview guide were given to practising teachers to rate the items as important or not important. A pilot study was conducted using third year class of Primary Education students training to be teachers at the University of Botswana. Twenty students doing in-service program took part in the pilot study. All practicing teachers rated the questions as important for the study.

3.5 Triangulation

In this study the researcher used triangulation as a way to inject credibility in the study. Cohen & Manion (2013) describe triangulation as using multiple methods to make sure that research findings are robust, rich, comprehensive and well developed. As already mentioned, both qualitative and quantitative research designs were used in order to gain a more complete understanding of the phenomenon being studied. Another technique that the researcher used

for establishing credibility was prolonged engagement. The researcher took five months in the field studying the phenomenon of ECE. This time provided an opportunity not only to discuss and understand the practices but also to learn through observing in the field.

Dependability is a measure of a system's availability, reliability and its maintenance support. This is the criterion through which consistency of the study is shown. According to Marshall & Rossman (2016) dependability is the consistency and stability of the study over time. The consistency of the study was maintained by ensuring uniformity and following procedures during data collection.

The sole responsibilities for all the phases and tasks from the study were upon the researcher to maintain stability of the study. Moreover, as a proof of dependability, Cohen, Manion & Morrison (2013) recommended a detailed explanation of how data was collected and interpreted. Dependability was maintained in the study because the researcher used the same questionnaire for all the participants, which maintained uniformity and consistency. With the use of the interview, the researcher used an audio recorder that captured the accurate words verbatim, by so doing the researcher maintained dependability as there was no distortion of what the participants said.

Shenton (2014) state that conformability refers to the degree to which findings of a study are genuine reflections of the participants investigated. It confirms the neutrality of research; that is to ensure that the researcher does not interfere with the findings. The data was analysed using SPSS to ensure that the researcher did not in any way interfere with the findings.

In order to achieve conformability, the researcher decided to audit trail as a strategy. Creswell (2017) for example, suggests the use of sufficient evidence of the research process to be kept so that an external source can access them if they want to follow the procedure, collection and the analysis of data. The audit trial for this study includes a guide, questionnaire, an interview schedule and data analysis procedures.

3.6 Ethical Considerations

There were two ethical considerations that this research satisfied. They were confidentiality and anonymity and the right to withdraw from the study and the process of getting a permit to

conduct the study. There were several ethical considerations that this research satisfied. There were issues of confidentiality and anonymity and the right to withdraw from the study. There were also the process of getting clearance from University of Botswana, Office of Research and Development (ORD).

3.6.1 Process of getting a research permit

First, one has to defend the proposal to the university wide community. After the student passes the defense, then the proposal is sent to ORD for further scrutiny. Once ORD is satisfied with the proposal they write to the Ministry of Education, which has now been divided in the Ministry of Basic Education (MoBE) and the Ministry of Tertiary Education, Research, Science and Technology (MoTE). In this case the letter is written to the MoBE to ask for a research permit. Before one is given the permit one has to read the guidelines (Appendix 10) then fill the research Application Forms (Appendix 11).

In this research the ECE schools used in the study were governed by two ministries, those attached to primary schools belonged to the Ministry of Basic Education (MoBE) and others belonged to the Ministry of Local Government and Rural Development. MoBE gave the permit and explained that the permit would not include privately owned programs because they are not owned by the government. The government owned schools such as Ithuteng, Therisanyo and Thebe were covered by the permit from the Ministry of Basic Education, while others were under the Ministry of Local Government and Rural Development. It was then inevitable that another permit be obtained from the Ministry of Local Government and Rural Development (Gaborone District Council). The permit allowed the researcher to use schools that were not under the government (see appendix 5).

3.6.2 Confidentiality and anonymity

The anonymity of a person or preschool is protected by making it impossible to link aspects of the data to a specific pre-school or person. Confidentiality and anonymity are guaranteed by ensuring that no one other than the researcher knows the source (Spector, Merrill, Elen, 2013). In this study no names were attached to the information, only codes were used.

3.6.3 The right to withdraw from the study

The participants were informed that they could withdraw from the study at any time if they wished to. In this research, ethics of research were considered. The three ethical issues

pertaining to qualitative investigations are known as autonomy, beneficence and justice (Speziale & Carpenter, 2011). The following steps were taken into consideration in order to address these issues.

An interview consent form (Appendix 2) was given to participants prior to data collection. Polit & Beck (2008, p.120) talk about 'power of free choice,' that is, enabling the respondents to consent voluntarily to participate before data collection. The consent forms revealed the goal of data collection and how the collected data was to be used. That was done in accordance with Denzin & Lincoln (2017) who corroborates that if a researcher is honest and open with potential participants about the goals of the research and how the information gathered will be treated, cooperation of the participants is easily obtained. Furthermore, there was a letter providing information about the procedure to be used and the purpose of the study (Appendix 9).

The consent forms were handled with care to ensure confidentiality. Beneficence involves maximizing possible benefits and good for the participants while minimizing the possible harm as well as risks resulting from the study. Participants were assured that there was no risk in participating in the study. They were also promised that the findings of the study will be made available to the researcher, the participating ECE programs, and the respondents themselves and those with interest in developing early childhood education.

3.7 Methodological Limitations

Simon & Goes (2011, p. 40) define limitations of a study as "things that are somewhat out of the researcher's control, but if they disappear the study would become irrelevant." The following are the limitations of the current.

3.7.1 Built-in bias

Perhaps the strongest objection to research is that the quality of the research depends greatly on the individual researcher (Creswell, 2017). Since I personally designed questions in both the interview and the questionnaires I took the following steps to avoid bias.

The questionnaire and the interview questions were given to 4 colleagues to check for bias, and all the 4 colleagues reported no bias in the questions. Questions were also thoughtfully asked and delivered in a way that allowed participants to freely give their perceptions and feelings. According to Denzil & Lincoln (2017) confirmation bias is a

situation where the researcher wants data to either confirm or dispute a hypothesis. This study was not based on hypothesis; therefore there was no need to conform the data to agree or disagree with a hypothesis.

3.7.2 Challenge to repeat

As stated by Denzil & Lincoln (2017), because qualitative research is so inextricably intertwined with the individual researcher, it is challenging for such research to be repeated. And this makes it hard to confirm or deny the results of the original study. One of the challenges of repeating the current study would be that certain aspects such as service providers would change or if not they may have different views or perception in another time frame. The same thing applies to classroom environment, the methods of teaching and the styles of learning. The only aspects of this study that may be repeated would be the questions from both the questionnaire and the interviews.

3.7.3 Perceived lack of rigor

Denzil & Lincoln (2017), states that quantitative research can demonstrate rigor by including a wide variety of numerical and statistical data and that the rigor of qualitative research is harder to demonstrate since it often involves the qualitative analysis of qualitative data. In this study rigor or trustworthiness has been achieved through unambiguous questions, bracketing, not tempering with data and audit trailing.

Questions from both the interview and the questionnaire were clear and non-ambiguous, this assisted the participants to respond to them effortlessly. In the questionnaire there was only one question that the participants probably felt uncomfortable answering and that was a question relating to the name of the pre-school they worked for. The majority of the participants did not answer this question. This was plausibly because they were working for the school at the time. Otherwise, all the questions were well answered.

Bracketing is the ability of the researcher to avoid polluting data with his/her own experiences (Roller& Lavrakas, 2015). In this study the researcher did not assist or give clues when the participants did not understand the/a question(s). She only explained the question(s) for them to fully understand.

Roller & Lavrakas (2015) further say that the researcher should allow the data to speak during data analysis. In this study data 'spoke' in more than one way through the use of

triangulation, the multi-method of both qualitative and quantitative. Data was analysed 5 times using various techniques such as descriptive statistics, cross tabulation, factor analysis, principal component analysis and qualitative data analysis. All these techniques allowed data to speak out rather than the researcher speaking for the data. In some instances the researcher was surprised by the revelation of the data after the analysis was made, such as when the majority of the participants thought safety devices, mission and vision as well as establishing a strong PTA were the most important aspects in an ECE program. Audit trailing is when the researcher is willing to share her findings with relevant authority (Creswell, 2014). In this study, all the findings will be shared with influential stakeholders like BQA.

3.8 Delimitation of the Study

Delimitations are those characteristics that limit the scope and define boundaries of the study. Simon & Goes (2011) states that these, unlike the limitations, are in the researchers control and include such aspects as the sample population, geographical location, the time the research is going to take, etc. The sample population and the geographical location used in the study has been discussed in section 3.3.1 above. Due to the fact that it is not practically possible to use entire populations, appropriate sampling procedures were followed to ensure that the sample used in the study together with the geographical location was representative of the whole and statistically significant. With regard to the issue of time, a lot of time was spent on the collection of data. There were 89 questionnaires and 13 interviews, and each interview lasted between 30 minutes to an hour. The researcher had to follow up the questionnaires 3 times in order to better the return rates. This was big in magnitude, requiring both human and financial resources. The investigation took measures to ensure that what could naturally be limiting factors were handled in a manner that was representative of the whole and thereby delimiting the study.

3.9 Conclusion

This chapter presented the research paradigm, research design and approaches used in this study. Furthermore, it dealt with the population of the study and sampling procedures were explained. Data collection and analytic tools, techniques and procedures used in this study were presented. The study used a mixed-method design which is a combination of qualitative and quantitative research approaches to acquire comprehensive data. Ethical concerns and measures to provide trustworthiness are also discussed. The chapter concluded with issues of methodological limitations. The following chapter presents the findings and of the research.

Chapter 4: The Findings of the study

4.1 Introduction

This chapter presents the findings of the investigation guided by the research questions and the themes developed during data analysis. As already indicated, quantitative data was collected using a questionnaire (Appendix 6) while qualitative data was collected using the interview (Appendix 8). Guidelines on how to conduct an interview were followed (Appendix 9).

4.2 Demographic Factors

Participants were asked to provide their age, gender, employment status, educational qualifications, positions held in ECE schools and their nationalities.

4.2.1 Gender of the participants

Figure 6 shows the gender of the participants. They were given 2 options, male or female.

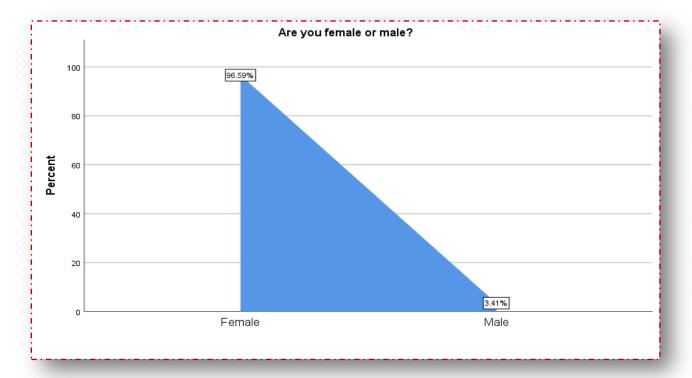


Figure 6: Gender of the Participants

According to Figure 6, majority of the participants were females (96.59%) while the minority were males (3.41%).

4.2.2 Gender of the Participants per category of ECE

Table 2 shows the distribution of participants per the four categories of ECE used in the study.

Table 2: Gender of the Participants per Category of ECE

CATEGORY OF ECE		GENDER		
	Female	Male		
Privately Owned	62.5%	1.1%		
Government Owned	19.3%	0.0 %		
Church Owned	9.1%	1.1%		
Institution (University/College-based Owned	5.7 %	1.1 %		
Total	96.6%	3.4%		

According to the Table 2, privately owned programs took the lead with 62.2% of the teachers being female while 1.1% was males. This was followed by government owned programs with 19.3% females. There were no male teachers (0.0%) in the government owned programs. Church owned programs came third with 9.1% females and 1.1% males. The institution owned programs came last with 5.7% females and 1.1% males. While there were no male teachers in the government owned programs, there were a few in the other programs.

4.2.3 Status of Employment of Participants

With regard to employment status, participants were provided with four choices: full time employment, part time and self-employed. Figure 8 shows the status of employment by participants.

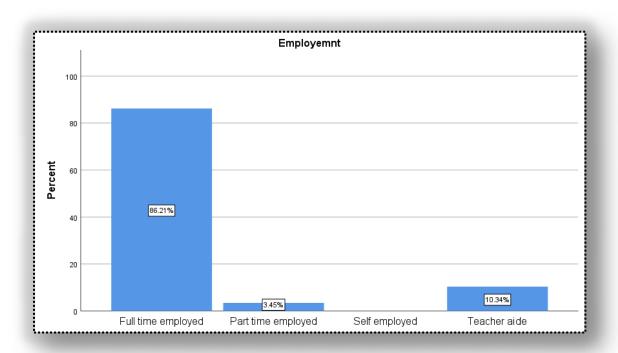


Figure 7: Status of Employment of Participants

According to Figure 7, majority of participants, 86.21 %, were on full time employment. There were no teachers who were self-employed.

4.2.4 Status of employment as per category of ECE used in the study

Participants were asked about the status of employment per category of ECE used in the study. Table 3 shows the results.

Table 3: Status of Employment as per category of ECE used in the study

CATEGORY OF ECE FULL-TIME PART-TIME SELF-EMPLOYED

Privately Owned	54.0%	2.3%	0.0
Government Owned	18.4%	1.1%	0.0
Church Owned	9.2%	0.0%	0.0
Institution	4.6%	0.0%	0.0
(University/College-based			
Owned			
Total	86.2%	3.4%	0.0%

According to Table 3, privately owned programs had 54% ECE teachers working on full time basis, 2.3% working on part time basis and 0.0% self-employed. In the government owned programs, 18.4% worked on full time basis, 1.1% on part time basis and 0.0% were self-employed. With the church owned programs, 9.2% worked on full- time basis, 0.0% on part time basis, and 0.0% were self-employed. The institution owned programs had 4.6% teachers working on full-time basis, 0.0% on part time basis and 0.0% were self-employed.

Table 3 further shows that the majority of the teachers were working full time at 86.2% followed by part timers with 3.4%. There were no teachers working as self-employed in all the categories of ECE.

4.2.5 Educational achievement/qualifications of participants

Participants were asked to state their qualifications. The qualifications were as follows:

Certificate in Early Childhood Education, Diploma in Early Childhood Education, Advanced
Diploma in Early Childhood Education, Degree in Early Childhood Education, Masters in
Early Childhood Education and PhD in Early Childhood Education. A Diploma is a
qualification that comes after a Certificate, and then a Bachelor Degree comes after a
Diploma. The next level is that of an Advanced Diploma which comes after the completion of
a Bachelor's Degree, a Master's Degree follows and PhD which is the highest level in the
Botswana education system. Figure 9 shows the qualifications of the participants.

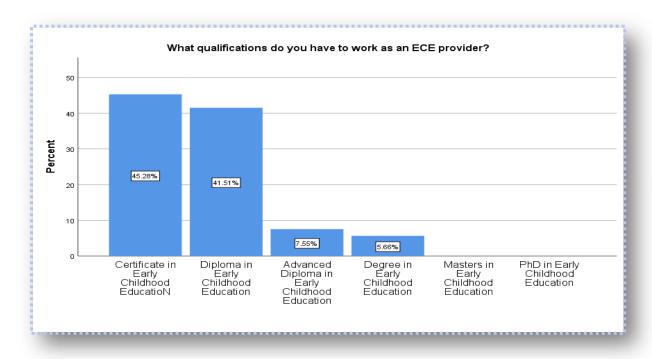


Figure 8: Qualifications of participants

According to Figure 8 majority of the participants, 45.26%, held a Certificate in ECE; a Certificate is the lowest level of educational qualifications. This was followed by a Diploma in ECE at 41.51%. There were 7.55% participants who held an Advanced Diploma in Early Childhood Education. There were also 5.66% participants who held a Degree in Early Childhood Education. There were no participants with a Master's degree in ECE or a PhD in ECE, which are the two highest levels of qualifications.

4.2.6 Qualifications of the participants per category ECE

Table 4 shows qualifications of the participants as per the four categories of ECE used in the study.

Category of ECE	Certificate in Early Childhood Education	Diploma in Early Childhood Education	Advanced Diploma in Early Childhood Education	Degree in Early Childhood Education	Masters in Early Childhood Education	PhD in ECE
Privately Owned	33.3%	27.8%	5.6%	5.6%	0.0%	0.0%

Table 4: Qualifications of the participants per category ECE

Government Owned	1.9%	7.4%	0.0%	0.0%	0.0%	0.0%
Institution Owned	1.9%	1.9%	1.9%	0.0%	0.0%	0.0%
Church Owned	7.4%	3.7%	0.0%	0.0%	0.0%	0.0%
Total	44.5%	40.8%	7.5%	5.6%	0.0%	0.0%

Table 4 shows the qualifications of teachers as per category of ECE. The table shows that privately owned programs had 33.3% participants with a certificate in ECE as their qualification. They also had 2.7% teachers holding a Diploma in ECE and 5.6% teachers with a Degree in ECE. These programs had no teachers with a Master's degree or a PhD in ECE. Government owned programs had 1.9% teachers with a Certificate in ECE, 7.4% with a Diploma in ECE, and no teachers with a Degree or Masters in ECE. They also did not have teachers with a PhD in the field. Institution owned programs had 1.9% teachers holding a Certificate in ECE, 1.9% with Advanced Diploma in ECE, and no teachers with a Degree, Masters or PhD in ECE. The church owned programs had 7.4% teachers holding a Certificate in ECE, 3.7% with a Diploma, and no teachers with a Degree, Masters or PhD. As Table 6 shows, majority of the teachers hold a Certificate in ECE (44.5%). The second qualification held by many is a Diploma at 40.8%. The third level of qualification held in all the categories is an Advanced Diploma in ECE at 7.5%. The least qualification is a Bachelor Degree in ECE at 5.6%. There were no teachers with Masters or PhD.

4.2.7 Position held by participants in ECE Programs

The participants were asked to state what positions they held in the program they were working for. These positions were as follows: Teacher Aid, Teacher, Senior Teacher, Deputy School Head, and School Head. Figure 9 shows the position of Teachers in the ECE programs.

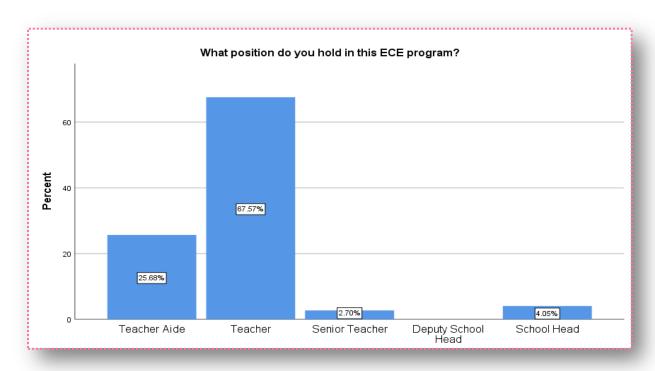


Figure 9: Position held by participants in ECE

According to Figure 9, majority of the participants were working as Teachers at 67.57%, followed by Teacher Aides (those who assist teachers in the preparation and administering of activities) at 25.68%. There were few Senior Teachers at 2.70%, and even fewer School Heads at 4.05% while no Deputy School Heads participated in the study.

4.2.8 Positions held by participants as per category of ECE

Table 5 shows positions held by participants as per the four categories of ECE used in the study.

Table 5: Position held by participants as per category of ECE				
Category of ECE	Teacher Aide	Teacher	Senior Teacher	School Head
Government owned	1.3%	10.7%	0.0%	0.0%
Privately owned	18.7%	45.3%	2.7%	4.0%
Institution owned	4.0%	2.7%	0.0%	0.0%
Church owned	1.3%	8.0%	0.0%	0.0%
Total	25.3%	66.7%	2.7%	4.0%

69

Table 5 shows the positions held by participants in the four categories of ECE. In the government owned programs, there was 1. 3% Teacher Aides, 10.7% Teachers, 0.0% Senior Teachers and 0.0% School Heads. In the privately owned programs there were 18.7% Teacher Aides, 45.3% Teachers, 2.7% Senior Teachers and 4.0% School Heads. In the institution owned programs there were 4.0% Teacher Aides, 2.7% Teachers, 0.0% Senior Teachers and 0.0% School Heads. The church owned programs had 1.3% Teacher Aides, 8.0% Teachers, 0.0% Senior Teachers and (0.0%) School Heads.

The position most of the Teachers held was that of a Teacher (66.7%). There were more Teacher Aides (4.0%) than Teachers (2.7%) in the institution owned pre-schools. The position of Senior Teacher and School Head was only found in the privately owned pre-schools. The second most held position is that of Teacher Aide (25.3%). The least position was that of Senior Teacher (2.7%).

4.2.9 Nationality of Participants per Participating ECE

Table 6 shows nationality of participants as per the four categories of ECE used in the study

Table 6 : Nationality of participants per participating ECE

tegory of ECE

Batswana

Other Nationality

Category of ECE	Batswana	Other Nationalities
Government Owned	15.9%	1.1%
Privately Owned	36.4%	10.1%
Institution Owned	6.8%	0.0%
Church Owned	10.2%	0.0%
Total	69.3%	11.2%

According Table 6, the category of ECE that had different nationalities was the privately owned ECE. In addition to 36.4% Batswana, it had 10.1% other nationalities. In the institution owned as well as the church owned there were no other nationalities except Batswana. Overall, Batswana were employed in all categories of ECE with a combined total of 69.3%, while the other nationalities comprised 11.2% in total.

4.2.10 Participating ECE Schools

Participants were asked to state what type of pre-school they were working at. The types of pre-schools were categorised into four: government owned, privately owned, institution owned as well as church owned. Figure 10 shows the four categories of ECE and how many Teachers are working in each of the categories.

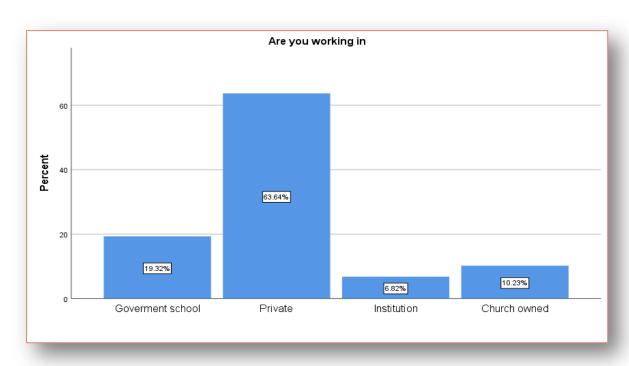


Figure 10: Participating ECE Schools

According to Figure 10, majority of the pre-schools were privately owned at 63.64%, followed by those owned by the government at 19.32%, and then church owned at 10.23%. The least number of pre-schools were those that were owned by institutions at 6.82%.

4.2.11 Years of operation of the pre-schools

Participants were given options to choose from in regard to the years of operation of the school they are working for. These options consisted of age brackets: 0-5, 6-10, 11-15, 16-20 and 30+. Figure 11 shows the years the ECE has been operating.

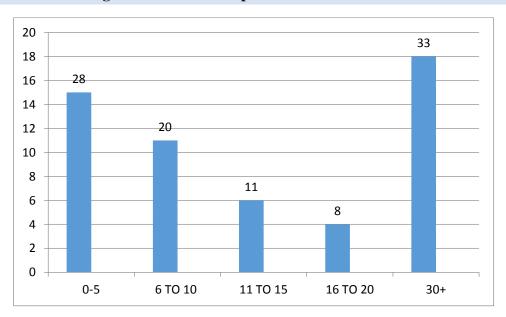


Figure 11: Years of Operation of the Pre-school

The participants were asked to state how long their programs had been running. Figure 11 shows that the majority (33%) of the schools have been running for 30 years and more. This was followed by those which have been in existence for 0-5 years (28%). The third largest group were those who were in existence for 6-10 years at 20%. The least were those who have been in existence for 16-20 years (8%).

Table 7: Years of operation of the pre-school as per category of ECE used in the study

Category of ECE	Duration of operation	Duration of operation	Percentages
	in months	in years	
Government	26 months	2 years	1.4%
	28 months	2.3 years	1.4%
Privately owned	18 months	1.5 years	2.8%
	20 months	1.6 years	1.4%
	26 months	2.2 years	1.4%
	27 months	2.2 years	5.6%
	28 months	2.3 years	2.8%
	35 months	2.9 years	4.2%
	44 months	3.6 years	1.4%
	48 months	4 years	1.4 %
	73 months	6 years	2,8 %
	84 months	7 years	1.4%
	96 months	8 years	1.4 %
	120 months	10 years	4.2 %
	132 months	11 years	1.4%
	168 months	14 years	4.2%
	240 months	20 years	1.4%
	312 months	26 years	2.8%
Institution owned	314 months	26 years	1.4%
Programs			
Church Owned	27 months	2.2 years	2.8 %
	310 months	25 years	4.2%

Table 7 shows that within the government owned programs 1.4% of the participants stated that their school had been operating for 2 years, while another 1.4% said that their school had been operating for 2.3 years. In the privately owned programs 2.8% of the participants said they had been operating for 1.5 years; 1.4% said they had been operating for 1 year 8 months and another 1.4% said they had been operating for 2.2 years. 5.6% of the participants from the privately owned programs said their school had been in operation for 2.2 years, while 2.8% said they had been operating for 2.3 years. Still in the same privately owned programs 4.2 % of the participants said their school had been operating for 2.9 years, while 1.4 % said they had been operating for 3.6 years.

1.4% of the participants said they had been operating for 4 years while 2.8% said that they had been operating for 6 years. There were 1.4% of the participants who said they had operated for 7 years and another 1, 4% said they had been operating for 8 years. There were 4.2% of the participants who said that they have been operating for 10 years; 1.4% said that

they had been operating for 11 years, while there were 4.2% of the participants who said that their school had been operating for 14 years. There were also 1.4% of the participants who said that they had been in operation for 20 years while there were 2.8% who said that they had been operating for 26 years. In the institution owned programs there were 2.8% of participants who said that they have been in operation for 26 years. 2.0 % of participants from the church owned programs said that they had been in operation for 2. 2 years while 4.2% said that they had been in operation for the past 25 years.

Table 7 also show that the Government owned schools are the newest (2-2.3 years) as compared to the privately owned institution owned at (1.5-26 years) while church owned have been in existence for 25 years. The privately owned programs have a wide range of the years of operation; this could be attributed by the fact that they are many as compared to the other categories of ECE used in the study. According to Table 9, in the church owned programs there are schools that are new (2.2 years at 2, 8%) while there are schools that are old (25 years at 4.2%).

4.3 Accreditation Standards

Participants were asked about their understanding of what accreditation entails (Appendix 8). In addition, they were asked to indicate standards that they feel should be part of a Minimal Accreditation Model for use in Botswana. The following emerged from the qualitative findings.

4.3.1 Conceptualization of accreditation

During the interview, participants were asked to state their understanding of the concept of accreditation. Different though complimentary ideas were given. One participant defined accreditation as 'a policy document that can be used to guide teaching and learning in ECE programs'. The other participant reiterated, 'An accreditation is a program that seeks to assess all that is needed to educate and care for a young child who is in Early Childhood Education Program.' Another participant said 'Accreditation is the assessment of the quality of teaching.' While one other participant stated that 'accreditation is a process you go through to find out if what you are doing is valuable or not'.

Based on the findings of the interview, the participants regarded accreditation as a guide, assessment tool, and a tool to measure the quality of education children receive. In addition to defining accreditation, participants also indicated the need for comprehensive facilities in an ECE

program. Participants were asked if they think comprehensive facilities need to be considered for inclusion in MAM. Comprehensive facilities are all the aspects that enable the school to carry out the mandate of teaching children, and include aspects such as playing grounds, photocopying machines, out-door equipment as well as in-door equipment such as tables, chairs, shelves, locker rooms, vehicles for transporting materials and food supplies (Mc Genney, 2014). For this question the participants were given three options i.e. high priority, medium priority and low priority. They were asked if having comprehensive facilities should be included in MAM. Figure 12 shows the responses to the question.

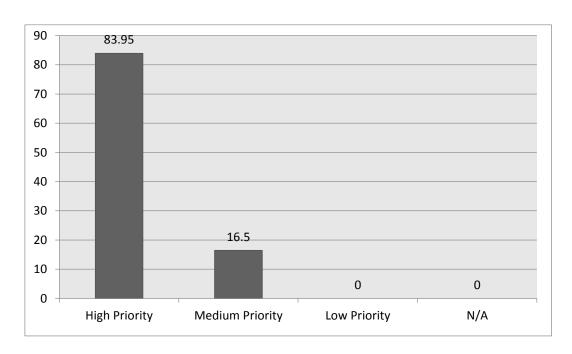


Figure 12: The need for comprehensive facilities in an ECE program

According to Figure 12, 83.95% thought that having comprehensive and appropriate facilities a high priority and should comprise part of an accreditation model. This was followed by 16.5% of the Teachers who considered the availability of comprehensive and appropriate facilities as a medium priority. None of the participants saw it as a low priority.

4.3.2 The need for comprehensive facilities as per category of ECE

Participants were asked whether comprehensive facilities should be included in the MAM as per category of ECE. Results are shown in Table 8.

Table 8: The need for comprehensive facilities as per category of ECE

CATEGORY OF ECE	COMPREHENSIVE FACILITIES		
	High Priority	Medium Priority	Low Priority
Privately Owned	56.80%	7.40%	0.0%
Government Owned	12.30%	7.40%	0.0%
Church Owned	7.40%	1.20%	0.0%
Institution University/College-based Owned	7.40%	0.0%	0.0%
Total	83.60%	16%	0.0%

As per Table 8, 56.80% regarded the issue of adequate / comprehensive facilities as a high priority while 7.40% regarded the issue as of medium priority. No participant from the privately owned programs saw it as a low priority (0.0%). In the government owned programs 12.30% saw the issue as a high priority when 7.40% looked at it as a medium priority. No participant from the government owned programs saw it as a low priority. In the church owned programs 7.40% looked at this issue as a high priority when 1.20% regarded it as a medium priority. No participants from the church owned programs saw it as a low priority issue. Institution owned programs had 7.40% of the participants saying that the issue of availability of adequate resources was a high priority and no participant thought of it as a low priority.

Table 8 shows that in all the categories of ECE the aspect of adequate facilities was considered necessary to be included in the MAM as 83.60% of the participants considered it to be a high priority. Only 16% of the participants saw it as a medium priority. There were no participants (0.0%) who regarded the issue of facilities as a low priority in all the categories of ECE. This is yet another aspect that the participant would like to be considered in the MAM.

When participants were asked 'What resource implications exist in preparing for accreditation? These were the findings from the qualitative data: One participant said, 'We would need material and equipment from the government'. Another one said, 'We would need

resources, materials, transport, laptops'. A third participant said, 'We would need equipment for learners and we need to make sure the resources are there'. The findings of the qualitative data appear to complement those from the quantitative data in showing that the majority of the participants regarded having materials, equipment, transport and resources necessary to prepare for accreditation.

4.3.3 The need for safe school environment in ECE

In this question participants were asked whether safe school environment can be included in the MAM. Safe environment basically deals with security issues such as making sure that danger zones like electrical outlets are closed, there are water system toilets rather than pit latrines that can pose danger to young children. Again for this question the participants were given four options: very deserving, deserving, somehow deserving and not deserving.

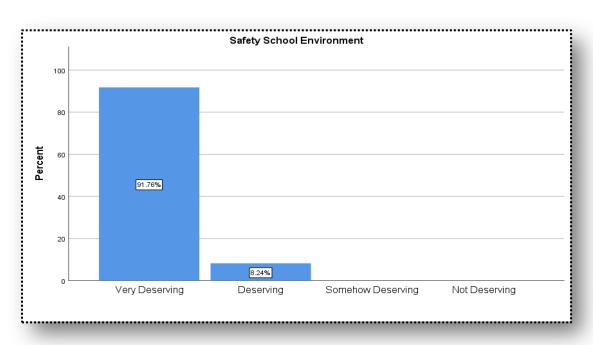


Figure 13: The need for safe school environment in ECE

Figure 13 shows that majority of the participants (91.76%) said safe school environment was very deserving to be included in the MAM. Only 6.24% saw this issue as deserving, no participants thought this issue was somehow deserving or not deserving.

4.3.4 The need for safe school environment in ECE as per category of ECE

Participants were asked whether safe school environment should be included in MAM. The responses are shown in Table 9.

Table 9: The need for safe school environment in ECE as per category of ECE

CATEGORY OF ECE	SAFE SCHOOL ENVIRONMENT				
	Very	Deserving	Somehow	Not	
	Deserving		Deserving	Deserving	
Privately Owned	60.0 %	5.9%	0.0 % %	0.0 %	
Government Owned	16.5%	1.2 %	0.0 %	0.0%	
Church Owned	9.4 %	0.0%	0.0 %	0.0%	
Institution (University/College-based	5.9 %	1.2 %	0.0%	0.0%	
Owned					
Total	91.8 %	8.3 %	0.0 %	0.0 %	

According Table 9, all the participants from the four categories of ECE used in the study find safety within the ECE program a deserving aspect (100%). A combined total of 91.8% see safety as a very deserving aspect in ECE while 8.3% see it as deserving. There was no participant who considered the issue of safety as somehow deserving or not deserving. Within the church owned programs none of the consultants found this issue as deserving, somehow deserving or not deserving. All considered this issue as a highly important aspect of a program needing to be included in MAM.

4.3.5 The need for children's safety during pick-up and drop-off times

Participants were asked whether there is need to include children's safety during dropoff and pick-up in MAM. Participants were also given four options very deserving, deserving, somehow deserving and not deserving. The responses are shown in Figure 14.

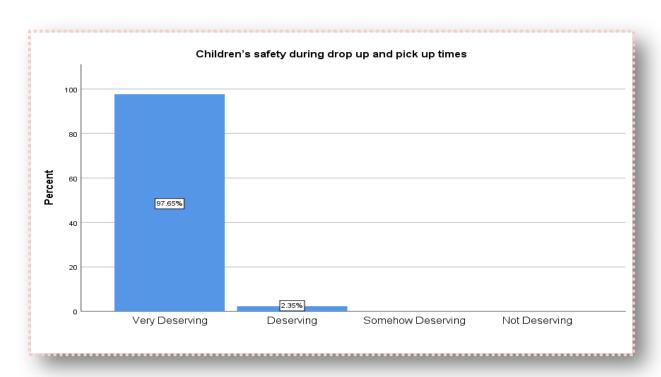


Figure 14: The need for Safety during pick-up times and drop-of times

Figure 14 shows that majority of the participants (97.65%) regarded this aspect as very deserving, 2.35% considered it as deserving, no participant saw it as somehow deserving or not deserving.

Table 10 : The need for safety during pick-up and drop-off times as per category of ECE

CATEGORY OF ECE	SAFETY DURING PICK UP AND DROPPING OF TIMES				
	Very Deserving	Deserving	Somehow Deserving	Not Deserving	
Privately owned	64.7%	0.0%	0.0 %	0.0 %	
Government owned	16.5%	2.4%	0.0 %	0.0%	
Church owned	9.4 %	0.0%	0.0 %	0.0%	
Institution	7.1%	0.0%	0.0%	0.0%	
(University/College-					
based owned					
Total	97.6 %	2.4 %	0.0 %	0.0 %	

Table 10 shows that similar to the issue of safe environment, the issue of children's safety during pick-up and drop-off times were a very important issue with all the participants. All the participants in the four categories of ECE regarded safety during pick up and drop of

times as deserving to be included in the MAM with a total of 97.6%. The remaining participants 2.4% saw this issue as deserving. None of the participants looked at this issue as somehow deserving or not deserving to be included in the accreditation model. Due to the consensus of the participants, the issue of safety during prick-up and drop-off times needs to be incorporated in the MAM.

4.3.6 The need for security in an ECE program

The participants were asked to consider the issue of security as an aspect to be considered in the MAM. Similarly participants were given four options very deserving, deserving, somehow deserving and not deserving. Their responses are shown in Figure 15.

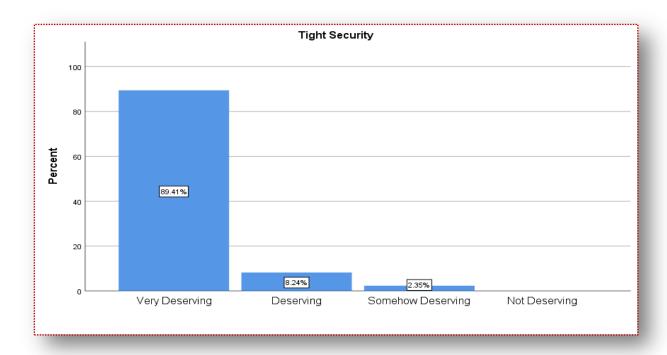


Figure 15: The need for Security in an ECE program

Figure 15 shows that the majority of the participants, 69.41%, regarded the issue of security as very deserving, 8.24% regarded it as deserving, 2.35% saw it as somehow deserving and no participant regarded it as not deserving.

4.3.7 The Need for security in an ECE Program as per category of ECE

The participants were asked whether security should be included in the Minimal Accreditation Model. Results are shown in Table 11.

Table 11: The need for security in an ECE program as per category of ECE

CATEGORY OF ECE	TIGHT SECURITY				
	Very Deserving	Deserving	Somehow Deserving	Not Deserving	
Privately owned	60.0 %	3.5 %	0.0 % %	0.0 %	
Government owned	12.9%	3.5 %	2.4 %	0.0%	
Church owned	10.6 %	0.0%	0.0 %	0.0%	
Institution	5.9 %	1.2 %	0.0%	0.0%	
(University/College-					
based owned					
Total	89.4 %	8.2 %	2.4 %	0.0 %	

As Table 11 shows, sixty per cent of those in the privately owned programs considered the issue of security as very deserving and recommended it to be included in the MAM while 3.5% of the participants considered security as a deserving issue to be included in the model of accreditation. There were no participants in the privately owned programs who thought the issue of security was somehow deserving or not deserving

From the government owned programs there were 12.9% of participants who considered security issues as very deserving while 3.5% saw the issue as deserving. 2.4% of the participants thought that this issue somehow deserved. There were no participants from the government owned programs who thought the issue did not deserve to be included in MAM. With the church owned programs there were 10.6% of participants who thought that the security issue is a very deserving issue while there were no participants who saw this issue as deserving, somehow deserving or not deserving. The institution owned programs had 5.9% of the participants who said that the issue of security was very deserving while 1.2% of participants said the issue was deserving. There were no participants who thought the issue was somehow deserving or not deserving in the institution owned programs.

Table 11 shows that 89.4% of the participants from the four categories of ECE used in the study saw the issue of tight security in an ECE program very deserving. This was followed by 8.2% of participants still from all the four categories of ECE who thought that this issue of security was deserving. Only 2.4% regarded this issue as somehow deserving. None saw this issue as not deserving to be included in MAM.

4.3.8 The need for safety devices in an ECE program

The participants were asked if the aspect of safety devises could be included in the minimal accreditation model. Participants were asked to prioritise the safety devices and to state if

they are a high priority, a medium priority or a low priority. The responses are captured in Figure 16.

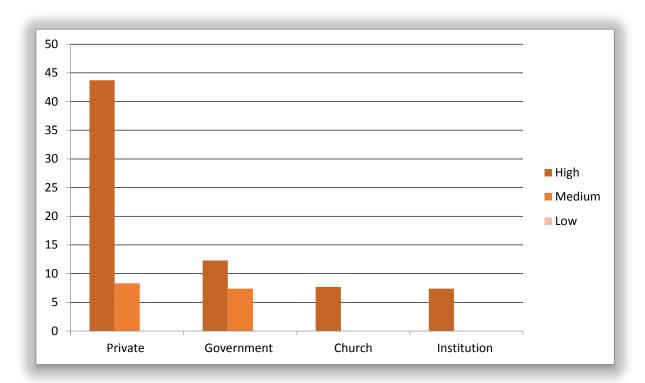


Figure 16: The need for Safety Devices in an ECE program

As Figure 16 shows the privately owned participants regarded the issue of safety as a crucial issue. The majority of the participants thought that these devices are of high priority (44. %). This was followed by those in the government owned programs at 13.6%. They were followed by church owned participants with 5.5%. The last group were the institution owned with 5.4%.

Table 12: The need for Safety Devices in an ECE program as per category of ECE

CATEGORY OF ECE	SAFETY DEVICES				
	High Priority	Medium Priority	Low Priority		
Privately owned	44%	7.0 %	0.0 %		
Government owned	13.6 %	7.2%	0.0%		
Church owned	5.5%	0.0 %	0.0 %		
Institution (University/College- based owned	5.4%	0.0%	0.0%		
Total	68.5%	14.2%	0.0%		

As noted in Table 12, the level of priority regarding the issue of safety was high at 68.5% total percentage of the participants from the four categories of ECE stating that it was of high priority. There were 14.2 % of participants who looked at the issue of safety as of medium priority. The figures above show that security is of high priority and needs to be considered in the MAM.

Safety devices have been prioritised by participants in this study because of the importance they carry. This has not come as a surprise, because teachers as well as parents are concerned about the safety of the children in the schools. Safety is not only about strangers coming to the school to shoot innocent children but can involve aspects such as sanitary systems like pit latrines that can endanger the lives of innocent and vulnerable children (Gordon & Browne, 2013)

4.3.9 The Need for a Computer Lab in an ECE program

The participants were asked if the computer lab should be included in the MAM. The participants were given four options to choose from which were very useful, useful, rarely useful and not useful. Their responses are shown in Figure 18.

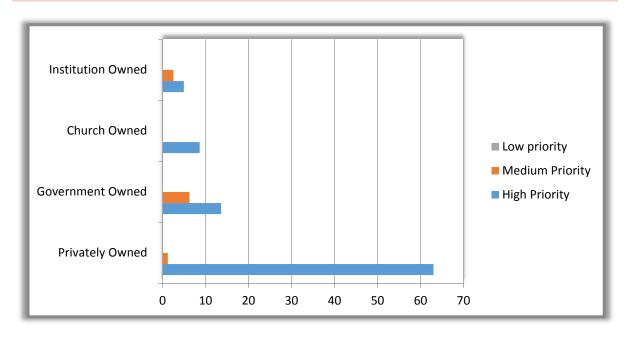


Figure 17: The need for a Computer Lab in an ECE program

Figure 17 shows that majority of the participants in the privately owned programs considered them to be very useful (29.4%). These were followed by those from the government at 5.9%. The third group were those from the church owned programs at 8.0%. The last group was the institution owned at 2.5%.

Responses about whether the computer lab should be included in the MAM were also presented in tabular form. As indicated above, participants were given four options to choose from which were very useful, useful, rarely useful and not useful. The results are shown in Table 13.

Table 13 : The Need for a computer lab in ECE as per category of ECE in an ECE program

CATEGORY OF ECE	COMPUTER LAB				
	Very Useful	Useful	Rarely Useful	Not Useful	
Privately Owned	29.4%	25.9%	7.1%	2.4%	
Government Owned	5.9 %	7.1%	2.4 %	3.5%	
Church Owned	4.7%	3.5 %	0.0 %	1.2%	
Institution	2.4 %	3.5 %	0.0%	0.0%	
(University/College-based					
Owned					
Total	42.4%	40.4 %	10.6 %	7.1%	

According to the Table 13 most of the participants across the four categories of ECE thought that the computer lab was very useful to have in an ECE program (42.4%). 40.4% thought it was useful, 10.6% thought it was rarely useful and 7.1% thought it was not useful.

4.3.10 The need for a Science Lab in an ECE program

Participants were asked whether the Science Lab can be included in the Minimal Accreditation Model. They were given four options to choose from, these were very useful, useful, rarely useful and not useful. The responses are shown in Figure 19.

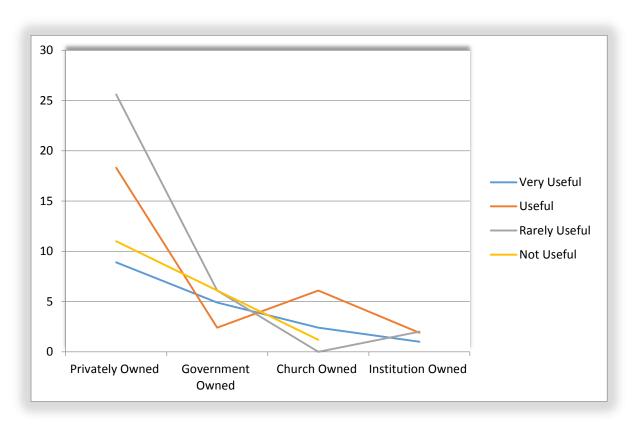


Figure 18: The need for a Science Lab in an ECE program

Figure 18 shows that the majority of the participants from all the categories saw the science lab as not useful. Privately owned programs found them not useful by 11.0% and rarely useful by 25.6%. The government owned programs saw them as not useful by 6.1% and useful by 4.9%. The church owned programs saw the science lab very useful by 2.4% and not useful by 1.2%.

Table 14: The need for a Science Lab in an ECE program as per category of ECE

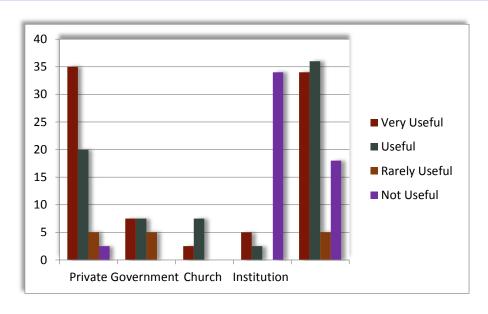
CATEGORY OF ECE	SCIENCE LAB				
	Very Useful	Useful	Rarely Useful	Not Useful	
Privately Owned	8.9 %	16.5 %	25.6 %	11.0 %	
Government Owned	4.9 %	2.4 %	6.1 %	6.1%	
Church Owned	2.4 %	6.1 %	0.0 %	1.2%	
Institution (University/College-	1.2 %	4.9 %	1.2 %	0.0%	
based Owned					
Total	17.1%	31.7%	32.9 %	18.3 %	

Responses from participants about the usefulness of having a science were also presented in tabular form. From Table 14, (17.1%) of the participants thought that having a science lab in an ECE program was very useful. There were also more participants (31.7%) who thought having a science lab was useful, when (32.9%) regarded having a science lab in an ECE program rarely useful. There was also a good number of participants who regarded the issue of a science lab as not useful to have in an ECE program.

4.3.11 The need to have a library in an ECE program

Participants were asked whether the library can be included in the Minimal Accreditation Model. They were given four options to choose from; these were very useful, useful, rarely useful and not useful. Their responses are captured in Figure 19.

Figure 19: The need to have a Library in an ECE program



According to Figure 19, 35.0% of the participants from the privately owned programs saw the library as a very useful facility; these were followed by those participants from the government owned programs at 7.5%. The third group were those from the institution at 5.0%. The last category was those from the church owned programs at 2.5%.

Table 15: The need to have a Library in an ECE program as per category of ECE

CATEGORY OF ECE	LIBRARY				
	Very Useful	Useful	Rarely Useful	Not Useful	
Privately owned	35.0 %	20.0 %	5.0 %	2.5 %	
Government owned	7.5 %	7.5 %	5.0 %	0.0 %	
Church owned	2.5 %	7.5 %	0.0 %	0.0%	
Institution (University/College-based	5.0 %	2.5 %	0.0 %	0.0%	
owned					
Total	50.0 %	37.5%	10.5 %	2.5 %	

In tabular form, Table 15 shows that 50.0% of a combined total of all the ECE categories used in the study considered the library as a very useful facility to have in an ECE program. Similarly, 37.5% of the participants saw the library as a useful facility. There were 10.5% of participants who considered the library to be rarely useful. The least number of participants (2.5%) were those who thought the library was not a useful facility to have in an ECE program.

4.3.12 The need to have an Administrative Block in an ECE program

The participants were asked if the administrative block should be included in the MAM. They were given four options to choose from: very useful, useful, rarely useful and not useful. Their responses are shown in Figure 21.

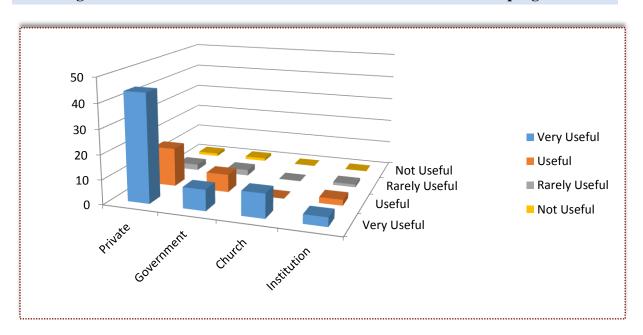


Figure 20: The need to have an Administrative Block in an ECE program

It can be seen from Figure 20 that participants from the privately owned programs saw this facility as very useful (43.9%). They were followed by those from the church owned at 9.8%. The third group were those from the government at 8.5%. The last group were those from the institution owned who found the administrative block as very useful at 3.7%. The results are again shown in tabular form in Table 16.

Table 16 : The need to have an Administrative Block in an ECE program as per category of ECE

CATEGORY OF ECE	ADMINISTRATION BLOCK			
	Very Useful	Useful	Rarely Useful	Not Useful
Privately Owned	35.0 %	20.0 %	5.0 %	2.5 %
Government Owned	7.5 %	7.5 %	5.0 %	0.0 %
Church Owned	2.5 %	7.5 %	0.0 %	0.0%
Institution (University/College-based	5.0 %	2.5 %	0.0 %	0.0%
Owned				
Total	50.0 %	37.5%	10.5 %	2.5 %

According to the Table 16, 50.0% found having an administration block very important in an ECE program. This was followed by those who said having an administration block was useful at 37.5%. The percentage of those who thought that the administration block was rarely useful was 10.5%. The least were those who thought that the administration block was not useful 2.5%.

4.3.13 The need for records of pupils' work in an ECE program

The participants were asked if keeping of records of pupils' work could be included in the Minimal Accreditation Model. They were given two options: agree and disagree. Figure 21 shows the results.

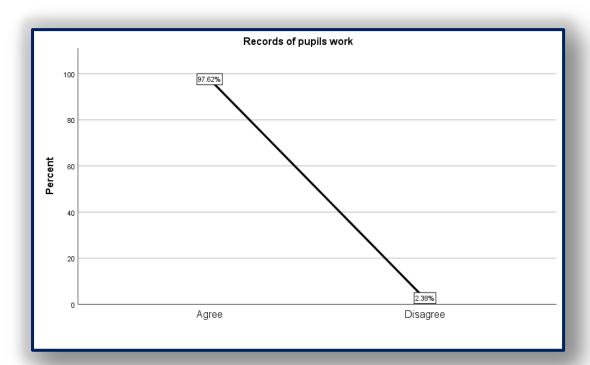


Figure 21: The need for records of pupils' work in an ECE program

Figure 21 shows that there are 97.62% of participants who agreed that keeping records of pupils work is important as compared to 2.38% who said that the records are not important to keep.

CATEGORY OF ECE	RECORDS OF PUPILS WORK					
	Totally Agree	Agree	Moderately Agree	Disagree	Strongly Disagree	
Privately Owned	51.2%	8.3%	2.4%	1.2%	0.0%	
Government Owned	15.5%	0.0%	2.4%	0.0%	1.2%	
Church Owned	9.5%	0.0%	1.2%	0.0%	0.0%	
Institution	6.0%	0.0%	1.2%	0.0%	0.0%	
University/College-based						
Owned						
Total	82.1%	8.3%	7.1%	1.2%	1.2%	

Table 17: The need for records of pupils' work in an ECE program

This question was further analysed and the results are shown in Table 17. Participants were asked to choose one of the options: totally agree, agree, moderately agree, disagree and strongly disagree. In the privately owned programs 51.2% of the participants totally agreed that it is important to keep pupils records, while 8.3% agreed, 2.4% moderately agreed, 1.2% disagreed and 0.0% strongly disagreed. From the government owned programs 15.5% totally agreed that keeping pupils records was important, 0.0% agreed, 2.4% moderately agreed, 0.0% disagreed, and 1.2% strongly disagreed. From the church owned programs 9.5% totally agreed that having such records was an important thing to do, 0.0% agreed, while 1.2% moderately agreed, 0.0% disagreed and 0.0% strongly disagreed. In the institution owned 6.0% totally agreed that such records are important while 0.0% agreed, 1.2% moderately agreed, 0.0% disagreed and 0.0% strongly disagreed.

As noted in Table 17, 82.1% totally agreed that records of pupils work was an essential component in the Minimal Accreditation Model. This was followed by 8.3% who agreed that these records were essential. There was 1.2% who disagreed that these records should be an essential component of the accreditation model. At the same time there was another 1.2% who strongly disagreed that these records are not essential component of the accreditation standards. All in all, the total percentage of participants who value the keeping of these records is greater at 97.5% than those who are not for the keeping of the records of pupils' records of work (2.4%).

4.3.14 The need to keep cash flow records in an ECE program

The participants were also asked if keeping cash flow records was an important aspect to be included in the MAM. For this question the participants were given four options: very useful, useful, rarely useful and not useful. Figure 22 shows the results.

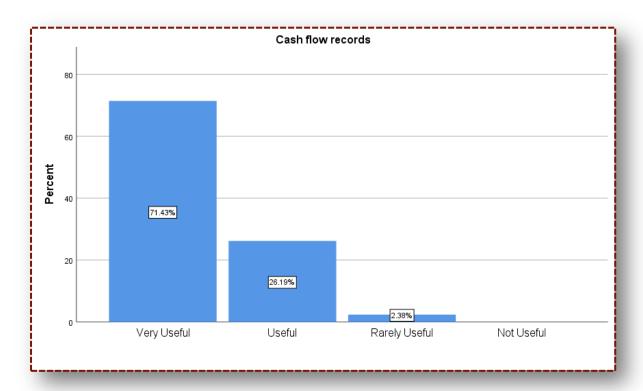


Figure 22: The need to keep cash flow records in an ECE program

Figure 22 shows that the majority of the participants (71.43%) thought that cash flow records are very useful in an ECE program, followed by 26.19 % who thought that such records are useful. Only 2.36% thought that they are rarely useful; no one thought that they are not useful. The issue was analysed further using the four categories of ECE used in the study. The results are shown in Table 18.

Table 18 : The need to keep cash flow records in an ECE program as per category of ECE

CATEGORY OF ECE		CASH FLOW RECO	PRDS
	Very Useful	Useful	Rarely Useful
Privately owned	45.2%	16.7%	0.0 %
Government owned	14.3 %	4.8 %	1.2 %
Church owned	8.3 %	1.2 %	0.0 %
Institution University/College-based owned	3.6%	3.6 %	0.0%
Total	75.9%	18.1%	4.8 %

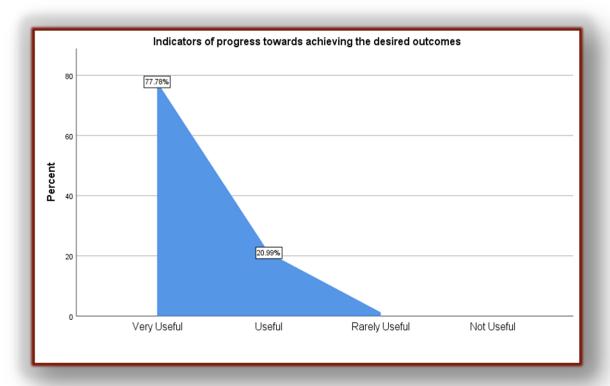
According Table 18, 45.2% of the privately owned participants consider keeping cash flow records as very useful, while 16.7% see it as useful; no participant from the privately owned saw it as rarely useful. From the government owned programs 14.3% saw this issue as very useful while 4.8% saw it as useful. There were 1.2% of the participants from the government who saw this issue as rarely useful. In the institution owned programs there were 3.6% of the participants who saw this issue as very useful, while a further 3.6% also saw this issue as useful. In the church owned programs there were 8.3% of participants who looked at this issue as very useful while 1.2% saw the issue of keeping cash flow records as useful. No participant from the church owned saw this issue as rarely useful.

Table 18, shows that the majority of the participants viewed cash flow records as very useful (75.9%) in keeping up to date financial records in an ECE program. These were followed by 18.1% who thought cash flow records were useful while only 4.8% found cash flow records as rarely useful in an ECE program. Basically the percentage of participants who found them useful (75.9%) is more than those who find them rarely useful (4.8%). Consequently, the aspect of cash flow can also be incorporated in the MAM.

4.3.15 The need for indicators of progress towards desired outcomes in an ECE program

The participants were asked whether there should be indicators of progress toward goals in the accreditation model, and the options were very useful, useful, rarely useful or not useful. Their responses are captured in Figure 23.

Figure 23 : The need for indicators of progress towards desired outcomes in an ECE program



According to Figure 23, majority of the participants (77.78%) felt that indicators are very useful in assisting an ECE to achieve goals. There were 20.99% of the participants who said that they find indicators useful while no participants considered indicators as rarely useful or not useful. The responses are also presented in tabular form in Table 19.

Table 19: The need for indicators of progress towards desired outcomes in an ECE program as per category of ECE

CATEGORY OF ECE	INDICATORS OF PROGRESS TOWARDS OUTCOMES				
	Very Useful	Useful	Rarely Useful	Not Useful	
Privately Owned	49.4%	16.0%	0.0 %	0.0 %	
Government Owned	13.6%	3.7 %	0.0 %	0.0%	
Church Owned	9.9 %	0.0%	0.0 %	0.0%	
Institution (University/College-based Owned	4.9 %	1.2 %	1.2%	0.0%	
Total	77.8 %	21.0%	1.2 %	0.0 %	

In Table 19, the majority of the participants from all the categories of ECE said that indicators of progress toward the achievement of goals were very useful (77.8%). This figure was followed by those who thought that it was useful to have the indicators in an ECE program (21.0%). There were a few participants who thought that indicators of progress were rarely useful (1.2%) and these were from the institution owned ECE programs.

4.3.16 The need to keep confidential pupils records in an ECE program

The participants were asked if the aspect of keeping confidential pupils records should be included in the MAM. Participants were given five options to choose from: totally agree, moderately agree, agree, disagree, and strongly disagree. The responses are shown in Figure 24.

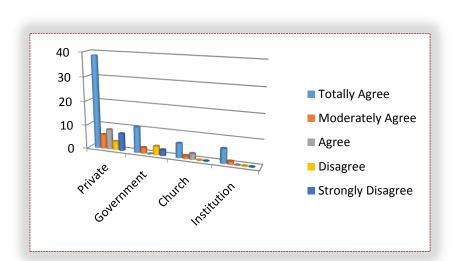


Figure 24: The need to keep confidential pupils records in an ECE program

Figure 24 shows that participants in the privately owned programs as well as the rest varied in opinion. Majority of them said that they totally agreed that these confidential records should be made available during inspection (38.6%). Still within the privately owned 7.2% strongly disagreed that these records be made available during inspection, while 8.4% agreed that they be made available.

With regards to the government owned programs, there was a variety of opinions about this matter. In this category 10.8% totally agreed that these records be made available during inspection, 3.6% disagreed and 2.4% strongly disagreed with the idea. The surprising thing is that within the church owned participants there was no participant who disagreed or strongly disagreed that such records should not be made available during inspection by a relevant authority. There were 6.05% of participants who totally agreed and 1.2% who

moderately agreed to the idea. With the institution and church owned programs no participant either disagreed or strongly disagreed that such documents should be made available to inspection. In this category 6.0% of the participants totally agreed that these documents be made available during inspection. There was 1.2% who moderately agreed to the idea.

Table 20: The need to keep confidential pupils records in an ECE program

CATEGORY OF ECE	CONFIDENTIAL PUPILS RECORDS					
	Totally Agree	Moderately Agree	Agree	Disagree	Strongly Disagree	
Privately owned	38.6%	6.0%	8.4%	3.6%	7.2%	
Government owned	10.8 %	2.4%	0.0%	3.6 %	2.4%	
Church owned	6.0 %	1.2%	2.4%	0.0 %	0.0%	
Institution (University/College-based owned	6.0%	1.2%	0.0%	0.0 %	0.0%	
Total	61.4%	10.8%	10.8%	7.2%	9.6%	

As shown in Table 20, despite differences in opinion by the participants, it is clear from the Table above that the majority of them in all the four categories being privately owned, government owned, church owned as well as institution owned believed that the records should be made available during inspection (61.4%). This was followed by those who moderately agreed and agreed with both showing the same percentages of 10.8% each. 7.2% disagreed and 9.6 strongly disagreed.

4.3.17 The need for auditing in an ECE program

Auditing was another assessment aspect looked into. Auditing is a systematic examination of books, accounts, documents, vouchers of an organization to ascertain the truthfulness of the financial and the non-financial disclosures. It is a procedure to make sure the books and accounts are properly maintained as required by law. Participants were asked if auditing needed to be included in the MAM. Options provided for this question were very useful, useful, rarely useful and not useful. The responses of this question are captured in Figure 25.

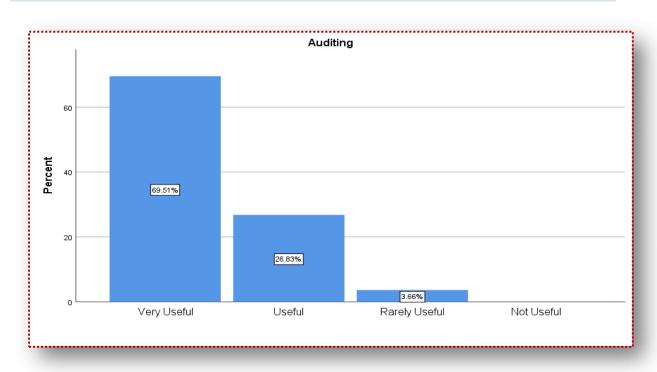


Figure 25: The need for auditing in an ECE program

Figure 25 shows that majority (69.51%) thought that auditing was very useful in keeping sound financial records in an ECE program. This was followed by 26.83% who thought that auditing is useful, and 3.66% who felt auditing was rarely useful. This information was also presented in tabular form on Table 21.

Table 21 : The need for auditing in an ECE program as per category of ECE as per category of ECE

CATEGORY OF ECE		AUDITING	
	Very Useful	Useful	Rarely Useful
Privately owned	41.5%	19.5%	3.7%
Government owned	12.2%	4.9 %	0.0 %
Church owned	9.8 %	1.2 %	0.0 %
Institution	6.1 %	1.2 %	0.0%
University/College-based			
owned			
Total	69.5%	26.8%	3.7 %

Table 21 shows that 41.5% of the participants in the privately owned programs regard it as a very useful component to have in ECE while 19.5% see it as a useful aspect. 3.7% of the participants regarded it as a rarely useful aspect to have. In the government owned programs

12.2% of participants regarded auditing as a very useful aspect to have while 4.9% saw it as useful. No participant from the government owned programs saw the issue of auditing as rarely useful. Within the church owned programs 9.8% of the participants who regarded the issue of auditing as very useful when 1.2% saw it as useful. There were no participants from the church owned programs who saw the issue as rarely useful. In the institution owned programs 6.1% of the participants who regarded the issue of auditing as very useful, while 1.2% found auditing to be useful. No participants from the institution owned programs regarded the aspect of auditing as rarely useful.

Table 21 shows that the majority of the participants (69. 5%) view auditing as a very useful process in an ECE program. This is followed by 26.8% who see auditing as useful in the running of an ECE program. Only 3.7% see auditing as a rarely useful aspect in the running of an ECE program. There are no participants who see this aspect as not useful.

4.4 Complementary findings from the qualitative data

In addition to quantitative findings presented above, qualitative findings were obtained as follows. These are presented as per the questions presented to participants in the interviews.

4.4.1 What is the importance of having accreditation standards in Botswana?

When the participants were asked what the importance of having accreditation standards in Botswana was, one participant said 'To find out what is actually happening. The schools are run by different people; as a result some may be interested in making money for their own good.' The other participant said 'It is important to have accreditation to prevent people from abusing policies and the rights of children.' A third participant said, 'Accreditation provides a guideline of how one can run things, if you do not have something to guide you, you can go out of bounds.' Another one added 'Accreditation is important because it impacts on the welfare of the children. It has to match standards with other departments. It is also to the benefit of the child not to be deprived of quality education.' Yet another participant added 'Accreditation is important because children will receive the best education.' Other responses from participants were 'Schools will have good performance, good quality of learning for children;' 'Programs will also benefit because as they increase quality they will also increase fees'.

These statements indicate that participants want ECE programs to follow accreditation standards for quality education. They see accreditation as a 'tool' that could guide their work

with young children. Participants are thus calling for quality education and learning, which, to a significant extent, can be achieved through accreditation.

4.4.2 What role should stakeholders play in supporting accreditation efforts?

When the participants about the role that stakeholders should play in supporting the accreditation of ECE, the responses were as follows. 'All stakeholders should pay attention to finding quality Teachers and quality Teacher Assistants, not all those involved are interested in the welfare of the child, but others have a passion for it'. 'Schools should start working on the maintenance of their premises to make sure they are in order, like windows and toilets for example'. 'A committee from different stakeholders could do research to find out the needs of children and then include them in the policy'.

It is evident from these responses that stakeholders are required to be participatory and make significant contributions in ensuring that quality Teachers and Teacher Assistants are recruited for the benefit of ECE clients, i.e. the children. Further that schools should be maintained and provide a safe and conducive learning environment for kids.. All these can be taken care of by accreditation.

4.4.3 Are there any perceived barriers that could stop the accreditation process advancing?

When responding to the above question, one of the participants said, 'Nothing can stop accreditation from advancing.' The other participant said, 'It could fail because of lack or resources from the Government'. The other said, 'There is a lack of training personnel who are going to be involved in the accreditation process. One participant said, 'I take it that if research is done properly nothing can stop it from happening'. Another said, 'Lack of funding, not being honest, especially the private sectors as they may think that they could be jeopardised and probably result in closing.' Another response stated that 'The way people handle things, most people care less about the welfare of a child, lack of resources, lack of support from the stakeholders and lack of proper training for teachers'.

These responses indicate a number of sample barriers that could hinder the accreditation process, including lack of funding, lack of resources, dishonesty on the part of some providers, lack of support from stakeholder, poor training of teachers and lack of genuine

interest in the welfare of children. However, some participants felt that no obstacle was huge enough to deter the accreditation process.

4.4.4 Should there be contextual differences in the accreditation model?

The responses to the above question were varied. These included a participant who said, 'it would be unfair for ECE programs in the rural area to be assessed the same way as those in the towns because in the rural area there is a shortage of everything; there are no materials let alone equipment for children to use.' The other said, 'If they are not the same then quality will be compromised and accreditation will be weakened.' While one said, 'All children deserve the best type of education, accreditation standards should not differ.' It has to be uniform because all children deserve a quality education. A child moving from an urban to a rural area should not be educated differently, because this may impact on their proper development'. Another participant said, 'There should not be differences in context, because all learners need the same quality education irrespective of where they come from, be it town or village.' One participant further added, 'There should not be any difference because some providers may be comfortable and not improve their services because policy allows them.'

It is clear from the above responses that majority of the people felt that there should not be contextual differences in the accreditation model depending on the area/region of the country.

4.4.5 What incentives for ECE providers come along with accreditation?

When the participants were asked about incentives for ECE that come along with accreditation, one participant said, 'Given the fact that the current policy document is outdated, accreditation can help with new ideas that could be incorporated into the existing document.' Another said, 'The accreditation will improve the results of our learners so that when they transit to Primary School, we could get positive feedback from the feeder school.' While another said, 'Since it will be inspection, it will benefit teachers and providers, and they will be prepared and ready for this assessment.'

The findings indicate that participants perceived aspects such as the improvement of the current ECE Policy Guideline, the improvement of the learners' results and keeping teachers and providers prepared and ready for assessment are some of the incentives that come along with accreditation.

4.4.6 What preparatory activities should the Government of Botswana (BQA) do to improve the successful implementation of accreditation standards?

In responding to this question one participant stated 'I take it that now that the research has been done with this study, the government can see what to do, getting ideas of what the participants of this study are saying and using that to start accreditation.' Another participant said, 'The government can have all people concerned together in one place and ask them for their views regarding accreditation, select the best views from all those involved, then implement them. In another response a participant said, 'The government should start by teaching all those involved in the teaching of young children; teachers, social workers; there should be workshops to empower them'

The findings reveal that research on accreditation, workshops and discussion as well as training are pivotal in improving successful implementation of accreditation standards.

4.4.7 What could be the unintended consequences of having accreditation standards?

When the participants were asked this question above they responded by saying 'Some providers could drop out due to accreditation, finding that it could be a difficult process; 'Schools could shut down because of accreditation'; 'Some of the people would not be able to follow accreditation standards, in Zambia, for instance, teachers are against just the accreditation of teachers. People have different opinions and some will like it and some will not'.

The above responses show that most of the participants anticipated unintended consequences such as closure of the programs due to the difficulty of the accreditation process.

4.4.8 Is there any other issue you would like to add in regards to accreditation in ECE?

In answering this question, one participant said, 'It is important to be accredited; when you are accredited you sell your product because it confirms your quality standards.' Another one said, 'The government of Botswana should comply with what the accreditation body comes up with.' The other participant said, 'Accreditation will help us, because it is like a guideline, if the government does not have accreditation standards, all people can do whatever they want to do'. Another said, 'I like it so much because it will ensure that providers make sure their services are of value, especially for the benefit of the young child'.

One participant said, 'It is something that has value, it will develop our youth to be leaders of tomorrow because of the strong foundation paved by the accredited schools'. Another one added, 'Accreditation can lead us somewhere as teachers because of the salary increase resulting from good accreditation assessment.'

These responses show that participants believe that accreditation can help to standardise ECE provision in Botswana, improve the quality of ECE programs, provide empowerment for the youth through a strong educational foundation as future leaders of the country, and also salary increment for ECE teachers.

4.5 Conclusion

In conclusion this chapter presented findings of the study. The findings included demographic factors and the accreditation aspects that participants prioritised for inclusion in MAM using the quantitative data. The factors ranged from need for infrastructural facilities, equipment and materials, issues of confidentially, safety/security issues, quality of teachers and training. The chapter also presented the findings of the qualitative data which showed that the majority of the participants are highly interested in the accreditation of ECE programs. They believe that it is through accreditation that ECE programs, teachers and children can reap benefits such as quality of ECE provision, better salaries for teachers, strong educational foundation for young children, etc. The next chapter will be focusing on the discussion of the findings.

Chapter 5: Discussion of the Results and Conclusions

5.1 Introduction

This chapter discusses the findings presented in Chapter 4 and makes conclusions about how lessons learnt respond to the main research questions. The study explored standards or factors that would contribute to the development of an accreditation model for ECE programs in Botswana. This chapter therefore summarizes the findings in terms of the key aspects suggested by the participants of the study. The chapter discusses the most preferred aspects, second most preferred aspects, aspects below cut off point and importance of an accreditation model. The chapter also explores the findings of the qualitative investigation with regards to the accreditation of ECE programs. Lastly, the chapter discusses the proposed model of accreditation recommended for Botswana.

5.2 The Most Preferred Aspects per Participants Views

The first question that the study sought to answer was 'Which aspects do you consider a high priority in formulating an ECE accreditation model.' As mentioned in Section 3.2.1.1, this was determined using Factor Analysis, which was conducted in this manner. First, the data, which was rather mixed up, was entered into the SPSS. And then FA was selected and commanded to prioritise the factors. FA then analysed and rank ordered the factors to see which ones were highly prioritised and which ones were not. The findings of the study show that the most preferred aspects with regards to participants' views were those in the .900 rankings and these were three in number. These were safety devices, mission and vision and establishing a strong PTA. Table 22 shows the rankings of these three.

Table 22: The most preferred aspects per participants' views .900+ - .931

Rankings
.932
.931
.909

These aspects were followed by those who fell between .908- .850. The last aspects were below the cut-off point of .850-824. These will be discussed in order of preference and their importance in the accreditation model starting with the highest to the lowest.

5.2.1 Safety devices .932

The issue of safety devices was rated high as an integral aspect of the accreditation model. Consequently it attracted a high value .932. Safety devices were valued as high priority because the lives of pupils and teachers depend on the safety of the environment. Safety devices incorporate gadgets that could be used during an emergency, such as in the case of a fire outbreak. These gadgets may include among others fire extinguishers, alarms and sand to be used for putting out fire. These gadgets are usually placed in strategic places where they could be retrieved easily and quickly when the need arises.

The participants' very high ranking of safety as an important aspect of the provision of ECE program is supported by literature. According to Hearron & Hildebrand (2014), safety is the primary concern for an ECD program. Gordon & Browne, (2017) recommend that ECE programs should among other things consider it their responsibility to provide safety by adequately supervising children at all times, organising safe procedures for parking and having records of names of people authorised to pick up children with complete photos for identification. Gordon & Browne (2016) add among other things secure carpeting, scald proof spouts, covered electrical outlets and gates on stairways, and argue that these should be made standard in all facilities of ECE.

5.2.2 Mission and Vision .931

The second factor that was highly prioritised was mission and vision at .931. The mission and vision of the program basically refers to the philosophy or the guiding principle. On the one hand, mission statements define the organization's purpose and primary objectives (Follari, 2015). Vision statements, on the other hand, define the purpose for the school, focusing on goals and aspirations. These statements are designed to be uplifting and inspiring (Henniger, 2017). Teachers and management should be attuned to the aspirations of the mission and vision of the school and what they intend to achieve for the learners at the end of the program (Gordon & Browne, 2016). Programs must have mission and vision to provide a sense of direction and purpose. This makes it inevitable that mission and vision to be included in the MAM (Jackman, 2016).

ECE in Botswana is not well coordinated at the moment; however there are efforts made by stakeholders such Ministry of Education, Ministry of Local Government, Ministry of Health and the Ministry of Labour and Home Affairs as discussed in Section 1.4.

5.2.3 Establishing a strong Parents Teachers Association .909

The third aspect that was highly recommended to be made a part of the Minimal Accreditation Model was the establishment of a very strong Parents Teachers Association (PTA) .909. The involvement and participation of parents in the education of their children is very crucial because it is through such links that educators can narrow the gap between the home and the school. Such a link is necessary because it creates a platform whereby pertinent issues such as curriculum, fund raising activities, building of strong relationships and partnerships with families and parental education can all be discussed (Follari, 2015). Parents could be urged to be of assistance with regards to issues such as home-work and personal hygiene of their children. Parents who are PTA committee members could also assist teachers in liaising with other parents who are not members of PTA on matters relating to their children's education, areas of interest and health issues (Henniger, 2017).

The proverb that says 'it takes a village to educate a child' is highly applicable in Botswana context, especially in Botswana ECE. That participants prioritized this aspect shows that they wish to establish the partnership and involvement of parents in the education of their children. There could be various reasons for this. Firstly, the involvement will assist not only the teachers but also the children as what they learnt in school will be enhanced at home in a contextual manner. Learning that is in a vacuum, that is, the acquisition of knowledge and skills without context is not effective for young children. The pupils need to learn in context, and the inclusion of the parents using PTA could help make this possible (Follari, 2015). Secondly, PTA can bring the home closer to the school and the school closer to the home. When such partnerships are created then children receive the best from these two setups, the school and the home. As stated by Urie Bronfenbrenner (1917-2005) the child's environment affects how a child grows and develops (Hearron & Hildebrand, 2014).

5.3 The second most preferred aspects

The findings of the study show that 8 factors were second most preferred and considered necessary to constitute part of an ECE accreditation mode in Botswana. These were ranked from .898-.850. These were listed in order of preference as shown in Table 23. These are discussed in regards to their importance in the accreditation model. They are quality of teacher training, evaluation and monitoring teachers' performance, trained teachers, admission policy, indicators of progress towards achieving the desired goals, pupils, preschool facility and trained leadership. Each of these factors is discussed below.

Table 23: Second most preferred aspects as per participants' views.930-.850

Aspect	Rankings
Quality of Teacher Training	.898
Evaluation and monitoring Teachers' Performance	.895
Trained Teachers	.891
Admission Policy	.881
Indicators of progress towards achieving the	.871
desired goals	
Pupils	.870
Pre-school Facility	.859
Trained Leadership	.850

5.3.1 Quality of teacher training .898

The quality of teacher training .898 was considered a very important aspect of the accreditation model. In an paper entitled *Encouraging Quality in Early Childhood Education and Care* by OECD, the authors point out that it is important for education systems to invest in rigorous teacher education and training if teachers are to deliver high quality outcomes. Despite this, there is often reluctance by governments to raise staff qualifications as this may impact on wage demands (OECD, 2015). This study suggest that not only should the Government of Botswana aim to hire quality teachers but private owners of ECE programs should also do the same. Hiring staff that do not have the right qualifications is costly in the long term in that it impacts negatively on the quality of education that young learners receive.

OECD (2015) further points out that although teachers are expected to have specific knowledge, skills and competencies, they are however not provided with sufficient education and training to acquire skills and competencies. The authors argue that well trained teachers are key in the provision of high quality ECE that can produce most favourable cognitive and social outcomes (OECD, 2015). Litjens & Taguma (2010) also state that enriched stimulating environments and high-quality pedagogy are fostered by better qualified staff; and better quality pedagogy leads to better learning outcomes. The point to buttress is that the qualifications, education and training of ECE staff is an important matter in the education of kids and should be made an integral part of an accreditation model. This is complemented by the qualitative findings which showed that participants agitated for the recruitment of quality Teachers and Teacher Aides.

5.3.2 Evaluation and monitoring teachers' performance .895

The evaluation and monitoring of teachers' performance .895 was also considered important. Monitoring is a type of evaluation that is performed while a project is being implemented. This is done with the aim of improving the project generally and improving its how it functions while in action as well. (Gordon & Browne, 2017, p 230) define evaluation as "as process that determines if the goals of a centre are being met." This allows programs to improve on what they think might have not met their standards. It is important to monitor ECE teachers to insure that they are on the right track in regards to the mission and vision and other crucial aspects of the school. If a particular teacher is not on track it is the responsibility of management to assist the particular teacher to align with the mission and vision and other crucial aspects of the school.

5.3.3 Trained teachers .891

The benefits of trained teachers have already been discussed under Section 5.5.1. The outcome of teacher training leads to efficiently equipped teachers who are able to produce desired outcomes with regards to the teaching of young children. It is important to have solid teacher training programs commonly referred to as pre-service for all teachers in ECE, and once teachers are employed, it should be necessary to update them regularly through further training, which is commonly known as in-service training. This will equip teachers with current trends, skills, and contemporary pedagogy and issues in the ECE which may not have been necessary or even available while they were on training (Hearron & Hildebrand, 2014). OECD (2015, p. 2) states that while it is important to have qualified teachers, it must be known that 'it is not the qualification of teachers *per se* that has an impact on child learning outcomes, but the ability of better qualified staff to create a high quality pedagogic environment that makes the difference'.

The same authors state that key elements of staff quality include the way the staff involves the children and makes stimulating interactions with and between children as well as using scaffolding strategies such as guiding, modelling and questioning (OECD, 2015). In short, well trained staff can foster healthy and educative interactions that can lead to better self-esteem and self-concept which can boost a child's ego and perseverance to reach higher levels of learning.

5.3.4 Admission policy .881

The third aspect that the participants felt strongly about was the issue of Admission Policy (.881). Admission Policy is a document that details exactly which child can be registered looking at the age requirements, fees requirements, academic readiness maturity, diversity or gender balance and code of conduct (Follari, 2015). Admission Policy is an important document because it allows the school to screen pupils who could be admitted into the program (Heckman, 2011). It is a tool that would determine the child's developmental level as well as the maturity, thus enabling the school to make proper/appropriate placement. The Admission Policy therefore is a crucial aspect on the MAM.

5.3.5 Indicators of progress towards achieving the desired goals .871

It is important for an ECE program to have stipulated guidelines to assist in the realization of the mission and vision. It is further important for a program to know the main areas that they want to focus on with regards to the progress of the centre. It would be difficult to find out if progress is made when there are no areas or aspects indicating progress that the ECE wants to work on. There should be clear guidelines or indicators that detail the program objectives as well as the roles and responsibilities of the members (Gordon & Browne, 2013). The program could also have aspects such as mission and vision. If, for example, the mission and vision of the program covers the five domains of development being the moral, intellectual, physical, social and aesthetic, then the school should be able to develop an approach that would be appropriate and effective in developing children holistically in all these domains (Henniger, 2017). For a program to realise that these aspects are fully covered they would need to come up with a checklist such as the one presented in Table 24.

Table 24: Indicators of progress towards achieving the desired goals

Aspect	What to look for	Evidence of performance	E	G	A	U
Mission & Vision	What are the aims of the ECE program Taking into account the mission and vision which states that children should be developed holistically	Does the school have the right equipment and materials to support this kind of learning?				
Safety measures	Are there any safety measures in the ECE program?	Are there clear guidelines as preventative measures in case of a crisis?				
Management of daily operations	Does the school have staff that understands legislation relating to education and ECE operation	Are daily matters properly attended to be various personnel assigned to each duty? Does the school handle daily matters with flexibility and systematically				

Key: E – Excellent G – Good A – Acceptable U- Unsatisfactory

Adapted from (Performance Indicators, Pre-Primary Institutions) Social Welfare Department (Hong Kong) (no author)

Table 24 shows the aspects/ evidence of performance as well as and four rankings being excellent, good, acceptable and unsatisfactory. This tool would be important as it would enable the school to improve on the aspect they feel they had not done well on.

5.3.6 Pre- School facility .859

Pre-school facility was also prioritised as important for incorporation in the accreditation model. It is one of the most important aspects of an ECE program because children spend most of the time there. The school facility consists not only the physical structure; there are a variety of building systems such as mechanical, plumbing, electrical and power, telecommunications, security and fire suppression systems as well. Facilities also include furnishings, materials and supplies, equipment and information technology and various aspects of building grounds namely: athletic fields, playgrounds, areas for outdoor learning,

and parking (Gordon & Browne, 2016).

The facility needs to be safe from danger as already discussed in Section 5.4.1. The facility or the environment should also be a developmentally appropriate environment (Hearron & Hildebrand, 2014). A Developmentally Appropriate Environment (DAE) is an environment that provides learning that is age appropriate, individually appropriate as well as culturally appropriate. Children need space in which they could interact with other children, listen to music, explore, role play, dramatize, sleep and have what is called *alone time* (Mc Geeney, 2014). It is, therefore, important for the facility to have indoor and outdoor play material. The indoor play material can be those that can develop learners in fine motor skills such as painting, drawing, sewing, threading and beading, while the gross motor skills could be activities like dancing, swimming, catching, kicking, sliding, climbing, jumping, pushing and pulling. All these can be done in the outdoor play area (Gordon & Browne, 2016).

The outdoor play area should also have different terrains or landscapes to allow for the different activities. Children should not get injured because they fell on a hard surface when they needed a soft terrain that is already cushioned. Children need a grassy area where they could play football or a soft landing zone placed under a slide to allow for a comfortable landing. Further, as already indicated that children need alone time there is need for the program to provide a quiet zone; this area is important as it permits children to have personal space, intimate interaction with an adult such as when the child is read to, or during solitary play, reading a book or just relaxing. There should be a cosy carpet, comfortable sofas, pillows, book shelves and stuffed toys in this area (Hearron & Hildebrand, 2014).

The facility should also have different zones such as dramatic zone, where they can engage in make-believe activities, that is where they pretend to be someone else e.g. nurse, wife, doctor, policeman and fire-fighter, etc. In this zone there could be home centre furnished with kitchen utensil, furniture and so on (Mc Geeney, 2014). The facility should also have the arts and craft zone; here the children can experiment with sand, paint, paste and other messy materials. In this zone there would be need to have a tap for warm running water for learners to wash their hands as they wish and as there is need.

The pre-school facility could also have a multi-purpose room. This room is for napping, eating or large group activities. This space can be used for various activities such as meetings, conferences, parental fund raising activities and any activity that involves a large number of people. In the pre-school facility there is need to have teachers work place. It is

here that the teachers could have tea, snack and telephone conversation or just to relax or prepare activities. (earron & Hildebrand (2014) recommend that this space should be furnished with appropriate outlets, computers, photo copying machines, file cabinets, professional library, refrigerator and a television. An ECE facility would not be complete without an administrative area.

(Mc Geeney, 2014) recommend that the admin should be directly facing the school entry for effective monitoring of all individuals entering or leaving the premises. This space should be able to accommodate the secretarial as well as the administrative personnel. The space should also have equipment such as computers, faxes, phones, copy machines and filling cabinets. In addition the space also needs to have toilets for parents and personnel working there. Findings of the qualitative data supplemented the issue of facilities in that participants thought providers needed to start making the learning environment worthy of accreditation.

5.3.7 Trained leadership .850

Trained leadership was prioritised as an important aspect of the MAM. Hearron & Hildebrand (2014, p. 347) define leadership as a "process of social influence in which one person can enlist the aid and support of others in the accomplishment of a common task." The authors argue that being a leader in an ECE program is challenging and needs someone who can plan, organize and also delegate. Among these the ECE leader must also be intelligent, have vision, be initiative, mature, be decisive and have self-assurance (Hearron & Hildebrand, 2014).

Leadership is an important aspect in an ECE program because it is through good leadership the spirit of teamwork, sharing of ideas as well as establishing warm cordial relationships with the parents, children, teachers and other stakeholders can be created in order to provide quality education. In most cases, in various organizations where a leader is not capable and does not possesses the skills outlined above there could be hostility, lack of cooperation, lack of consultation and lack of team sprit or togetherness. This can render the organization, in this case an ECE program, dysfunctional thus leading to poor quality of service. This is thus a very important aspect in an ECE program.

5.4 Factors below the cut-off point of .850

There were factors that fell below the .850 cut off point which will not be considered in the Minimal Accreditation Model and these will be listed according to their rankings starting with the highest. These are objectives of the program, meaningful job related activities, tight security, confidential pupils' records, parents' teachers association, curriculum and availability of equipment and materials. These will not be discussed as they were already discussed in Chapter 4.

5.5 Discussion on the interview/qualitative findings

The second research question of the study was 'What recommendations can be made to the authorities in Botswana regarding accreditation of ECE programs? The suggestions emanating from the qualitative findings are many and include among others, the prominence of accreditation in ECE provision. It thus is necessary to bring this point to the attention of relevant authorities. Participants further stressed the need to have preparatory measures put in place before the inception of the accreditation model. These include making facilities accreditation worth, prioritizing the training of ECE providers, and standardizing ECE provision across the country irrespective of region, among other things.

The third question that the study sought to answer was 'Do the participants attach any importance to having accreditation model to monitor the provision of ECE in Botswana?' Responses indicated that teachers regarded the accreditation as a necessary tool to standardize quality in ECE programs across the country. Factors that could be incorporated in the accreditation model were identified, ranked accordingly and prioritized as discussed above. It should be kept in mind that these participants are practitioners who are already in the field, which field as yet has no accreditation standards, and their responses are a reflection of what they see as needful on the ground. Other points raised by the qualitative findings were that through accreditation the youth could be empowered with a strong foundation as future leaders, further that it could bring with it salary increment for ECE practitioners.

Qualitative finding complement and augment quantitative findings presented in Chapter 4 and discussed in the current chapter. Evidently, recommendations of the findings of the current research undertaking to the Government of Botswana and the envisage responses by way of not only making of policies specific to the improvement of ECE provision in Botswana but also by way of introducing accreditation to monitor such provision can make a

significant difference in the life and learning of the kids cross the country. Standardization across the board for the different providers and regions of the country as suggested by the qualitative data, and the current strides in making ECE accessible to all could work towards bridging the achievement gap between children of the haves and have nots, and thus foster social cohesion and harmony, both among the kids and their parents as all participate in the education of their children through Parents Teachers Associations. At grassroots level, this could indeed work towards attaining one of the pillars of the long-term national vision of being an educated and an informed nation (Government of Botswana, Presidential Task Group, 1997).

This investigation, and indeed the relevant authorities in the country could treat factors discussed in both the quantitative and qualitative study as the base or preliminary since in that fulsome education of students, and more so of you children inescapably needs to be broader than just pedagogical, learning environment matters (European Union, 2014). Although differences in the socio-economic and cultural background of children (and their parents) cannot be completely eliminated, efforts on the part of the education system to provide equity (as suggested by participants who argued that quality should not be compromised because of context/region) can go to significant extent in eliminating bias and 'otherness' from young learners. The impact of these negative issues on the learning of the kids should not be underestimated. In Report of the Working Group on Early Childhood Education and Care, the European Union (2014, p. 63) states that if the provision of ECE is done for financial gains, several negative consequences result. The Report states that one of the consequences is that there "unequal access" and "social stratification" in attendance of school because of a number of reasons including:

private-for-profit provision tend to be more available in more affluent areas; publicly subsidised provision is rationed and bureaucratic procedures as well as unequal access to information about enrollment (including language barriers) are preventing marginalised groups from taking up ECEC places even though they might be entitled to provision; private-for-profit arrangements in poor neighborhoods tend to offer lower quality provision and consequently it might exacerbate inequalities among children from disadvantaged background and their more affluent peers; benefits and measures aimed at increasing ECEC attendance of children from low-income families might unintendedly have adverse effects on their participation. For these reasons, there is an increasing consensus among researchers and policymakers that developing and implementing public policies that progressively move towards universal provision of publicly subsidised

ECEC is both a priority and a necessity, if the goal of reducing the attainment gap is to be met.

Evidently there is need to find ways in which ECE management can be done more efficiently by management and all other stakeholders. One of the suggestions that this study posits is the development of an accreditation model; the belief is that accreditation would contribute significantly towards quality ECE in the country, make the efficient training of teaching staff mandatory, create other related benefits such as the increment of salaries and generally increase gains for the country in the long term. The description of the proposed accreditation model follows.

Figure 26: Proposed model of Accreditation recommended for Botswana

MSWELA'S MODEL OF ACCREDITATION FOR BOTSWANA ECE

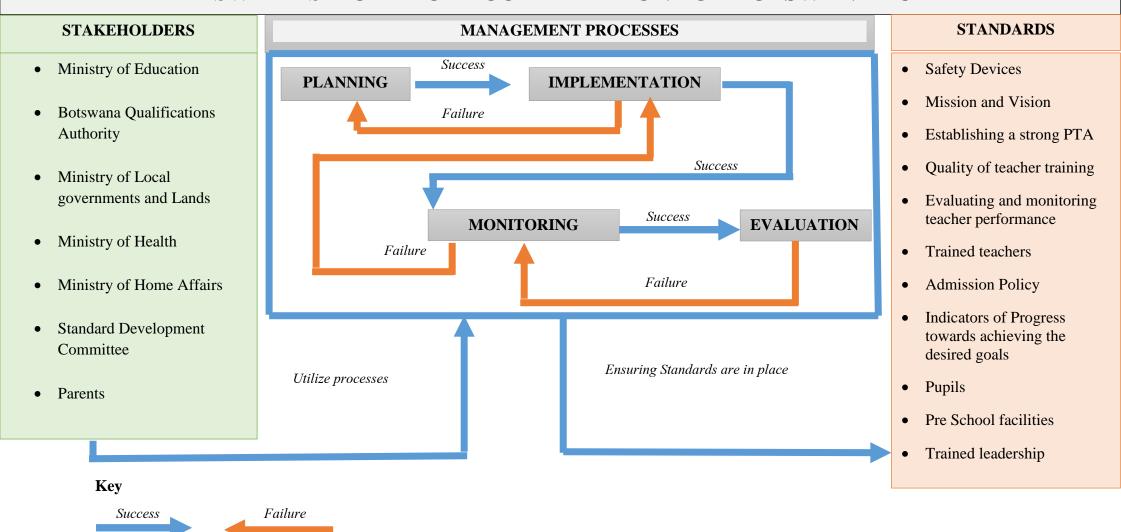


Figure 26 presents a model that the study is proposing to be used in the accreditation of ECE programs in Botswana.

5.6 Explanation of the Model

The accreditation model in Figure 26 is categorised into three areas of concentration, these areas are Standards, Management Processes and the Stakeholders. The major responsibility of the stakeholders is to utilise the management process in order for the standards to be achieved in ECE programs. The following is an explanation of what should happen at each stage.

5.6.1 Planning Stage

Planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals and establishes agreement around intended outcomes/results (Hearron & Hildebrand, 2015; Gordon & Browne, 2017). In this proposed accreditation model, it would be advisable to have an initial meeting where all the stakeholders select a Standard Development Committee (SDC). This committee will comprise of staff that is knowledgeable about ECE and related matters, policies and teaching techniques together with appropriate facilities for the development of standards. The Standards Development Committee (SDC).

According to Van Damme (2004) the SDC shall identify members to set the standards and the functions they will perform within the committee, provide a biography of senior members of staff involved in the preparation of standards and describe the physical resources needed for the development and maintenance of standards (Van Damme, 2004). This is the committee that would lead in discussions as experts assisting the rest of the stakeholders in issues of policy, facilities etc.

In the planning stage, resources have to be availed to hold workshops with the stakeholders and providers in order to align them with the requirements of the accreditation process, which is the need to have all the standards prescribed by the findings and allow them time to work on implementing them, which would be would be a period of approximately 2 years. Again, there might be need for more consultations to check on the progress of the providers, in order to give them time to 'polish' their programs e.g. employing qualified staff

and making sure their facilities, equipment and all the standards prescribed by the study are in order.

Figure 27 shows that all the stakeholders will be involved in the planning process; this is the time to distribute work among themselves and get funding from various Government departments and NGOs as well as the private sector. The blue arrow shows that once planning has been done, the next step will be implementation.

5.6.2 Implementation Stage

Implementation is a process of putting a decision or plan into effect (Hearron & Hildebrand, 2015; Gordon & Browne, 2017). This is the stage that calls for all the resources facilitated for the accreditation process to be available and in their respective positions to start the work assigned, which is the accreditation process (Hearron & Hildebrand, 2015; Gordon & Browne, 2017). In the implementation stage, all programs will be working hard to make sure they are following the standards set. At the same time the SDC with the help of BQA, the main accreditation authority in Botswana, will be regularly visiting programs to provide advice where necessary.

Figure 27 shows that all the stakeholders will be involved in the implementation stage. In this stage there would be two groups of programs; those that have succeeded are represented by the color blue and those who have failed are represented in color red. The successful programs (blue arrow) will proceed to the monitoring stage while the unsuccessful ones or failing ones represented by the (red arrow) will go back to the planning stage to replan. There is no time frame given to the programs going back to the planning stage as programs may require different time frames. If the re-plan has succeeded then the program can now move to the implementation stage, given the fact that SDC and BQA has seen that all the requirements in the planning stage are well met.

5.6.3 Monitoring Stage

Monitoring according to (Hearron & Hildebrand, 2015; Gordon & Browne, 2017) is the regular observation and recording of activities taking place in a project or program. It is a process of routinely 'monitoring to check how project activities are progressing' (Hearron & Hildebrand, 2015, p. 248). This is a stage that needs regular, effective and systematic checks.

It is in this stage that SDC and BQA will be taking regular checks in all the ECEs in Botswana to make sure that they are following the standards as stipulated by the accreditation model. This is a sensitive stage in that some programs will be meeting challenges here and there. It is at this stage that SDO and BQA should be able to advice providers, teachers and school administrators where necessary. This stage should be on the 3rd year.

Figure 27 also shows that at this stage, all the stakeholders will be involved in the monitoring led by the SDC and BQA. Again in monitoring stage there will be 2 groups of programs, those that have been successful (blue arrow) and those that have not been successful (red arrow). The other programs not having met the requirements set by SDC and BQA will go back to the implementation stage to re-strategize. Again, if they succeed in the implementation stage, they would now move to the monitoring stage. The success and failure of a program will be mandated by SDC and BQA.

5.6.4 Evaluation Stage

Evaluation is defined as a rigorous analysis of completed or ongoing activities that determine or support management accountability, effectiveness and efficiency (Hearron & Hildebrand, 2015; Gordon & Browne, 2017). In this proposed model, evaluation will take place after 4 years of implementation to allow providers to 'find their feet'. In the evaluation stage, programs will be assessed to see if they are effective in the implementation of the standards set.

Figure 27 shows that in the evaluation stage there will be 2 groups of programs, those that have succeeded (blue arrow) and those that have not succeeded (red arrow). Successful programs will be accredited according to the standards set by SDC and BQA. The programs that have failed to meet the requirements outlined by the SDC and BQA will go back to the monitoring stage until such a time that they are approved to move to the next stage which is the evaluation stage.

5.7 Implications of the findings to the MAM

The MAM defined standards of accreditation such as having an authorizing body that could review, assess, give permits or retain permits as being imperative factors in the model. In Botswana, it is the Botswana Qualifications Authority that is the authorizing body and has the power to review, assess, give or retain permits for an ECE program. Since BQA is thus

tasked by the Government to assess programs, teachers and institutions in the country, it would be incumbent upon ECE providers to ensure that that they meet the standards required to be accredited. This study has demonstrated factors (albeit preliminary) that are regarded as high priority, and those that are second best to be included in the accreditation model that BQA would need to consider when putting together an accreditation model that could be used as an assessment tool. The factors have also been ranked according to priority. SDC and BQA would also need to consider utilizing compliance checks that may be numeric as the Minimal Accreditation Model requires.

BQA would further need to determine the pass value for each factor. All the factors that are ranked highly and second most preferred would need to be incorporated in the assessment tool/accreditation model. Having these in place would go a long way towards regularizing and standardizing ECE in Botswana and ensuring that quality education/teaching and quality learning is taking place in all the programs that offer ECE across the country.

Figure 26 shows the proposed accreditation model for Botswana context. This model has been designed using the highly preferred factors as per participants view; and these include safety devices, mission and vision and establishing a strong PTA. The model also recognised the second best preferred aspects; these being the quality of teacher training, and evaluation and monitoring teachers' performance, trained teachers, admission policy, indicators of progress towards achieving the desired goals, pre-school facility and trained leadership.

Figure 26 further shows the stakeholders and their role in the accreditation model. Basically it is recommended that all the stakeholders, that is the government through BQA, Ministry of Education, Ministry of Local Government, Ministry of Labour and Home Affairs, Standard and Development Committee discuss issues related to the improvement and delivery of services of young children and also be available to assist the providers in the planning, implementation, monitoring and the evaluation stages.

In order to achieve quality ECE it is imperative that accreditation of ECE programs be established in Botswana. It must be remembered that the process of accreditation is not an easy process; it is challenging and time consuming. The 4 stages mentioned above require that each stage be done effectively. Each stage implicates another. If there has not been good

planning, then the implementation suffers as no one will know what to do and how to do it. The same can be said about monitoring and evaluation, if there is no monitoring then it would be difficult for stakeholders to know what is happening in the ECE programs. The evaluation stage also needs other stages before it can be addressed adequately. In the evaluation stage, SDC and BQA will assess ECE programs on what has been recommended to see its successes or failures. It is at this stage that programs may be awarded certificates by SDC and BQA for good performance, improvement or to close down.

5.8 Conclusion

This chapter has discussed the findings presented in Chapter 4 and made conclusions about how lessons learnt answer the research questions. The chapter explored standards or factors that would contribute to the development of an accreditation model for ECE programs in Botswana. It summarized the findings in terms of the key factors suggested by the participants of the study. The chapter also explored the findings of participants' narrative with regards to recommendations that can be made to the authorities in Botswana. Lastly, the chapter discussed the proposed model of accreditation recommended for the Botswana context.

Chapter 6: Conclusions and Recommendations

6.1 Introduction

This chapter presents the conclusions and makes recommendations based on the findings of the study. The chapter is divided into 2 parts being the conclusions and the recommendation. The recommendations are further divided into 2, those resulting from the study and others.

6.2 Conclusions

In Chapter 1, five (5) objectives of the study were presented as follows. The first objective was to find out the participants understanding of basic issues such as the importance of ECE, the meaning of accreditation and the importance of accreditation in ECE in Botswana. The second objective was to identify aspects which were considered a high priority in formulating an ECE model suitable for Botswana. The third objective to identify from the participants which model of accreditation would be most suitable in Botswana. While the fourth objective was to assess whether participants attach any importance to having an accreditation model for ECE in Botswana. The last objective was to identify recommendations that can be made to the authorities in Botswana about priority factors to be included in the accreditation model.

The first objective as to was to find out the participants understanding of basic issues such as the importance of ECE, the meaning of accreditation and the importance of accreditation in ECE in Botswana. This objective was answered by the qualitative data because participants new what ECE means and what accreditation means as well as the importance of accreditation. Participants regarded it as a assessment tool to ensure that quality is obtained and children get appropriate standards in ECE programs.

The second objective of the study was to identify aspects that should *be made high priority in formulating the accreditation model*. This objective was answered by the quantitative data through Factor Analysis. Participants identified safety devices, mission and vision as well as having a strong PTA as priority factors in formulating an accreditation model. They also identified second most preferred aspects such as quality of teacher training, evaluation and monitoring teacher's performance, trained teachers, admission policy, indicators of progress towards achieving the desired goal, pupils, pre-school facility and trained leadership.

The third objective to identify from the participants which model of accreditation would be most suitable in Botswana. The participants felt that the MAM model was a good model to be used in Botswana since it is less demanding and uses numerical assessment. In this case it will be easier to understand and to follow.

The fourth objective was to assess whether participants attach any importance to having an accreditation model for ECE in Botswana. The fourth objective of the study was 'Do the participants attach any importance to having accreditation model to monitor the provision of ECE in Botswana?' Responses indicated that teachers regarded the accreditation as a necessary tool both to guide as well as to standardize quality in ECE programs. Again some of the factors that BQA could consider incorporating in the accreditation model were identified, ranked and prioritized for relevant authorities and all who might be interested. It was further noted that accreditation could bring other advantages such as the empowerment of younger generation of learners who would be accorded a strong foundation in education as future leaders. Furthermore, resultant good performance could lead to salary increment for ECE practitioners as a performance bonus.

The last objective was to find out *recommendations that could be made to the authorities in Botswana to start the accreditation model for ECE programs*. This objective was answered through the qualitative data. Of note from qualitative data was the centrality of accreditation in ECE provision. This point takes center-stage, making it mandatory to be brought to the attention of authorities. Preparatory measures to be put in place before the inception of the accreditation model were also mentioned, which include making facilities accreditation worth, prioritizing efficient equipping of ECE providers, making relevant materials and other resources available and standardizing ECE provision across the country irrespective context, among other things. Quantitative data ranked and prioritized factors that were deemed essential for the accreditation model. These are the most and second most preferred aspects as discussed in the previous chapter.

6.3 Recommendations relating to ECE practitioners/ Government

It is necessary to upgrade the current ECE teacher entry level to degree level for people seeking for employment in the ECE field. They should also have studied Child Development as a course component because it would expose them to developmental issues of young learners such as developmental needs of children, any observed deficiencies and learning

goals and inform the parents and others how to work with the children to meet their individual needs. The Head of the program should be someone who has a Master's Degree in ECE or equivalent. This person would need to have extensive knowledge of ECE and be able to evaluate teachers and monitor their performance.

Materials and equipment are crucial in the education of young children. ECE programs that are short of equipment and materials hamper the development of young pupils. Mature teachers have vast experience in teaching, nurturing and caring and are therefore more equipped than the younger colleagues.

6.4 Other Recommendations

It is hoped that policy makers such as Botswana Government, through BQA would benefit from this investigation as they would already be aware of some of the factors that teachers in the ECE programs in Botswana consider as priority factors to be incorporated in the accreditation model. Top amongst these factors are issues of: a) safety standards b) Mission and Vision c) establishment of a strong PTA. It is thus hoped that this research would be of benefit to Botswana Qualifications Authority (BQA) and could provide a foundation to kick-start the formulation of the accreditation system. The benefits would thus extend to the whole educational system in the country as well as.

The study could also be a start or a base for further research. Potential areas for future research could include the *Effects of Accreditation in Botswana ECE programs*. For such a study one would be interested in finding out improvements in the quality of education for young children after the inception of the accreditation model. It would further note major developments and setbacks in order to improve the provision of ECE in Botswana.

It is hoped that learners will ultimately benefit from the findings of the current study as consumers of the service. When accreditation begins, service providers would inevitably be expected to align to approved standards, knowing that they otherwise would be shut down, hence losing their reputation, money and clients. Therefore schools will not be comfortably lax because of accreditation requirements.

Parents will benefit immensely. Currently parents are not sure of the quality of the services they are paying for. In some cases the fees are extremely high and it is not apparent why this is so; it could be quality or it be a financial gain scam. These are the questions parents are constantly asking themselves when they pay these huge amounts of school fees.

Once accreditation starts parents would, from an informed position, have the liberty to choose where to register their children, rather than what obtains now where it is unclear to them which schools offers the best quality and which ones do not.

Economically, Botswana will also benefit. Research has pointed out that children who received quality ECE are considered more likely to acquire steady jobs, own a home, a car or more and are unlikely to be jailed (Henniger, 2017). The economic and social benefits of ECE are many, hence the importance of establishing accreditation standards. The whole of Botswana can benefit long-term, both financially and economically if accreditation in ECE programs throughout the country were to be made available.

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Appendix 1: Information Sheet

To whom it may concern

Thank you very much for agreeing to participate in this study. This information sheet

explains what the study is about and how we would like you to take part in it.

Firstly, the purpose of the study is to find out if minimal accreditation standards are needed

to ensure quality provision of Early Childhood Education in Botswana. Secondly, the study

also aims to find out if there could be benefits associated with having minimal accreditation

standards for early childhood education in Botswana.

In order to elicit your views, we would like you to be interviewed by a researcher .If you

agree to this, the interview will be audio recorded and will last between approximately half an

hour to one hour.

The information provided by you in the interview will be used for research purposes. It will

not be used in a manner which would allow identification of your individual responses.

The study has been considered by an Office of Research Development (ORD) Ethics

Committee at the University of Botswana and has been given a favourable review.

Once again we would like to thank you for agreeing to take part in the study. If you have any

question about the research at any stage, please do not hesitate to contact us.

Naledi B. Mswela

University of Botswana

Department of Primary Education

Private Bag 00702

Gaborone

3552249 (work)

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Appendix 2: Interview Consent Form Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana

A PhD Proposal

By

Naledi Binnie Mswela

I, the undersigned, have read and understood the Information Sheet provided.

- I have been given the opportunity to ask questions about the study.
- I understand that taking part in the study will include answering the questions to the best of my knowledge.
- I have been given adequate time to consider my decision and I agree to take part in the study.
- I understand that my personal details, such as name of employer address will not be revealed to people outside the project.
- I understand that my words may be quoted in publications, reports, web pages and other research outputs but my name will not be used.
- I understand that I can withdraw from the study at any time and I will not be asked any questions about why I no longer want to take part.

Procedures Informing Participants about the nature of their participation

- The purpose of the interview
- Address terms of confidentiality
- Explanation of the format of the interview
- How to get in touch with you later if they want to
- Ask them if they have any questions before you both get started with the interview

Benefits of the study

- Helps build a stronger team of teachers, administrators and families working together to improve quality for children
- Motivates employees and promotes creativity
- Develops problem-solving skills and Breaks the barriers

Dissemination of Research Findings

Research findings will be disseminated to all participants of the study, as well as stakeholders.

Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana

Security of Data

Data will be kept in a locked cupboard in a tightly secure environment within the premises of the University of Botswana therefore ensuring confidentiality, credibility and safety.

Right to respond and/or withdraw from the study

The participants have the right not to respond to questions that make them feel uncomfortable or sensitive or even withdraw from the study.

Contact at Office of Research and Development (ORD)

In case the participant(s) feels violated or have any concerns about the study they can liaise with the following person(s)

ORD, IRB Administrative Assistant

Ms Basutli Ramontshonyana

Tel: 355 2900

Email: research@mopipi.ub.bw

Name of Participant	Date
Researcher Signature	Date

Appendix 3: Names of Pre- Schools in Botswana: The region, name of school, location as well as Sub – Region

		2014-16 SCH	IOOLS WITH RECEPTI	ON CLASSES AS AT 1ST	MARCH 2016
Natio	Regi	Region	School	Location	Sub Region
nal	onal				
1	1	Kweneng	Ramaphatle	Ramaphatle	Mogoditshane/Thamaga
2	2	Kweneng	Letlole	Mmankgodi	Mogoditshane/Thamaga
3	3	Kweneng	Mmokolodi	Mmokolodi	Mogoditshane/Thamaga
4	4	Kweneng	Leologane	Leologane	MAA/Lentsweletau
5	5	Kweneng	Boatlaname	Boatlaname	MAA/Lentsweletau
6	6	Kweneng	Gamodubu	Gamodubu	MAA/Lentsweletau
7	7	Kweneng	Mmonye	Mmankgodi	Mogoditshane/Thamaga
8	8	Kweneng	Sorilatholo	Sorilatholo	Letlhakeng
9	9	Kweneng	Diphuduhudu	Diphuduhudu	Letlhakeng
10	10	Kweneng	Serinane	Serinane	Letlhakeng
11	11	Kweneng	Tsetseng	Tsetseng	Letlhakeng
12	12	Kweneng	Motokwe	Motokwe	Letlhakeng
13	13	Kweneng	Kaudwane	Kaudwane	Letlhakeng
14	14	Kweneng	khekhenye	Khekhenye	Letlhakeng
15	15	Kweneng	Sesung	Sesung	Letlhakeng
16	16	Kweneng	Malwelwe	Malwelwe	Letlhakeng
17	17	Kweneng	Ngware	Ngware	Letlhakeng
18	18	Kweneng	Letlhakeng	Letlhakeng	Letlhakeng
19	19	Kweneng	Gothibamang	Letlhakeng	Letlhakeng
20	20	Kweneng	Kgope	Kgope	Maa/Lentsweletau
21	21	Kweneng	Dikgatlhong	Dikgatlhong	MAA/Lentsweletau
22	22	Kweneng	Mahetlwe	Mahetlwe	MAA/Lentsweletau
23	23	Kweneng	Vermulen	Vermulen	MAA/Lentsweletau
24	24	Kweneng	Lephepe	Lephepe	MAA/Lentsweletau
25	25	Kweneng	Makgasane	Lentsweletau	MAA/Lentsweletau
26	26	Kweneng	Sojwe	Sojwe	MAA/Lentsweletau
27	27	Kweneng	Louw	Molepolole	MAA/Lentsweletau
28	28	Kweneng	Bakwena National	Molepolole	MAA/Lentsweletau
29	29	Kweneng	Mmanoko	Molepolole	MAA/Lentsweletau
30	30	Kweneng	Bonewamang	Molepolole	MAA/Lentsweletau
31	31	Kweneng	Kotolaname	Molepolole	MAA/Lentsweletau
32	32	Kweneng	Monnathebe	Lesilakgokong	MAA/Lentsweletau
33	33	Kweneng	Mogonono	Mogonono	MAA/Lentsweletau
34	34	Kweneng	Gabane	Gabane	Mogoditshane/Thamaga
35	35	Kweneng	Tloaneng	Tloaneng	Mogoditshane/Thamaga
36	36	Kweneng	Thamaga Western	Thamaga	Mogoditshane/Thamaga
37	37	Kweneng	Gobuamang	Gobuamang	Mogoditshane/Thamaga
38	38	Kweneng	Kumakwane	Kumakwane	Mogoditshane/Thamaga

39	39	Kweneng	Pule	Gabane	Mogoditshane/Thamaga
40	40	Kweneng	Thebephatshwa	Mogoditshane	Letlhakeng
41	41	Kweneng	Gasiko	Gabane	Mogoditshane/Thamaga
42	42	Kweneng	Kubung	Kubung	Mogoditshane/Thamaga
43	43	Kweneng	Gakgatla	Gakgatla	Mogoditshane/Thamaga
44	44	Kweneng	Lesirane	Mogoditshane	Mogoditshane/Thamaga
45	45	Kweneng	Nkoane	Thamaga	Mogoditshane/Thamaga
46	46	Kweneng	Kontle	Thamaga	Mogoditshane/Thamaga
47	47	Kweneng	Khudumelapye	Khudumelapye	Letlhakeng
48	48	Kweneng	Ditshegwane	Ditshegwane	Letlhakeng
49	49	Kweneng	Botlhapatlou	Botlhapatlou	Letlhakeng
50	50	Kweneng	Takatokwane	Takatokwane	Letlhakeng
51	51	Kweneng	Monwane	Monwane	Letlhakeng
52	52	Kweneng	Salajwe	Salajwe	Letlhakeng
53	53	Kweneng	Dutlwe	Dutlwe	Letlhakeng
54	54	Kweneng	Hatsalatladi	Hatsalatladi	MAA/Lentsweletau
55	55	Kweneng	Ditshukudu	Ditshukudu	MAA/Lentsweletau
56	56	Kweneng	Mmatseta	Mmatseta	MAA/Lentsweletau
57	57	Kweneng	Gakutlo	Gakutlo	MAA/Lentsweletau
58	58	Kweneng	Medie	Medie	MAA/Lentsweletau
59	59	Kweneng	Molefe	Kopong	MAA/Lentsweletau
60	60	Kweneng	Lentsweletau	Lentsweletau	MAA/Lentsweletau
61	61	Kweneng	Lewis	Molepolole	MAA/Lentsweletau
62	62	Kweneng	Boribamo	Molepolole	MAA/Lentsweletau
63	63	Kweneng	Kealeboga	Molepolole	MAA/Lentsweletau
64	64	Kweneng	Canon	Molepolole	MAA/Lentsweletau
65	65	Kweneng	Neale Sechele	Molepolole	MAA/Lentsweletau
66	66	Kweneng	Kutlwano	Molepolole	MAA/Lentsweletau
67		Kweneng	Borakalalo	Molepolole	MAA/Lentsweletau
68	68	Kweneng	Lekgwapheng	Molepolole	MAA/Lentsweletau
69	69	Kweneng	Lephaleng	Molepolole	MAA/Lentsweletau
		69			
70		Ghanzi	Kalkfontein	Kalkfontein	Charles Hill
71	2	Ghanzi	Karakubis	Karakubis	Charles Hill
72		Ghanzi	New Kanagas	Kanagas	Charles Hill
73		Ghanzi	East Hanahai	Hanahai	Gantsi
74		Ganzhi	Kole	Kole	Charles Hill
75		Ganzhi	Ncojane	Ncojane	Charles Hill
76		Ganzhi	Kacgae	Kacgae	Gantsi
77		Ganzhi	Grootlaagte	Grootlaagte	Gantsi
78		Ganzhi	Metsimantsho	Metsimantsho	Charles Hill
79		Ganzhi	Makunda	Makunda	Charles Hill
80		Ganzhi	Kuke	Kuke	Gantsi
81		Ganzhi	West hanahai	West Hanahai	Gantsi
82	13	Ganzhi	Bere	Bere	Gantsi

		13			
83	1	Chobe	Mabele	Mabele	Chobe
84	2	Chobe	Kachikau	Kachikau	Chobe
85	3	Chobe	satau	satau	Chobe
86	4	Chobe	Parakarungu	Parakarungu	Chobe
87	5	Chobe	Pandamatenga	Pandamatenga	Chobe
88	6	Chobe	Lesoma	Lesoma	Chobe
89	7	Chobe	Kavimba	Kavimba	Chobe
		7			
90	1	North West	Chanoga	Chanoga	Shakawe
91	2	North West	Tsau	Matsaudi	Maun
92	3	North West	Habu	Habu	Gumare
93	4	North West	Nxamasere	Nxamasere	Shakawe
94	5	North West	Sekondomboro	Sekondomboro	Shakawe
95	6	North West	Gunotsoga	Gunotsoga	Shakawe
96	7	North West	Kgosietsile	Mababe	Shakawe
97		North West	Kareng	Kareng	Maun
98	9	North West	Botlhatlogo	Botlhatlogo	Maun
99	10	North West	Makakung	Makakung	Maun
100	11	North West	Qangwa	Qangwa	Gumare
101	12	North West	Xai xai	Xaixai	Gumare
102	13	North West	Chukumuchu	Chukumchu	Shakawe
103	14	North West	Xakao	Xakao	Shakawe
104	15	North West	Seronga	Seronga	Shakawe
105		North West	Ngarange	Ngarange	Shakawe
106	17	North West	Shaikarawe Satellite	Sheikarawe	Shakawe
107	18	North West	Mogolokwane	Phuduhudu	Maun
108	19	North West	Khweeosee	Somelo	Maun
109	20	North West	Thamalakane	Maun	Maun
110	21	North West	Legotlhwane	Legotlhwane	Maun
111	22	North West	Sehithwa	Sehithwa	Maun
112		North West	Bodibebg	Bodibeng	Maun
113		North West	Semboyo	Semboyo	Maun
114		North West	Nokaneng	Nokaneng	Gumare
115		North West	Gumare	Gumare	Gumare
116		North West	Kelekele	Gumare	Gumare
117		North West	Tubu	Tubu	Gumare
118	29	North West	Nxaunxau	Nxaunxau	Gumare
119		North West	Ikoga	Ikogga	Gumare
120		North West	Sepopa	Sepopa	Gumare
121		North West	Mohembo	Mohembo	Shakawe
122	33	North West	Kauxwi	Kauxwi	Shakawe
123		North West	Mogotho	Mogotho	Shakawe
124		North West	Beetsha	Beetsha	Shakawe
125	36	North West	Gudigwa	Gudigwa	Shakawe

		36			
126	1	Kgalagadi	Makopong	Makopong	Kgalagadi South
127	2	Kgalagadi	Khuis	Khuis	Kgalagadi South
128	3	Kgalagadi	Werda	Werda	Kgalagadi South
129	4	Kgalagadi	Hereford	Hereford	Kgalagadi South
130	5	Kgalagadi	Khawa	Khawa	Kgalagadi South
131	6	Kgalagadi	Kokotsha	Kokotsha	Kgalagadi South
132	7	Kgalagadi	Omaweneno	Omaweneno	Kgalagadi South
133	8	Kgalagadi	Tsabong	Tsabong	Kgalagadi South
134	9	Kgalagadi	Kang	Kang	Hukuntsi
135	10	Kgalagadi	Ledibela	Ledibela	Hukuntsi
136	11	Kgalagadi	Lokgwabe	Lokgwabe	Hukuntsi
137	12	Kgalagadi	Letswai	Zutshwa	Hukuntsi
138	13	Kgalagadi	Inalegolo	Inalegolo	Hukuntsi
139	14	Kgalagadi	Maitshoko	Maitshoko	Hukuntsi
140	15	Kgalagadi	Mosiiwa	Hukuntsi	Hukuntsi
141	16	Kgalagadi	Ngwatle	Ngwatle	Hukuntsi
142	17	Kgalagadi	Tshane	Tshane	Hukuntsi
143	18	Kgalagadi	Lehututu	Lehututu	Hukuntsi
144	19	Kgalagadi	Ncaang	Ncaang	Hukuntsi
145	20	Kgalagadi	Phuduhudu	Kang	Hukuntsi
146	21	Kgalagadi	Mahusane	Kang	Hukuntsi
147	22	Kgalagadi	Makgakgane	Hukuntsi	Kgalagadi South
148	23	Kgalagadi	Kisa	Kisa	Kgalagadi South
149	24	Kgalagadi	Kolongkwaneng	Kolongkwaneng	Kgalagadi South
150	25	Kgalagadi	Struizendam	Struizendam	Kgalagadi South
151	26	Kgalagadi	Bogogobo	Bogogobo	Kgalagadi South
152	27	Kgalagadi	Hunhukwe	Hunhunkwe	Kgalagadi South
153	28	Kgalagadi	Bokspits	Bokspits	Kgalagadi South
154	29	Kgalagadi	Maleshe	Maleshe	Kgalagadi South
155	30	Kgalagadi	Middlepits	Middlepits	Kgalagadi South
156		Kgalagadi	Vaalhoek	Vaalhoek	Kgalagadi South
157		Kgalagadi	Monong	Monong	Kgalagadi South
158	33	Kgalagadi	Ukhwi	Ukhwi	Kgalagadi South
		33			
159		South East	Therisanyo	Gaborone	Gaborone
160		South East	Otse	Otse	S/East
161		South East	Bontleng	Gaborone	Gaborone
162		South East	Tshwaragano	Gaborone	Gaborone
163		South East	Kgetheng	Ramotswa	S/East
164		South East	Mafitlhakgosi	Tlokweng	S/East
165		South East	St Condrads	Ramotswa	S/East
166		South East	Mojadife	Ramotswa	S/East
167		South East	Boitumelo	Gaborone	Gaborone
168	10	South East	Magopane	Ramotswa	S/East

169	11	South East	Lesetlhana	Mogobane	S/East
170		South East	Ketshwerebothata	Ramotswa	S/East
171	13	South East	Ithuteng	Gaborone	Gaborone
172	14	South East	Mokgosi	Ramotswa	S/East
173	15	South East	Baratani	Otse	S/East
174	16	South East	Thebe	Gaborone	Gaborone
175	17	South East	Notwane	Gaborone	Gaborone
176	18	South East	segoditshane	Gaborone	Gaborone
177	19	South East	Camp	Gaborone	Gaborone
178	20	South East	Ikageng	Gaborone	Gaborone
179	21	South East	Mogobane	Mogobane	S/East
180	22	South East	Siga	Ramotswa	S/East
181	23	South East	Taung	Gaborone	Gaborone
		23			
182	1	North East	Pelotelele	Pelotelele	North East
183	2	North East	Themashanga	Themashanga	North East
184	3	North East	Jackalas No. 1	Jackalas 1	North East
185	4	North East	Gulubane	Gulubane	North East
186	5	North East	Mbalambi	Mbalambi	North East
187	6	North East	Ditladi	Ditladi	North East
188	7	North East	Ntshe	Ntshe	Francistown
189	8	North East	Tatitown	Tatitown	Francistown
190	9	North East	Tagale	Tagala	Francistown
				3.6.1.1	г .
191	10	North East	Mahube	Mahube	Francistown
191	10	North East 10	Mahube	Manube	Francistown
191			Mahube Sikwane	Sikwane	Kgatleng
	1	10			
192	1 2	10 Kgatleng	Sikwane	Sikwane	Kgatleng
192 193	1 2 3	10 Kgatleng Kgatleng	Sikwane Linchwe	Sikwane Mochudi	Kgatleng Kgatleng
192 193 194 195 196	1 2 3 4 5	Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse	Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng
192 193 194 195	1 2 3 4 5	Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants	Kgatleng Kgatleng Kgatleng Kgatleng
192 193 194 195 196 197 198	1 2 3 4 5 6 7	Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi	Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng
192 193 194 195 196 197 198	1 2 3 4 5 6 7	Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa	Kgatleng
192 193 194 195 196 197 198 199 200	1 2 3 4 5 6 7 8	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka	Kgatleng
192 193 194 195 196 197 198 199 200 201	1 2 3 4 5 6 7 8 9	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane	Kgatleng
192 193 194 195 196 197 198 199 200 201 202	1 2 3 4 5 6 7 8 9	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane	Kgatleng
192 193 194 195 196 197 198 199 200 201 202 203	1 2 3 4 5 6 7 8 9 10 11	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe Mmadipamo	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane Mochudi	Kgatleng
192 193 194 195 196 197 198 199 200 201 202 203 204	1 2 3 4 5 6 7 8 9 10 11 12	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe Mmadipamo Seingwaeng	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane Mochudi Mochudi Mochudi	Kgatleng
192 193 194 195 196 197 198 199 200 201 202 203 204 205	1 2 3 4 5 6 7 8 9 10 11 12 13	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe Mmadipamo Seingwaeng Bogatsu	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane Mochudi Mochudi Mochudi Mochudi	Kgatleng
192 193 194 195 196 197 198 199 200 201 202 203 204 205 206	1 2 3 4 5 6 7 8 9 10 11 12 13 14	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe Mmadipamo Seingwaeng Bogatsu Boiteko	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane Mochudi Mochudi Mochudi Mochudi Mochudi Malotwana	Kgatleng
192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe Mmadipamo Seingwaeng Bogatsu Boiteko Our Lady of Carmel	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane Mochudi Mochudi Mochudi Mochudi Mochudi Molowane Malotwana Malotwana Morwa	Kgatleng
192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe Mmadipamo Seingwaeng Bogatsu Boiteko Our Lady of Carmel Dikgonnye	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane Mochudi Mochudi Mochudi Mochudi Mochudi Molowana Malotwana Morwa Dikgonnye	Kgatleng
192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe Mmadipamo Seingwaeng Bogatsu Boiteko Our Lady of Carmel Dikgonnye Dikwididi	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane Mochudi Mochudi Mochudi Mochudi Mochudi Molohudi Mochudi Mochudi Molohudi Molohudi	Kgatleng
192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Kgatleng	Sikwane Linchwe Tlhaakgame Kgomodiatsaba Leshibitse Olifants Matsieng Raditladi Ramonaka Rankoa Letsebe Mmadipamo Seingwaeng Bogatsu Boiteko Our Lady of Carmel Dikgonnye	Sikwane Mochudi Bokaa Kgomodiatshaba Leshibitse Olifants Mochudi Bokaa Ramonaka Malolwane Mmathubudukwane Mochudi Mochudi Mochudi Mochudi Mochudi Molowana Malotwana Morwa Dikgonnye	Kgatleng

214 23 Kg 215 24 Kg	gatleng F			Kgatleng
215 24 Kg	_	Kgafela		
	gatleng	-5	Mochudi	Kgatleng
216 25 Kg		Mmusi	Mochudi	Kgatleng
1 -10	gatleng F	Rasesa	Rasesa	Kgatleng
217 26 Kg	gatleng N	Matebele	Matebele	Kgatleng
218 27 Kg	gatleng N	Mabalane	Modipane	Kgatleng
219 28 Kg	gatleng I	Lady Mitchison	Mochudi	Kgatleng
	28			
220 1 Soi	outhern I	Ketlogetswe	Kanye	Kanye
221 2 Soi	outhern I	Lorolwane	Lorolwane	Kanye
222 3 Soi	outhern I	Lotlhakane	Lotlhakane	Kanye
223 4 Soi	outhern N	Mafhikana	Kanye	Kanye
224 5 Soi	outhern N	Maisantwa	Kanye	Kanye
225 6 Soi	outhern	Makaba	Kanye	Kanye
226 7 Soi	outhern	Matsaakgang	Kanye	Kanye
227 8 Soi	outhern N	Mokgadi	Kanye	Kanye
228 9 Soi	outhern N	Mosamowakwena	Mosamowakwena	Kanye
229 10 Soi	outhern F	Rachele	Kanye	Kanye
230 11 Soi	outhern	Sebako	Kanye	Kanye
231 12 Soi	outhern	Segwagwa	Segwagwa	Kanye
232 13 Soi	outhern	Peleng West	Lobatse	Kanye
233 14 Sou	outhern	peleng	Lobatse	Kanye
		Pitikwe New	Lobatse	Kanye
235 16 Sou	outhern	Hill	Lobatse	Kanye
236 17 Soi	outhern	Maokane	Maokane	Jwaneng/Mabutsane
237 18 Soi	outhern	Betesankwe	Betesankwe	Jwaneng/Mabutsane
238 19 Soi	outhern	Mokomma	Mokomma	Jwaneng/Mabutsane
239 20 Soi	outhern	Kgalagadi .	Jwaneng	Jwaneng/Mabutsane
240 21 Soi	outhern	Sekoma	Sekoma	Jwaneng/Mabutsane
241 22 Soi		•	Kokong	Jwaneng/Mabutsane
242 23 Soi	outhern	Mosielele	Moshupa	Moshupa
243 24 Soi	outhern	Pitseng	Pitseng	Moshupa
		Ranaka	Ranaka	Moshupa
245 26 Soi		·	Manyana	Moshupa
	outhern F	Kgabophuti	Moshupa	Moshupa
		•	•	Moshupa
	outhern I	Dinatshana	Dinatshana	Goodhope
			Gathwane	Goodhope
		-	Goodhope	Goodhope
			Magoriapitse	Goodhope
			Mogojogojo	Goodhope
			Mokatako	Goodhope
254 35 Soi	outhern F	Phitshane Molopo	Phitshane Molopo	Goodhope
255 36 Sou	outhern	Marojane	Hebron	Goodhope

257 1 Central Makolojwane Serowe Serowe 258 2 Central Mabuo Mabuo Serowe 259 3 Central Motshegaletau Motshegaletau Serowe 260 4 Central Thabala Thabala Serowe 261 5 Central Motalaote Serowe Serowe 262 6 Central Motetswhane Serowe Serowe 263 7 Central Paje Paje Serowe 264 8 Central Mabeleapodi Mabeleapodi Serowe 265 9 Central Dimajwe Dimajwe Serowe 266 10 Central Moiyabana Moiyabana Serowe 267 11 Central Mogorosi Mogorosi Serowe 268 12 Central Mmualefhe Serowe Serowe 269 13 Central Tshimoyapula Tshimoyapula Serowe 270 14 Central Majwanaadipitse Majwanaadipitse Serowe 271 15 Central Makolo Serowe Serowe 272 16 Central Makolo Serowe Serowe	
258 2 Central Mabuo Mabuo Serowe 259 3 Central Motshegaletau Motshegaletau Serowe 260 4 Central Thabala Thabala Serowe 261 5 Central Motalaote Serowe Serowe 262 6 Central Motetswhane Serowe Serowe 263 7 Central Paje Paje Serowe 264 8 Central Mabeleapodi Mabeleapodi Serowe 265 9 Central Dimajwe Dimajwe Serowe 266 10 Central Moiyabana Moiyabana Serowe 267 11 Central Mogorosi Mogorosi Serowe 268 12 Central Mmualefhe Serowe Serowe 269 13 Central Tshimoyapula Tshimoyapula Serowe 270 14 Central Majwanaadipitse Majwanaadipitse Serowe 271 15 Central Malatswae Malatswae Serowe	
259 3 Central Motshegaletau Motshegaletau Serowe 260 4 Central Thabala Thabala Serowe 261 5 Central Motalaote Serowe Serowe 262 6 Central Motetswhane Serowe Serowe 263 7 Central Paje Paje Serowe 264 8 Central Mabeleapodi Mabeleapodi Serowe 265 9 Central Dimajwe Dimajwe Serowe 266 10 Central Moiyabana Moiyabana Serowe 267 11 Central Mogorosi Mogorosi Serowe 268 12 Central Mmualefhe Serowe Serowe 269 13 Central Tshimoyapula Tshimoyapula Serowe 270 14 Central Majwanaadipitse Majwanaadipitse Serowe 271 15 Central Malatswae Malatswae	
260 4 Central Thabala Thabala Serowe 261 5 Central Motalaote Serowe Serowe 262 6 Central Motetswhane Serowe Serowe 263 7 Central Paje Paje Serowe 264 8 Central Mabeleapodi Mabeleapodi Serowe 265 9 Central Dimajwe Dimajwe Serowe 266 10 Central Moiyabana Moiyabana Serowe 267 11 Central Mogorosi Mogorosi Serowe 268 12 Central Mmualefhe Serowe Serowe 269 13 Central Tshimoyapula Tshimoyapula Serowe 270 14 Central Majwanaadipitse Majwanaadipitse Serowe 271 15 Central Malatswae Malatswae	
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264 8 Central Mabeleapodi Mabeleapodi Serowe 265 9 Central Dimajwe Dimajwe Serowe 266 10 Central Moiyabana Moiyabana Serowe 267 11 Central Mogorosi Mogorosi Serowe 268 12 Central Mmualefhe Serowe Serowe 269 13 Central Tshimoyapula Tshimoyapula Serowe 270 14 Central Majwanaadipitse Majwanaadipitse Serowe 271 15 Central Malatswae Malatswae Serowe	
265 9 Central Dimajwe Dimajwe Serowe 266 10 Central Moiyabana Moiyabana Serowe 267 11 Central Mogorosi Mogorosi Serowe 268 12 Central Mmualefhe Serowe Serowe 269 13 Central Tshimoyapula Tshimoyapula Serowe 270 14 Central Majwanaadipitse Majwanaadipitse Serowe 271 15 Central Malatswae Malatswae Serowe	
26610 CentralMoiyabanaMoiyabanaSerowe26711 CentralMogorosiMogorosiSerowe26812 CentralMmualefheSeroweSerowe26913 CentralTshimoyapulaTshimoyapulaSerowe27014 CentralMajwanaadipitseMajwanaadipitseSerowe27115 CentralMalatswaeMalatswaeSerowe	
26711 CentralMogorosiMogorosiSerowe26812 CentralMmualefheSeroweSerowe26913 CentralTshimoyapulaTshimoyapulaSerowe27014 CentralMajwanaadipitseMajwanaadipitseSerowe27115 CentralMalatswaeMalatswaeSerowe	
26812 CentralMmualefheSeroweSerowe26913 CentralTshimoyapulaTshimoyapulaSerowe27014 CentralMajwanaadipitseMajwanaadipitseSerowe27115 CentralMalatswaeMalatswaeSerowe	
26913 CentralTshimoyapulaTshimoyapulaSerowe27014 CentralMajwanaadipitseMajwanaadipitseSerowe27115 CentralMalatswaeMalatswaeSerowe	
270 14 Central Majwanaadipitse Majwanaadipitse Serowe 271 15 Central Malatswae Malatswae Serowe	
271 15 Central Malatswae Malatswae Serowe	
272 16 Central Makolo Sarowa Sarowa	
12/2 Topechian Maxolo Sciowe Sciowe	
273 17 Central Masokola Serowe Serowe	
274 18 Central Gobojango Gobojango Selebo	
275 19 Central Phethu Mphoeng Mmadinare Selebo	
276 20 Central Mabolwe Mabolwe Selebo	
277 21 Central Modisaotsile Bobonong Selebo	
278 22 Central Rasetimela Bobonong Selebo	
279 23 Central Boitshoko Selebi Phikwe Selebo	
280 24 Central Semolale Semolale Selebo	
281 25 Central Molalatau Molalatau Selebo	
282 26 Central Reuben Mpabanga Selibe Phikwe Selebo	
283 27 Central Joseph Anderson Selibe Phikwe Selebo	
284 28 Central Tebogo Selibe Phikwe Selebo	
285 29 Central St Peters Mmadinare Selebo	
286 30 Central Mmadinare Mmadinare Selebo	
287 31 Central Busang Memorial Tsetsebje Selebo	
288 32 Central Tsetsebje Tsetsebje Selebo	
289 33 Central Moletemane Moletemane Selebo	
290 34 Central Lepokole Lepokole Selebo	
291 35 Central Tlhobololo Selibe Phikwe Selebo	
292 36 Central Lapologang Selibe Phikwe Selebo	
293 37 Central Bobonong Bobonong Selebo	
294 38 Central Gasebalwe Gweta Tutume	
295 39 Central Gweta Gweta Tutume	
296 40 Central Sowa Sowa Tutume	
297 41 Central Tachibona Dukwi Tutume	
298 42 Central Jamataka Jamataka Tutume	
299 43 Central Nkange Nkange Tutume	

300	44	Central	Mabuwe	Nkange	Tutume
301	45	Central	Maitengwe	Maitengwe	Tutume
302	46	Central	Nshamba	Maitengwe	Tutume
303	47	Central	Mengwe	Maitengwe	Tutume
304	48	Central	Mosetse	Mosetse	Tutume
305	49	Central	Marapong	Marapong	Tutume
306	50	Central	Mathangwane	Mathangwane	Tutume
307	51	Central	Mampori	Marapong	Tutume
308	52	Central	Semitwe	Semitwe	Tutume
309	53	Central	Marobela	Marobela	Tutume
310	54	Central	Sebina	Sebina	Tutume
311	55	Central	Mpatane	Mathangwane	Tutume
312	56	Central	Maposa	Maposa	Tutume
313	57	Central	Kutamog0ree	Kutamogoree	Tutume
314	58	Central	Senete	Senete	Tutume
315	59	Central	Dagwi	Dagwi	Tutume
316	60	Central	Nswazwi	Nswazwi	Tutume
317	61	Central	Manxotae	Manxotae	Tutume
318	62	Central	Makuta	Makuta	Tutume
319	63	Central	Tutume Central	Tutume	Tutume
320	64	Central	Timbi	Tutume	Tutume
321	65	Central	Selolwane	Tutume	Tutume
322	66	Central	Thini	Tutume	Tutume
323	67	Central	Magapatona	Tutume	Tutume
324	68	Central	Changate	Changate	Tutume
325	69	Central	Lepashe	Lepashe	Tutume
326	70	Central	Mpiti	Tutume	Tutume
327	71	Central	Itereleng Foley	Foley	Tonota
328		Central	Madisakwana	Tonota	Tonota
329	73	Central	Rauwe	Tonota	Tonota
330	74	Central	Masedi	Tonota	Tonota
331	75	Central	Mmandunyane	Mmandunyane	Tonota
332		Central	Tholodi	Tonota	Tonota
333		Central	Tonota	Tonota	Tonota
334		Central	Chadibe North	Thalogang	Tonota
335		Central	Kwee	Khwee	Boteti
336		Central	Kedia	Kedia	Boteti
337		Central	Mosu	Mosu	Boteti
338		Central	Toromoja	Toromoja	Boteti
339		Central	Mmanthabakwe	Mopipi	Boteti
340		Central	Tsienyane	Rakops	Boteti
341		Central	Khumaga	Khumaga	Boteti
342		Central	Mmea	Mmea	Boteti
343		Central	Moreomaoto	Moreomaoto	Boteti
344	88	Central	Moreomabele	Moreomabele	Palapye

345	89 Central	Chakaloba	Topisi	Palapye
346	90 Central	Diloro	Diloro	Palapye
347	91 Central	Kgagodi	Kgagodi	Palapye
348	92 Central	Lesenepole	Lesenepole	Palapye
349	93 Central	Maunatlala	Maunatlala	Palapye
350	94 Central	Borakanelo	Mosweu-Mokokwana	Palapye
351	95 Central	Lerala	Lerala	Palapye
352	96 Central	Mogapi	Mogapi	Palapye
353	97 Central	Kukubjwe	Lerala	Palapye
354	98 Central	Ratholo	Ratholo	Palapye
355	99 Central	Mapulane	Moremi	Palapye
356	100 Central	Goo-Tau	Goo-Tau	Palapye
357	101 Central	Mogome	Mogome	Palapye
358	102 Central	Mokgware	Mokgware	Palapye
359	103 Central	Molebatsi	Majwaneng	Palapye
360	104 Central	Matlhakola	Matlhakola	Palapye
361	105 Central	Lecheng	Lecheng	Palapye
362	106 Central	Goo-Sekgweng	Goo-Sekgweng	Palapye
363	107 Central	Malaka	Malaka	Palapye
364	108 Central	Pilikwe	Pilikwe	Mahalapye
365	109 Central	Moshopha	Moshopha	Mahalapye
366	110 Central	Mhalapitsa	Mhalapitsa	Mahalapye
367	111 Central	Maape	Maape	Mahalapye
368	112 Central	Dovedale	Dovedale	Mahalapye
369	113 Central	Mokobeng	Mokobeng	Mahalapye
370	114 Central	Ikongwe	Ikongwe	Mahalapye
371	115 Central	Mathako	Mathako	Mahalapye
372	116 Central	Mmutlane	Mmutlane	Mahalapye
373	117 Central	St James	Mahalapye	Mahalapye
374	118 Central	Mookane	Mookane	Mahalapye
375	119 Central	Moineedi	Taupje	Mahalapye
376	120 Central	Sethomo	Otse	Mahalapye
377	121 Central	Seleka	Seleka	Mahalapye
378	122 Central	Mmuabui	Makwate	Mahalapye
379	123 Central	Mahalapye	Mahalapye	Mahalapye
380	124 Central	Bonwapitse	Bonwapitse	Mahalapye
381	125 Central	Kalamare	Kalamare	Mahalapye
382	126 Central	Sefhare	Sefhare	Mahalapye

Appendix 4: Questionnaire Standards of Accreditation DATE COMPLETED:

This questionnaire is addressed to providers/practitioners with relevant experience to inform the study. The study explores "Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana". The overall objective of the proposed study is to explore practices in the current provision of Early Childhood Education in Botswana that can be used as the basis for developing minimal accreditation standards. It is hoped that the findings of this study will make a significant contribution to the quality of provision of Early Childhood Education (ECE) in Botswana, with particular reference to the importance of minimal accreditation standards in ensuring quality provision of ECE.

You are therefore asked to complete this questionnaire because the researcher believes that the information you provide will help her to achieve the objective of the study.

Kindly answer all questions as directed. Please provide accurate answers.

Your cooperation in completing this questionnaire is greatly appreciated.

GENERAL DIRECTIONS:

Identify a place and a time when you will be able to complete this questionnaire without being interrupted.

There are no "right" or "wrong" answer to any of these items. The questionnaire is designed to provide information about teachers' professional experiences, opinions, and classroom activities relating to accreditation of ECE in Botswana.

More specific instructions to assist you in responding are found in italics for each item.

Again, thank you for your time, effort, and thought in completing this questionnaire!

SECTION A: DEMOGRAPHICS

1.	How old are you? Tick one box only.	
	Under 25	
	25-29	
	30-39	
	40-49	
	50-59	
	60 or more	
2.	Are you female or male?	
	Female	
	Male	
3.	Are you:	
	Full time employed	
	Part time employed	
	Self-employed	
	Teacher aide	
4.	Are you working in: Government School	
	Private	
	Institutional	
	Church Owned	

5.	How long has your school been operating?	months/years
6.	How long have you worked in an ECE program?	months/years
7.	What qualifications do you have to work as an ECE	provider?
	Certificate in Early Childhood Education Diploma in Early Childhood Education Advanced Diploma in Early Childhood Education Degree in Early Childhood Education Masters in Early Childhood Education PhD in Early Childhood Education Other (please specify)	
8.	What position do you hold in this ECE program?	
	Teacher Aide Teacher Senior Teacher Deputy School Head School Head Other (please specify	
9.	Name of Early Childhood Education Programme	
10.	Nationality of Participant	

SECTION B

1. These items should be important aspects of an ECE program.

Tick where applicable \checkmark

Aspects	Totally	Moderately	Agree	Disagree	Strongly
	Agree	Agree			Disagree
Programme					
Objectives					
Mission/					
Vision					
Admission					
Policy					
Learner centred					
approach					
Teacher centred					
approach					
Activities					

2. All ECE schools should have the following:

Tick where applicable \checkmark

	Totally	Moderately	Agree	Disagree	Strongly
	Agree	Agree			Disagree
Appropriate/Trained					
Leadership					
Administrative					
Staff					
Teaching					
Staff					
Proper Physical					
Resources					

3. Tick according to level of priority that should be considered necessary for the ECE programs to run.

Tick where applicable \checkmark

Factors	High Priority	Medium Priority	Low Priority
Pre School Facility			

				-
Trained Teachers				
Pupils				
Availability of eq	uipment &			
materials				
Curriculum				
Availability of co	omprehensive			
facilities	•			
Cofoty				
Safety				
Devices				
	_	facilities in the p	provision of ECE?	
Tick where ap				
	Very Useful	Useful	Rarely Useful	Not Useful
Computer				
Lab				
Science				
Lab				
Library				
Administration				
Block P.T.A				
Offices				
5. In your own v	iew how long do	you think an ECI	E programme should ru	ın?
Tick where ap			- -	
Six month	S			
One Year	II 10			
One and a	Half years			

Two Years				
☐ Two and a☐ Three Year				
I Tillee Teal	.5			
6. Rank the follow	wing in order of the	ir usefulness in th	ne assessment of an l	ECE Programme.
Tick where app	olicable 🗸			
	Very Useful	Useful	Rarely Useful	Not Useful
Goals of the				
programme				
Activities to				
enable ECE to				
reach the desired				
goals				
Indicators of				
progress towards				
achieving the				
desired outcomes				
7. Rank these fac	tors in order of imp	ortance in driving	g quality ECE progra	ammes.
Tick where app	olicable 🗸			
Factors		Low Priority	Medium Priority	High Priority
Quality of teacher	training			
	_			
Quality of in-servi	ce training			
D	£.1 : .11.4. 4			
e.g. Provides mear	C v			
training opportunit	iies			
Evaluation and mo	onitoring of			
teachers performan	nce.			
Strategies to retain	teachers			

Provides meaningful job related training opportunities		

8. Which of the following statements will you prioritise in regards to parental involvement? *Tick where applicable* ✓

	High Priority	Moderate	Low Priority	Not Applicable
C :1 :		Priority		
Considering				
parents as co-				
teachers in the				
education of				
young children				
Creating a				
conducive				
environment for				
parents to be				
involved in ECE				
activities within				
the school				
Allowing parents				
to actively				
participate in				
decision making				
affecting their				
children				
Establishing a				
very strong PTA				

9. These documents should be available for any type of inspection by a relevant authority. *Tick where applicable* ✓

	Totally Agree	Moderately Agree	Agree	Disagree	Strongly Disagree
Confidential pupils personal records					
Records of pupils work					

10. Rank the following in order	of their usefulness in	keeping up to date	financial records in
an ECE programme.			

Tick where applicable \checkmark

	Very Useful	Useful	Rarely Useful	Not Useful
Cash flow records				
School fees				
Auditing				

11. Pertaining to matters of Health, Food and Nutrition, which one of the following is deserving of the most attention.

Tick where applicable **✓**

	Very Deserving	Deserving	Somehow	Not Deserving
			Deserving	
Policy relating to				
food and				
nutrition				
Early Childhood				
Education health				
partnership				
Regular				
maintenance and				
Inspection of				
equipment and				
infrastructure				

Rank these in order of importance for ECE schools.

Tick where applicable \checkmark

	Very Useful	Useful	Rarely Useful	Not Useful
Tight Security				
Safety School				
Environment				
Children's safety				
during drop up				
and pick up				
times				

13. Compliance Check-up.

If there is need for inspection to ensure quality be done?	provision, how often do you think this should
(Please tick one √)	
After 6 months After 1 year After 2 years After 3 years After 4 years	
14. In order to provide child-centred learning teacher – pupil ratio you consider appropriate to the control of	ng to ECE children, what would be the ideal opriate.
(Teacher - Pupil) Ratio	Tick where applicable √
1:10	
1:15	
1:20	
1:25	
1:30	
1:35+	
15. When starting an ECE programme how admitted in a start-up programme? <i>Pleat</i>	many children do you recommend should be ase tick one ✓
1. 10 pupils	
All answers will be entirel	y confidential and anonymous.
	your name and contact details in a separate ontact Details Phone (+267) 355 2249

THANK YOU for the thought, time, and effort you have put into completing this questionnaire.

Appendix 5: Early Childhood Programs in Gaborone and Locations

Pre- School Name	Location						
Sun Educational Services	Phase 1						
Spice World	Phase 1						
Pidipidi	Phase 1						
Galaletsang	Phase 1						
Happy Kids Day Care	Phase 1						
Alpha	Phase 1						
Baby-love	Phase 1						
Little Friends	Phase 1						
Morula Zac Day Care Centre	Phase 1						
Baobab Pre- School	Phase 2						
Kids Corner	Phase 2						
Step by Step	Phase 2						
Jack & Jill	Phase 2						
Early Bird	Phase 2						
Pumpkin Patch	Phase 2						
Rose of Sharon	Phase 2						
Bamboo	Phase 2						
Little Learners Academy	Phase 2						
Little Miracles	Phase 4						
Eagle Star Private School	Phase 4						
Westwood International Pre- School	Phase 4						
Hibiscus Pre- School	Phase 4						
First Steps	Block 3						
First Steps 2	Block 3						
Hillcrest Pre-School	Block 3						
Gates of Grace	Block 3						

Foot Prints	Block 5				
The Learning Centre	Block 6				
Kinder World	Block 7				
Phillisa Day Care Centre	Block 7				
All Nur Pre- School	Block 8				
Sacred Heart	Block 8				
Gaborone International Pre- School	Block 8				
City Christian Academy	Block 8				
	·				
Kaleidoscope	Block 9				
Regent Hill	Block 9				
Wonder Kids	Block 9				
Bunnies Academy	Block 9				
Dutch Reformed Day Care Centre	Extension 2				
The ARK Day Care Centre	Extension 2				
Little Lulu Nursery	Extension 2				
Childnest Day Care Centre	Extension 2				
Bambino's Nursery	Extension 2				
Playmates	Extension 3				
Kindertime Day Care Centre	Extension 3				
BCW Main Mall	Extension 3				
Little Kingdom Day Care Centre	Extension 4				
Humming Birds Day Care Centre	Extension 5				
Hulala Day Care Centre	Extension 5				

Holy Cross Hospice Day Care Centre	Extension 5					
Di G. A. I	TD					
Big Star Academy	Extension 7					
Northside English Medium Primary School	Extension 9					
Buzy Beezy	Extension 9					
Tiny Bubbles	Extension 9					
Goosey Gander	Extension 9					
Motswedi Education Centre	Extension 10					
YWCA Day Care Centre	Extension 10					
As We Grow Nursery School	Extension 10					
Joyland Day Care Centre	Extension 12					
Humpty Dumpty Day Centre	Extension 12					
Apostolic Faith Mission Day	Extension 19					
Sunset Day Care Centre	Extension 25					
The Best Day Care Centre	Extension 25					
Totang Pre- Primary & Nursery School	Extension 25					
Union Nursery School	Extension 27					
Thornhill Primary School	The Mall					
White City Day Care Centre	White City					
Noddy Nursery School	Village					
Sunbeam Academy	Village					
Little Nursery & Pre- School	Village					
Tiny Tots	Village					

Village Garrison Day Care Centre	BDR Village Garrison					
Ace Eagles Acadamy's Pre- Primary Unit	Gaborone North					
Happyland Day Care Centre	Gaborone North					
Lolly's Day Care	Gaborone North					
Broadhurst Primary School's Pre- Primary	Broadhurst					
Cinderella Pre- school	Broadhurst					
Sebotho Modisi Day care Centre	Broadhurst					
Rose of Sharon Pre- School and Day Care	Broadhurst					
Broadhurst						
Secret Garden Nursery School	Broadhurst					
Gabaresepe Day Care Centre	Old Naledi					
Old Naledi Day Care Centre	Old Naledi					
Academy of Toddlers	Phakalane					
Peo Mela Nursery School	Phakalane					
Phakalane Primary School Pre- Primary Unit	Phakalane					
Broadhurst Day Care Centre	Partial					
Cinderella Art Day Care Centre	Partial					
Charming Day Care Centre	Maruapula					
Dipeo Nursery School	Maruapula					
BCW Ginger	Ginger					
Botlhale Cambridge International School	Ledumang					
Divine Nursery School	Ledumang					
Itumeleng Lutheran Day Care Centre	Ledumang					
Phillipi Day Care and Pre- School	Ledumang					

Thuto Thebe Pre – Primary & Day Care Centre	Ledumang
Good Traits Nursery School	Tawana
Dimpho Day Care Centre	Tawana
Joyland Academy	Ginger
Junior Shephered Day Care Centre	Maruapula
Sebele Day Care & Pre- School	Sebele
Villa Bella Pre- School	Gaborone North
Child Development Lab	University of Botswana
Bontleng Day Care Centre	Bontleng

Appendix 6: Case Processing Summary

	Cases							
	Va	lid	M	issing		Total		
	N	Percent	N	Percent	N	Percent		
1. How old are you?	88	98.9%	1	1.1%	89	100.0%		
2. Are you female or male?	88	98.9%	1	1.1%	89	100.0%		
3. Employment status	87	97.8%	2	2.2%	89	100.0%		
4. How long has your school been operating? months/years	71	79.8%	18	20.2%	89	100.0%		
5. How long have you worked in an ECE program?months/years	77	86.5%	12	13.5%	89	100.0%		
6.What type of program *are you working at	54	60.7%	35	39.3%	89	100.0%		
7. What qualifications do you have to work as an ECE provider? (OTHER)	88	98.9%	1	1.1%	89	100.0%		
8. What position do you hold in this ECE program?	75	84.3%	14	15.7%	89	100.0%		
9. What position do you hold in this ECE program? (OTHER)	88	98.9%	1	1.1%	89	100.0%		
.10. Nationality of Participant	88	98.9%	1	1.1%	89	100.0%		
11. Pre School Facility	86	96.6%	3	3.4%	89	100.0%		
12. Trained Teachers	86	96.6%	3	3.4%	89	100.0%		
13. Pupils	84	94.4%	5	5.6%	89	100.0%		
14. Availability of equipment & materials	85	95.5%	4	4.5%	89	100.0%		
15 Curriculum	79	88.8%	10	11.2%	89	100.0%		
16. Availability of comprehensive facilities	81	91.0%	8	9.0%	89	100.0%		
17. Safety Devices	81	91.0%	8	9.0%	89	100.0%		
18. Computer Lab	85	95.5%	4	4.5%	89	100.0%		
19. Science Lab	82	92.1%	7	7.9%	89	100.0%		
20.Library	80	89.9%	9	10.1%	89	100.0%		
21 Administration Block	82	92.1%	7	7.9%	89	100.0%		
22. P.T.A Offices	83	93.3%	6	6.7%	89	100.0%		
23. In your own view how long do you think an ECE	79	88.8%	10	11.2%	89	100.0%		
program should run?								
24. Goals of the program	79	88.8%	10	11.2%	89	100.0%		
25. Activities to enable ECE to reach the desired goals	82	92.1%	7	7.9%	89	100.0%		
26. Indicators of progress towards achieving the desired	81	91.0%	8	9.0%	89	100.0%		
outcomes								
27. Quality of teacher training	83	93.3%	6	6.7%	89	100.0%		
28. Quality of in-service training	80	89.9%	9	10.1%	89	100.0%		
29. Evaluation and monitoring of teachers performance.	83	93.3%	6	6.7%	89	100.0%		

30. Strategies to retain teachers	78	87.6%	11	12.4%	89	100.0%
31. Provides meaningful job related training opportunities	81	91.0%	8	9.0%	89	100.0%
32. Considering parents as co-teachers in the education of	83	93.3%	6	6.7%	89	100.0%
young children						
33. Creating a conducive environment for parents to be	84	94.4%	5	5.6%	89	100.0%
involved in ECE activities within the school						
34. Allowing parents to actively participate in decision	82	92.1%	7	7.9%	89	100.0%
making affecting their children						
35. Establishing a very strong PTA	84	94.4%	5	5.6%	89	100.0%
36. Confidential pupils personal records	83	93.3%	6	6.7%	89	100.0%
37. Records of pupils work	84	94.4%	5	5.6%	89	100.0%
38. Cash flow records	84	94.4%	5	5.6%	89	100.0%
39. School fees	84	94.4%	5	5.6%	89	100.0%
40. Auditing	82	92.1%	7	7.9%	89	100.0%
41. Policy relating to food and nutrition	84	94.4%	5	5.6%	89	100.0%
42. Early Childhood Education health partnership	82	92.1%	7	7.9%	89	100.0%
43. Regular maintenance and Inspection of equipment and	84	94.4%	5	5.6%	89	100.0%
infrastructure						
44. Tight Security	85	95.5%	4	4.5%	89	100.0%
45. Safety School Environment	85	95.5%	4	4.5%	89	100.0%
46. Children's safety during drop up and pick up times	85	95.5%	4	4.5%	89	100.0%
47. Compliance Check-up. If there is need for inspection to	87	97.8%	2	2.2%	89	100.0%
ensure quality provision, how often do you think this						
should be done?						
48. In order to provide child-centred learning to ECE	82	92.1%	7	7.9%	89	100.0%
children, what would be the ideal teacher – pupil ratio you						
consider appropriate.						
49. When starting an ECE program how many children do	84	94.4%	5	5.6%	89	100.0%
you recommend should be admitted in a start-up program?						
50. Program Objectives	78	87.6%	11	12.4%	89	100.0%
51. Mission/ Vision	78	87.6%	11	12.4%	89	100.0%
52. Admission Policy	74	83.1%	15	16.9%	89	100.0%
53. Learner centred approach	81	91.0%	8	9.0%	89	100.0%
54. Teacher centred approach	80	89.9%	9	10.1%	89	100.0%
55. Activities	78	87.6%	11	12.4%	89	100.0%
56. Appropriate/Trained Leadership	87	97.8%	2	2.2%	89	100.0%
57. Administrative Staff	84	94.4%	5	5.6%	89	100.0%
58. Teaching Staff	86	96.6%	3	3.4%	89	100.0%
59. Proper Physical Resources	83	93.3%	6	6.7%	89	100.0%
60. Confidential pupils personal records	83	93.3%	6	6.7%	89	100.0%
61. Records of pupils work	84	94.4%	5	5.6%	89	100.0%

1. How old are you?

Crosstab

				Cros	stab					
					1.	How o	old are you	1?		
			Under 25	25-29	30-39	40-49	50-59	60 or more	21	Total
4. Are	Governme	Count	2 _a	3 _a	4 _a	7 _a	0_a	0_a	1 _a	17
you	nt school	Expected	2.5	2.3	5.0	4.6	1.5	.8	.2	17.0
worki		Count								
ng in		% of Total	2.3%	3.4%	4.5%	8.0%	0.0%	0.0%	1.1%	19.3%
		Standardized	3	.4	5	1.1	-1.2	9	1.8	
		Residual								
	Private	Count	9 _a	6 _a	16 _a	15 _a	6 _a	4 _a	0_a	56
		Expected	8.3	7.6	16.5	15.3	5.1	2.5	.6	56.0
		Count								
		% of Total	10.2%	6.8%	18.2%	17.0%	6.8%	4.5%	0.0%	63.6%
		Standardized	.3	6	1	1	.4	.9	8	
		Residual								
	Institution	Count	1 _a	2 _a	2 _a	1 _a	0_a	0_a	0_a	6
		Expected	.9	.8	1.8	1.6	.5	.3	.1	6.0
		Count								
		% of Total	1.1%	2.3%	2.3%	1.1%	0.0%	0.0%	0.0%	6.8%
		Standardized	.1	1.3	.2	5	7	5	3	
		Residual								
	Church	Count	1 _a	1 _a	4 _a	1 _a	2 _a	0_a	0_a	9
	owned	Expected	1.3	1.2	2.7	2.5	.8	.4	.1	9.0
		Count								
		% of Total	1.1%	1.1%	4.5%	1.1%	2.3%	0.0%	0.0%	10.2%
		Standardized	3	2	.8	9	1.3	6	3	
		Residual								
Total		Count	13	12	26	24	8	4	1	88
		Expected	13.0	12.0	26.0	24.0	8.0	4.0	1.0	88.0
		Count								
		% of Total	14.8%	13.6%	29.5%	27.3%	9.1%	4.5%	1.1%	100.0
		er denotes a sub			old are					%

Each subscript letter denotes a subset of 1.

How old are you?

categories whose column proportions do not differ significantly from each other at the .05 level.

Chi-Square Tests

		Asymptotic	Monte Ca	arlo Sig. (2-sided)	Monte Car	lo Sig. (1-sided)
		Significance		95% Confidence	Significanc	95% Confidence
Value	df	(2-sided)	Significance	Interval	e	Interval

Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana

					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	16.238 ^a	18	.576	.561 ^b	.552	.571			
Likelihood Ratio	17.848	18	.466	.567 ^b	.557	.577			
Fisher's Exact Test	15.290			.645 ^b	.635	.654			
Linear-by-Linear Association	1.214 ^c	1	.270	.248 ^b	.240	.257	.123 ^b	.116	.129
N of Valid Cases	88								

a. 22 cells (78.6%) have expected count less than 5. The minimum expected count is .07.

c. The standardized statistic is -1.102.

Symmetric Measures											
						Monte Carlo Significance					
						95% Confidence					
			Asymptotic				Inter	val			
			Standard	Approximate	Approximate		Lower	Upper			
		Value	Error ^a	T ^b	Significance	Significance	Bound	Bound			
Nominal by	Phi	.430			.576	.561°	.552	.571			
Nominal	Cramer's V	.248			.576	.561°	.552	.571			
	Contingency Coefficient	.395			.576	.561°	.552	.571			
Interval by	Pearson's R	118	.094	-1.103	.273 ^d	.248 ^c	.240	.257			
Interval											
Ordinal by	Spearman Correlation	053	.101	488	.626 ^d	.623 ^c	.613	.632			
Ordinal											
N of Valid Ca	ases	88									

a. Not assuming the null hypothesis.

b. Based on 10000 sampled tables with starting seed 826213948.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 826213948.

d. Based on normal approximation.

2. Are you female or male?

Crosstab

		Crossu	เม		
			2. Are you fem	ale or male?	
			Female	Male	Total
4. Are you	Government school	Count	17 _a	$0_{\rm a}$	17
working in		Expected Count	16.4	.6	17.0
		% of Total	19.3%	0.0%	19.3%
		Standardized Residual	.1	8	
	Private	Count	55 _a	1 _a	56
		Expected Count	54.1	1.9	56.0
		% of Total	62.5%	1.1%	63.6%
		Standardized Residual	.1	7	
	Institution	Count	5 _a	1 _a	6
		Expected Count	5.8	.2	6.0
		% of Total	5.7%	1.1%	6.8%
		Standardized Residual	3	1.8	
	Church owned	Count	8 _a	1 _a	9
		Expected Count	8.7	.3	9.0
		% of Total	9.1%	1.1%	10.2%
		Standardized Residual	2	1.3	
Total		Count	85	3	88
		Expected Count	85.0	3.0	88.0
		% of Total	96.6%	3.4%	100.0%

Each subscript letter denotes a subset of 2. Are you female or male? categories whose column proportions do not differ significantly from each other at the .05 level.

Chi-Square Tests

				1						
				Monte	e Carlo Si	g. (2-sided)	Monte Carlo Sig. (1-sided)			
					95%	Confidence		Confidence		
			Asymptotic		I	nterval		I	nterval	
			Significance	Signific	Lower		Signific	Lower		
	Value	df	(2-sided)	ance	Bound	Upper Bound	ance	Bound	Upper Bound	
Pearson Chi-Square	5.872 ^a	3	.118	.103 ^b	.097	.109				
Likelihood Ratio	4.450	3	.217	.103 ^b	.097	.109				
Fisher's Exact Test	5.539			.103 ^b	.097	.109				
Linear-by-Linear	3.917 ^c	1	.048	.064 ^b	.059	.069	.057 ^b	.052	.061	
Association										
N of Valid Cases	88									

- a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .20.
- b. Based on 10000 sampled tables with starting seed 826213948.
- c. The standardized statistic is 1.979.

Symmetric Measures

		Syl	nmetric Meas	ures				
						Monte C	Carlo Signifi	cance
							95% Con	fidence
					Approximat		Inter	val
			Asymptotic	Approxim	e	Significan	Lower	Upper
		Value	Standard Error ^a	ate T ^b	Significance	ce	Bound	Bound
Nominal by Nominal	Phi	.258			.118	.103 ^c	.097	.109
	Cramer's V	.258			.118	.103 ^c	.097	.109
	Contingency	.250			.118	.103 ^c	.097	.109
	Coefficient							
Interval by Interval	Pearson's R	.212	.119	2.014	.047 ^d	.064 ^c	.059	.069
Ordinal by Ordinal	Spearman	.209	.098	1.978	.051 ^d	.059 ^c	.055	.064
	Correlation							
N of Valid Cases		88						

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on 10000 sampled tables with starting seed 826213948.
- d. Based on normal approximation.

3. Employment Status

Crosstab

			Cross	tab		
				3. Are you		
			Full time employed	Part time employed	Teacher aide	Total
4. Are	Government	Count	16 _a	1 _a	O_a	17
you working	school	Expected Count	14.7	.6	1.8	17.0
in		% of Total	18.4%	1.1%	0.0%	19.5%
		Standardize d Residual	.4	.5	-1.3	
	Private	Count	47 _a	2 _a	6_a	55
		Expected Count	47.4	1.9	5.7	55.0
		% of Total	54.0%	2.3%	6.9%	63.2%
		Standardize d Residual	1	.1	.1	
	Institution	Count	$4_{\rm a}$	0_a	$2_{\rm a}$	6
		Expected Count	5.2	.2	.6	6.0
		% of Total	4.6%	0.0%	2.3%	6.9%
		Standardize d Residual	5	5	1.8	
	Church	Count	8 _a	0_a	$1_{\rm a}$	9
	owned	Expected Count	7.8	.3	.9	9.0
		% of Total	9.2%	0.0%	1.1%	10.3%
		Standardize d Residual	.1	6	.1	
Total		Count	75	3	9	87
		Expected Count	75.0	3.0	9.0	87.0
		% of Total	86.2%	3.4%	10.3%	100.0%

Each subscript letter denotes a subset of 3. Are you categories whose column proportions do not differ significantly from each other at the .05 level.

				4						
				Mon	te Carlo Sig	. (2-sided)	Monte Carlo Sig. (1-sided)			
					95% Co	onfidence		95%	Confidence	
			Asymptotic		Inte	erval		I	nterval	
			Significance	Signif	Lower	Upper	Significan	Lower		
	Value	df	(2-sided)	icance	Bound	Bound	ce	Bound	Upper Bound	
Pearson Chi-Square	6.061 ^a	6	.416	.407 ^b	.397	.416				
Likelihood Ratio	7.160	6	.306	.337 ^b	.327	.346				
Fisher's Exact Test	6.023			.321 ^b	.312	.330				
Linear-by-Linear	1.473 ^c	1	.225	.233 ^b	.225	.241	.133 ^b	.126	.139	
Association										
N of Valid Cases	87									

- a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .21.
- b. Based on 10000 sampled tables with starting seed 826213948.
- c. The standardized statistic is 1.214.

Symmetric Measures

		Syl	inneuric i	vieasures								
						Monte	Monte Carlo Significance					
							95% Co	nfidence				
			Asymptoti		Approximat		Inte	erval				
			c Standard	Approxim	e		Lower	Upper				
		Value	Error ^a	ate T ^b	Significance	Significance	Bound	Bound				
Nominal by	Phi	.264			.416	.407 ^c	.397	.416				
Nominal	Cramer's V	.187			.416	.407 ^c	.397	.416				
	Contingency	.255			.416	.407°	.397	.416				
	Coefficient											
Interval by Interval	Pearson's R	.131	.095	1.217	.227 ^d	.233°	.225	.241				
Ordinal by Ordinal	Spearman Correlation	.127	.095	1.177	.243 ^d	.252°	.243	.260				
N of Valid Cases		87										

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on 10000 sampled tables with starting seed 826213948.
- d. Based on normal approximation.

. Ho	w long l	nas yo	our	sch	00	bee	n o	perat	ıng'	_			\top	mo	onth	s/ye	ears								
2	4	5	6	7	12	2 14	18	20	25	26	27	28	35	44	1 48	73	3 84	1 96	5 120	132	168	3 240	312	3	24
Are	Governme nt school			Ė	12	0 _a	0a	0 _a	0a	1 _a	0a	O _a	0a	0 _a	0a	0a	0a	0a	0 _a	0 _a	1 _a	0 _a	0 _a	0a	0
ou orkin in	nt sullon	Expecte	ed			.1	.3	.1	.1	.4	.8	.3	.4	.1	.1	.3	.1	.1	.4	.1	.6	.1	.7	.1	.1
- -		% of To	tal			0.0%	0.0	0.0%	0.0	1.4%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0. 0 %
		Standa d Resid		l		4	5	4	4	.9	9	5	7	4	4	5	4	4	7	4	.6	4	8	4	.4
	Private Count	Count				1 _a	2 _a	1 _a	1 _a	2 _a	4 _a	2 _a	3 _a	1 _a	1 _a	2 _a	1 _a	1 _a	3 _a	1 _a	3 _a	1 _a	2 _a	0a	1 a
		Expecte	ed	l		.7	1.3	.7	.7	2.0	4.0	1.3	2.0	.7	.7	1.3	.7	.7	2.0	.7	2.6	.7	3.3	.7	.7
		% of To	tal			1.4%	2.8	1.4%	1.4	2.8%	5.6	2.8	4.2 %	1.4 %	1.4	2.8	1.4	1.4	4.2%	1.4%	4.2%	1.4%	2.8%	0.0%	1. 4 %
		Standa d Resid				.4	.6	.4	.4	.0	.0	.6	.7	.4	.4	.6	.4	.4	.7	.4	.2	.4	7	8	.4
	Institution	Count		Н		Oa	O _a	0a	Oa	Oa	O _a	Oa	Oa	O _a	O _a	Oa	Oa	Oa	O _a	Oa	Oa	Oa	Oa	1 _a	0
		Expect	ed			.1	.1	.1	.1	.2	.4	.1	.2	.1	.1	.1	.1	.1	.2	.1	.3	.1	.4	.1	.1
		% of To	tal	l		0.0%	0.0	0.0%	0.0	0.0%	0.0 %	0.0 %	0.0	0.0 %	0.0	0.0	0.0	0.0	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0. 0 %
		Standa d Resid				3	4	3	3	5	7	4	5	3	3	4	3	3	5	3	5	-,3	6	3.5	.3
	Church	Count				Oa	O _a	Oa	Oa	Oa	2a	Oa	Oa	Oa	Oa	Oa	O _a	Oa	O _a	Oa	Oa	O _a	За	Oa	0
	- Inneu	Expect	ed			.1	.3	.1	.1	.4	.8	.3	.4	.1	.1	.3	.1	.1	.4	.1	.5	.1	.6	.1	.1

Chi-Square Tests

				Monte	Carlo Sig.	(2-sided)	Monte Carlo Sig. (1-sided)				
					95% C	onfidence		95% Conf			
			Asymptotic		Int	erval		I	nterval		
			Significance	Significa	Lower	Upper	Signifi	Lower			
	Value	df	(2-sided)	nce	Bound	Bound	cance	Bound	Upper Bound		
Pearson Chi-Square	169.162 ^a	93	.000	.000 ^b	.000	.000					
Likelihood Ratio	112.302	93	.084	.000 ^b	.000	.000					
Fisher's Exact Test	121.808			.000 ^b	.000	.000					
Linear-by-Linear	.002°	1	.966	.966 ^b	.962	.969	.487 ^b	.477	.497		
Association											
N of Valid Cases	71										

- a. 127 cells (99.2%) have expected count less than 5. The minimum expected count is .07.
- b. Based on 10000 sampled tables with starting seed 826213948.
- c. The standardized statistic is -.043.

Symmetric Measures

		<i>S</i> J 11111										
						Monte C	Monte Carlo Significance					
							95% Confidence					
							Interva	ıl				
			Asymp		Approxima			Uppe				
			totic		te			r				
			Standar	Approxi	Significanc	Significa	Lower	Boun				
		Value	d Error ^a	mate T ^b	e	nce	Bound	d				
Nominal by Nominal	Phi	1.544			.000	.000°	.000	.000				
	Cramer's V	.891			.000	.000°	.000	.000				
	Contingency	.839			.000	.000°	.000	.000				
	Coefficient											
Interval by Interval	Pearson's R	005	.152	043	.966 ^d	.966°	.962	.969				
Ordinal by Ordinal	Spearman	008	.149	063	.950 ^d	.948 ^c	.944	.952				
	Correlation											
N of Valid Cases		71										

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on 10000 sampled tables with starting seed 826213948.
- d. Based on normal approximation.

	5. How	long ha	ve	yo	u v	vor	ke	d in	an	E	CE p	orog	gran	n? _				m	onths	/yea	ars								
1	2	3 4	5 6	1	,	8 9	1	0 11	12	1	3 15	5 17	20	21	24	2	8 3	30 31	34	36	48				60			84	28 8
Are you working in	Government school	Count	0,	O _a	O _a	0,	O _a	1,	2,	O _a	Oa	Oa	O _a	2,	O _a	0,	O _a	O _a	1.	0,	O _a	O _a	O _a	O _a	1,	O _a	O _a	O _a	10
		Expected Count	,t	л	.1	.1	.3	.4	.5	.3	.4	.3	.1	1.0	.4	.1	.3	t.	л	1.2	.3	.1	.3	.8	.1	.1	л	.1	10.0
		% of Total	0.0%		0.			1.3%	2.6%		0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0	0.0	0.0	0.0	1.3	0.0%		0.0%	13.0%
				%			96			%											%	%	%	%	%		%		
		Standardized Residual	4	4	-,4	-,4	5	1.0	2.1	5	6	5	4	.9	6	4	5	4	2.4	-1.1	5	4	5	9	2.4	4	-,4	4	
	Private	Count	0,	1,	1,	1,	2,	2,	2,	2,	3,	2,	1.	4,	3,	1,	2,	1.	Oa	8,	2,	1,	1,	2,	O _a	O _a	1,	1,	52
		Expected Count	.7	.7	.7	.7	1.	2.0	2.7	1.	2.0	1.4	.7	5.4	2.0	.7	1.4	.7	.7	6.1	1.4	.7	1.4	4.1	.7	.7	.7	.7	52.0
		% of Total	0.0%		1.		2.	2.6%	2.6%		3.9%	2.5%	1.3%	5.2%	3.9%	1.3%	2.6%	1.3%	0.0%	10.4	2.6	1.3	1.3	2.6	0.0	0.0%		1.3%	67.5%
				%			%			%										%	%	%	%	%	%		%		
		Standardized Residual	8	.4	.4	A	.6	.0	4	.6	.7	.6	.4	6	.7	A	.6	.4	8	.8	.6	A	3	-1.0	8	8	A	A	
	Institution	Count	1,	O _a	O _a	0,	O _a	0,	0,	O _a	1,	O _a	O _a	O _a	1.	O _a	1,	O _a	0,	6									
		Count	.1	.1	.1	.1	.2	.2	.3	.2	.2	.2	.1	.6	.2	.1	.2	.1	.1	.7	.2	.1	.2	.5	.1	.1	.1	.1	6.0
		% of Total	1.3%	0.	0.	0.0%	0.	0.0%	0.0%	0.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0 %	0.0 %	0.0 %	1.3	0.0 %	1.3%	0.	0.0%	7.8%
				%	%		%			%																	%		
		Standardized Residual	3.3	3	3	3	4	5	6	4	5	4	3	8	5	3	4	3	3	A	4	3	4	.8	3	3.3	3	3	
	Church	Count	O _a	0,	0,	O _a	0,	2 _a	O _a	0,	1,	3,	0,	O _a	O _a	O _a	9												
	OWIES	Expected	.1	.1	.1	Л	.2	4	.5	.2	A	.2	.1	.9	.4	.1	.2	.1	.1	1.1	.2	.1	.2	.7	.1	.1	.1	.1	9.0
		% of Total	0.0%	0.	0.	0.0%	0.	0.0%	0.0%	0.	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	1.3	3.9	0.0	0.0%	0.	0.0%	11.7%
					0 %		0 %			0 %											%	%	%	%	%		0 %		
		Standardized Residual	3	3	3	3	5	6	7	5	6	5	3	1.1	6	3	5	3	3	-1.0	5	3	1.6	2.7	3	3	3	3	
'otal		Count	1	1	1	1	2	3	4	2	3	2	1	8	3	1	2	1	1	9	2	1	1	4	3	2	1	1	7
		Expected Count	1.0		1.	1.0	2.	3.0	4.0	2.	3.0	2.0	1.0	8.0	3.0	1.0	2.0	1.0	1.0	9.0	2.0	1.0	1.0	4.0	3.0	2.0	1.	1.0	77.
		% of Total	1.3%	1.		1.3%	2.	3.9%	5.2%	2.	3.9%	2.6%	1.3%	10.4	3.9%	1.3%	2.6%	1.3%	1.3%	11.7	2.6%	1.3	1.3	5.2	3.9	2.6%	1.	1.3%	100.0
					%		%			%												~			~		%		

169

Chi-Square Tests

				i Square I	Coto				
			Asymptot	Monte Ca	arlo Sig. (2-s	sided)	Monte Carl	o Sig. (1-s	ided)
			ic		95% Con	fidence		95% Co	onfidence
			Significa		Inter	val		Int	erval
			nce (2-	Significanc	Lower	Upper		Lower	Upper
	Value	df	sided)	e	Bound	Bound	Significance	Bound	Bound
Pearson Chi-Square	100.001 ^a	99	.453	.490 ^b	.480	.500			
Likelihood Ratio	84.997	99	.841	.257 ^b	.249	.266			
Fisher's Exact Test	105.749			.333 ^b	.323	.342			
Linear-by-Linear	3.933 ^c	1	.047	.044 ^b	.040	.048	.031 ^b	.028	.034
Association									
N of Valid Cases	77	·							

- a. 134 cells (98.5%) have expected count less than 5. The minimum expected count is .08.
- b. Based on 10000 sampled tables with starting seed 826213948.
- c. The standardized statistic is 1.983.

Symmetric Measures

		Зушш	ien ic mieas	our es				
						Monte (Carlo Signif	icance
					Approxima		95% Con	fidence
			Asymptotic		te		Inter	val
			Standard	Approxi	Significanc	Significa	Lower	Upper
		Value	Error ^a	mate T ^b	e	nce	Bound	Bound
Nominal by Nominal	Phi	1.140			.453	.490°	.480	.500
	Cramer's V	.658			.453	.490 ^c	.480	.500
	Contingency Coefficient	.752			.453	.490°	.480	.500
Interval by Interval	Pearson's R	.227	.120	2.023	.047 ^d	.044 ^c	.040	.048
Ordinal by Ordinal	Spearman Correlation	.242	.112	2.162	.034 ^d	.034 ^c	.031	.038
N of Valid Cases		77						

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on 10000 sampled tables with starting seed 826213948.
- d. Based on normal approximation.

6. What qualifications do you have to work as an ECE provider? Crosstab

					Advanced			
			Certificate	Diploma in	Diploma in			
			in Early	Early	Early	Degree in Early		
			Childhood	Childhood	Childhood	Childhood		
			Education	Education	Education	Education	N/A	Total
4.	Government	Count	1 _a	4 _{a, b}	0 _{a, b}	0 _{a, b}	1 _b	6
Are	school	Expected Count	2.7	2.4	.4	.3	.1	6.0
you		% of Total	1.9%	7.4%	0.0%	0.0%	1.9%	11.1%
worki		Standardized	-1.0	1.0	7	6	2.7	
ng in		Residual						
	Private	Count	18 _a	15 _a	$3_{\rm a}$	3 _a	$0_{\rm a}$	39
		Expected Count	17.3	15.9	2.9	2.2	.7	39.0
		% of Total	33.3%	27.8%	5.6%	5.6%	0.0%	72.2%
		Standardized	.2	2	.1	.6	8	
		Residual						
	Institution	Count	$1_{\rm a}$	1 _a	$1_{\rm a}$	0_a	0_a	3
		Expected Count	1.3	1.2	.2	.2	.1	3.0
		% of Total	1.9%	1.9%	1.9%	0.0%	0.0%	5.6%
		Standardized	3	2	1.6	4	2	
		Residual						
	Church	Count	$4_{\rm a}$	2 _a	$0_{\rm a}$	O_a	O_a	6
	owned	Expected Count	2.7	2.4	.4	.3	.1	6.0
		% of Total	7.4%	3.7%	0.0%	0.0%	0.0%	11.1%
		Standardized	.8	3	7	6	3	
		Residual						
Total		Count	24	22	4	3	1	54
		Expected Count	24.0	22.0	4.0	3.0	1.0	54.0
		% of Total	44.4%	40.7%	7.4%	5.6%	1.9%	100.0%

Each subscript letter denotes a subset of 7. What qualifications do you have to work as an ECE provider? categories whose column proportions do not differ significantly from each other at the .05 level.

		•	Chi-Squar	e Tests					
				Monte (Carlo Sig. (2	2-sided)	Monte C	Carlo Sig. ((1-sided)
					95% Co	nfidence		95% Co	nfidence
			Asymptotic		Inte	rval		Inte	rval
			Significanc	Significa	Lower	Upper	Signific	Lower	Upper
	Value	df	e (2-sided)	nce	Bound	Bound	ance	Bound	Bound
Pearson Chi-Square	15.747 ^a	12	.203	.242 ^b	.234	.250			
Likelihood Ratio	12.656	12	.395	.328 ^b	.318	.337			
Fisher's Exact Test	12.971			.365 ^b	.356	.375			
Linear-by-Linear Association	2.921°	1	.087	.102 ^b	.096	.107	.039 ^b	.035	.042
N of Valid Cases	54								

a. 18 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

			Symmetri	c Measure	S			
						Monte Carlo	Significa	ance
							95% Co	nfidence
			Asymptotic				Inte	erval
			Standard	Approxima	Approximate		Lower	Upper
		Value	Error ^a	te T ^b	Significance	Significance	Bound	Bound
Nominal by	Phi	.540			.203	.242°	.234	.250
Nominal	Cramer's V	.312			.203	.242°	.234	.250
	Contingency	.475			.203	.242 ^c	.234	.250
	Coefficient							
Interval by	Pearson's R	235	.105	-1.742	.087 ^d	.102°	.096	.107
Interval								
Ordinal by	Spearman	190	.123	-1.398	.168 ^d	.171°	.163	.178
Ordinal	Correlation							
N of Valid Ca	ases	54						

a. Not assuming the null hypothesis.

b. Based on 10000 sampled tables with starting seed 826213948.

c. The standardized statistic is -1.709.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 826213948.

d. Based on normal approximation.

7. What qualifications do you have to work as an ECE provider? (OTHER) Chi-Square Tests

			-			
			Asymptotic	Mon	te Carlo Sig. (2-s	ided)
			Significance		95% Con	fidence Interval
	Value	df	(2-sided)	Significance	Lower Bound	Upper Bound
Pearson Chi-Square	74.786 ^a	48	.008	.036 ^b	.032	.039
Likelihood Ratio	53.387	48	.275	.005 ^b	.004	.006
Fisher's Exact Test	70.877			.009 ^b	.007	.010
N of Valid Cases	88					

a. 65 cells (95.6%) have expected count less than 5. The minimum expected count is .07.

Symmetric Measures^d

		Symmetric	Wicusui es			
				Mo	onte Carlo	Significance
					95%	Confidence Interval
			Approximate	Significanc	Lower	
		Value	Significance	e	Bound	Upper Bound
Nominal by Nominal	Phi	.922	.008	.036 ^c	.032	.039
	Cramer's V	.532	.008	.036 ^c	.032	.039
	Contingency Coefficient	.678	.008	.036 ^c	.032	.039
N of Valid Cases		88				

c. Based on 10000 sampled tables with starting seed 826213948.

b. Based on 10000 sampled tables with starting seed 826213948.

d. Correlation statistics are available for numeric data only.

8. What position do you hold in this ECE program?

Crosstab

			Teacher Aide	Teacher	Senior Teacher	School Head	N/A	Total
-	Government	Count	1 _a	8 _a	0_a	0_a	$0_{\rm a}$	9
working in	school	Expected Count	2.3	6.0	.2	.4	.1	9.0
		% of Total	1.3%	10.7%	0.0%	0.0%	0.0%	12.0%
		Standardized Residual	8	.8	5	6	3	
	Private	Count	14 _a	34 _a	2 _a	3 _a	$0_{\rm a}$	53
		Expected Count	13.4	35.3	1.4	2.1	.7	53.0
		% of Total	18.7%	45.3%	2.7%	4.0%	0.0%	70.7%
		Standardized Residual	.2	2	.5	.6	8	
	Institution	Count	3 _a	2_a	$0_{\rm a}$	0_a	$0_{\rm a}$	5
		Expected Count	1.3	3.3	.1	.2	.1	5.0
		% of Total	4.0%	2.7%	0.0%	0.0%	0.0%	6.7%
		Standardized Residual	1.5	7	4	4	3	
	Church owned	Count	1 _a	6 _{a, b}	0 _{a, b}	0 _{a, b}	1 _b	8
		Expected Count	2.0	5.3	.2	.3	.1	8.0
		% of Total	1.3%	8.0%	0.0%	0.0%	1.3%	10.7%
		Standardized Residual	7	.3	5	6	2.7	
Total		Count	19	50	2	3	1	75
		Expected Count	19.0	50.0	2.0	3.0	1.0	75.0
		% of Total	25.3%	66.7%	2.7%	4.0%	1.3%	100.0%

Each subscript letter denotes a subset of 8. What position do you hold in this ECE program? categories whose column proportions do not differ significantly from each other at the .05 level.

•	Chi	2_i	ans	re	Tests
		7		116	6212

				Cm-Squa	iic icsis				
				Monte	Carlo Sig. (2	e-sided)	Monte	Carlo Sig. (1-si	ded)
								95% Confid	lence
			Asymptotic		95% Confid	ence Interval		Interva	1
			Significance		Lower		Significan		Upper
	Value	df	(2-sided)	Significance	Bound	Upper Bound	ce	Lower Bound	Bound
Pearson Chi-	15.419 ^a	12	.219	.268 ^b	.259	.276			
Square									

Likelihood	12.588	12	.400	.283 ^b	.274	.291			
Ratio									
Fisher's Exact	12.585			.419 ^b	.409	.428			
Test									
Linear-by-	.567°	1	.452	.466 ^b	.456	.475	.248 ^b	.239	.256
Linear									
Association									
N of Valid	75								
Cases									

- a. 16 cells (80.0%) have expected count less than 5. The minimum expected count is .07.
- b. Based on 10000 sampled tables with starting seed 826213948.
- c. The standardized statistic is .753.

Symmetric Measures

	Symmetric Picasures											
							Monte Carl	o Significance				
			Asymptotic				95% (Confidence Interval				
			Standard	Approxi	Approximate	Signific	Lower					
		Value	Error ^a	mate T ^b	Significance	ance	Bound	Upper Bound				
Nominal	Phi	.453			.219	.268 ^c	.259	.276				
by	Cramer's V	.262			.219	.268 ^c	.259	.276				
Nominal	Contingency	.413			.219	.268 ^c	.259	.276				
	Coefficient											
Interval by	Pearson's R	.088	.139	.751	.455 ^d	.466 ^c	.456	.475				
Interval												
Ordinal by	Spearman	047	.104	402	.689 ^d	.690°	.681	.699				
Ordinal	Correlation											
N of Valid	Cases	75										

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on 10000 sampled tables with starting seed 826213948.
- d. Based on normal approximation.

9. What position do you hold in this ECE program? (OTHER)

Crosstab

Ciossus											
8. What position do you hold in this ECE program? (OTHER)											
							School Head				
				Assistant		Laboratory	(Not for early	Tea	Volunte		
				Teacher	HOD	Assistant	childhood)	cher	er	Total	
4. Are	Government	Count	13 _a	0_{a}	1 _a	O_a	1 _a	1 _a	1 _a	17	
you	school	Expected	15.8	.2	.2	.2	.2	.2	.2	17.0	
working		Count									

Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana

in		% of Total	14.8%	0.0%	1.1%	0.0%	1.1%	1.1	1.1%	19.3%
		Standardized Residual	7	4	1.8	4	1.8	1.8	1.8	
	Private	Count	56 _a	O_a	$0_{\rm a}$	O_a	$0_{\rm a}$	0_a	O _a	56
		Expected Count	52.2	.6	.6	.6	.6	.6	.6	56.0
		% of Total	63.6%	0.0%	0.0%	0.0%	0.0%	0.0	0.0%	63.6%
		Standardized Residual	.5	8	8	8	8	8	8	
	Institution	Count	5 _a	0 _{a, b}	0 _{a, b}	1 _b	$0_{a,b}$	0 _{a, b}	0 _{a, b}	6
		Expected Count	5.6	.1	.1	.1	.1	.1	.1	6.0
		% of Total	5.7%	0.0%	0.0%	1.1%	0.0%	0.0	0.0%	6.8%
		Standardized Residual	2	3	3	3.6	3	3	3	
	Church	Count	8 _a	1 _a	$0_{\rm a}$	$0_{\rm a}$	$0_{\rm a}$	0_a	O_a	9
	owned	Expected Count	8.4	.1	.1	.1	.1	.1	.1	9.0
		% of Total	9.1%	1.1%	0.0%	0.0%	0.0%	0.0	0.0%	10.2%
		Standardized Residual	1	2.8	3	3	3	3	3	
Total		Count	82	1	1	1	1	1	1	88
		Expected Count	82.0	1.0	1.0	1.0	1.0	1.0	1.0	88.0
		% of Total	93.2%	1.1%	1.1%	1.1%	1.1%	1.1	1.1%	100.0%

Each subscript letter denotes a subset of 8. What position do you hold in this ECE program? (OTHER) categories whose column proportions do not differ significantly from each other at the .05 level.

Chi-Square Tests

			•	Monte Carlo Sig. (2-sided)				
			Asymptotic	95% Confidence Interval				
	Value	df	Significance (2-sided)	Significance	Lower Bound	Upper Bound		
Pearson Chi-Square	40.019 ^a	18	.002	.024 ^b	.021	.027		
Likelihood Ratio	23.983	18	.156	.005 ^b	.003	.006		
Fisher's Exact Test	32.997			.005 ^b	.003	.006		

Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana

N of Valid Cases	88		

a. 24 cells (85.7%) have expected count less than 5. The minimum expected count is .07.

Symmetric Massures^d

	Symmetric Measures										
				Mon	Monte Carlo Significance						
					95% Conf	idence Interval					
			Approximate		Lower						
		Value	Significance	Significance	Bound	Upper Bound					
Nominal by	Phi	.674	.002	.024 ^c	.021	.027					
Nominal	Cramer's V	.389	.002	.024 ^c	.021	.027					
	Contingency Coefficient	.559	.002	.024 ^c	.021	.027					
N of Valid Cases		88									

c. Based on 10000 sampled tables with starting seed 826213948.

b. Based on 10000 sampled tables with starting seed 826213948.

d. Correlation statistics are available for numeric data only.

10. Nationality of Participant

Crosstab

Crosstab	1		10											
			12.							Nationality	of Parti	cipant		
					Forei-	India-	Mala-	Motswa-		South	Sri	Zamb-	Zimb- abwe-	
				British	gner	n	wian	na	N/A	African	Lanka	ian	an	Total
4. Are	Govern	Count	1 _a	1 _a	0 _a	O _a	O _a	14 _a	1 _a	0_a	0_a	0_a	0_a	17
you working	ment school	Expected Count	.8	.2	.2	.2	.2	11.8	.2	.6	.4	.8	1.7	17.0
in		% of Total	1.1%	1.1%	0.0%	0.0%	0.0%	15.9%	1.1%	0.0%	0.0%	0.0%	0.0%	19.3%
		Standardiz ed Residual	.3	1.8	4	4	4	.6	1.8	8	6	9	-1.3	
	Private	Count	3 _a	O _a	1 _a	1 _a	1 _a	32 _a	0_a	3 _a	2 _a	4 _a	9 _a	56
		Expected Count	2.5	.6	.6	.6	.6	38.8	.6	1.9	1.3	2.5	5.7	56.0
		% of Total	3.4%	0.0%	1.1%	1.1%	1.1%	36.4%	0.0%	3.4%	2.3%	4.5%	10.2%	63.6%
		Standardiz ed	.3	8	.5	.5	.5	-1.1	8	.8	.6	.9	1.4	
		Residual												
	Institutio	Count	O _a	6 _a	O _a	$0_{\rm a}$	O _a	0_a	0 _a	6				
	n	Expected Count	.3	.1	.1	.1	.1	4.2	.1	.2	.1	.3	.6	6.0
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%
		Standardiz ed Residual	5	3	3	3	3	.9	3	5	4	5	8	
	Church	Count	Oa	Oa	Oa	Oa	Oa	9 _a	Oa	0_a	Oa	Oa	Oa	9
	owned	Expected Count	.4	.1	.1	.1	.1	6.2	.1	.3	.2	.4	.9	9.0
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%
		Standardiz ed Residual	6	3	3	3	3	1.1	3	6	5	6	-1.0	
Total		Count	4	1	1	1	1	61	1	3	2	4	9	88
		Expected Count	4.0	1.0	1.0	1.0	1.0	61.0	1.0	3.0	2.0	4.0	9.0	88.0
		% of Total	4.5%	1.1%	1.1%	1.1%	1.1%	69.3%	1.1%	3.4%	2.3%	4.5%	10.2%	100.0%

Each subscript letter denotes a subset of 9. Nationality of Participant categories whose column proportions do not differ significantly from each other at the .05 level.

Chi-Square Tests

	Sin Square resis												
			Asymptotic	Monte Carlo Sig. (2-sided)									
			Significance		95% Confidence Interval								
	Value	df	(2-sided)	Significance	Lower Bound	Upper Bound							
Pearson Chi-Square	24.834 ^a	30	.733	.674 ^b	.665	.683							
Likelihood Ratio	30.518	30	.439	.184 ^b	.176	.191							
Fisher's Exact Test	28.157			.719 ^b	.710	.728							
N of Valid Cases	88												

a. 40 cells (90.9%) have expected count less than 5. The minimum expected count is .07.

Symmetric Measures^d

Symmetric weasures								
				Monte	Carlo Significar	nce		
					95% Confider	nce Interval		
			Approximate			Upper		
		Value	Significance	Significance	Lower Bound	Bound		
Nominal by Nominal	Phi	.531	.733	.674 ^c	.665	.683		
	Cramer's V	.307	.733	.674 ^c	.665	.683		
	Contingency	.469	.733	.674°	.665	.683		
	Coefficient							
N of Valid Cases		88						

c. Based on 10000 sampled tables with starting seed 826213948.

b. Based on 10000 sampled tables with starting seed 826213948.

d. Correlation statistics are available for numeric data only.

Appendix 7: Factor Analysis

```
FACTOR

/VARIABLES Q1.a Q1.b Q1.c Q1.d Q1.e Q2.a Q2.b Q2.c Q2.d Q3.a Q3.b Q3.c Q3.d Q3.e Q3.f Q3.g Q4.a Q4.b Q4.c Q4.d Q4.e Q.5 Q6.a Q6.b Q6.c Q7.a Q7.b Q7.c Q7.d Q7.e Q8.a Q8.b Q8.c Q8.d Q9.a Q9.b Q10.a Q10.b Q10.c Q11.a Q11.b Q11.c Q12.a Q12.b Q12.c

/MISSING LISTWISE

/ANALYSIS Q1.a Q1.b Q1.c Q1.d Q1.e Q2.a Q2.b Q2.c Q2.d Q3.a Q3.b Q3.c Q3.d Q3.e Q3.f Q3.g Q4.a Q4.b Q4.c Q4.d Q4.e Q.5 Q6.a Q6.b Q6.c Q7.a Q7.b Q7.c Q7.d Q7.e Q8.a Q8.b Q8.c Q8.d Q9.a Q9.b Q10.a Q10.b Q10.c Q11.a Q11.b Q11.c Q12.a Q12.b Q12.c

/PRINT INITIAL EXTRACTION
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PC
/ROTATION NOROTATE
/METHOD=CORRELATION.
```

Factor Analysis

Communalities

Communances		
	Initial	Extraction
Programme Objectives	1.000	.843
Mission/ Vision	1.000	.931
Admission Policy	1.000	.881
Learner centred approach	1.000	.792
Teacher centred approach	1.000	.531
Appropriate/Trained Leadership	1.000	.850
Administrative Staff	1.000	.643
Teaching Staff	1.000	.729
Proper Physical Resources	1.000	.778
Pre School Facility	1.000	.859
Trained Teachers	1.000	.891
Pupils	1.000	.870
Availability of equipment & materials	1.000	.824
Curriculum	1.000	.825
Availability of comprehensive facilities	1.000	.773
Safety Devices	1.000	.932
Computer Lab	1.000	.798
Science Lab	1.000	.773
Library	1.000	.758
Administration Block	1.000	.714
P.T.A Offices	1.000	.836
5. In your own view how long do you think an ECE programme should run?	1.000	.650

Goals of the programme	1.000	.767
Activities to enable ECE to reach the desired goals	1.000	.815
Indicators of progress towards achieving the desired outcomes	1.000	.871
Quality of teacher training	1.000	.898
Quality of in-service training e.g. Provides meaningful job related training	1 000	015
opportunities	1.000	.815
Evaluation and monitoring of teachers performance.	1.000	.895
Strategies to retain teachers	1.000	.773
Provides meaningful job related training opportunities	1.000	.840
Considering parents as co-teachers in the education of young children	1.000	.792
Creating a conducive environment for parents to be involved in ECE	1.000	762
activities within the school	1.000	.763
Allowing parents to actively participate in decision making affecting their	1.000	740
children	1.000	.749
Establishing a very strong PTA	1.000	.909
Confidential pupils personal records	1.000	.836
Records of pupils work	1.000	.809
Cash flow records	1.000	.760
School fees	1.000	.720
Auditing	1.000	.789
Policy relating to food and nutrition	1.000	.752
Early Childhood Education health partnership	1.000	.746
Regular maintenance and Inspection of equipment and infrastructure	1.000	.811
Tight Security	1.000	.840
Safety School Environment	1.000	.711
Children's safety during drop up and pick up times	1.000	.707

Extraction Method: Principal Component Analysis.

Total Variance Explained

Total variance Explained											
		Initial Eigenval	ues	Extraction Sums of Squared Loadings							
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %					
1	7.210	16.022	16.022	7.210	16.022	16.022					
2	4.073	9.051	25.073	4.073	9.051	25.073					
3	3.603	8.007	33.080	3.603	8.007	33.080					
4	3.346	7.436	40.516	3.346	7.436	40.516					
5	2.621	5.824	46.340	2.621	5.824	46.340					
6	2.488	5.529	51.869	2.488	5.529	51.869					
7	2.099	4.664	56.533	2.099	4.664	56.533					
8	1.953	4.339	60.872	1.953	4.339	60.872					
9	1.875	4.167	65.039	1.875	4.167	65.039					

Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana

		ı				
10	1.493	3.318	68.357	1.493	3.318	68.357
11	1.429	3.175	71.532	1.429	3.175	71.532
12	1.392	3.094	74.627	1.392	3.094	74.627
13	1.208	2.684	77.310	1.208	2.684	77.310
14	1.057	2.348	79.659	1.057	2.348	79.659
15	.990	2.200	81.859			
16	.947	2.105	83.963			
17	.800	1.777	85.741			
18	.756	1.681	87.422			
19	.700	1.555	88.977			
20	.662	1.471	90.448			
21	.625	1.390	91.838			
22	.579	1.288	93.125			
23	.487	1.082	94.207			
24	.444	.987	95.194			
25	.298	.663	95.856			
26	.284	.630	96.487			
27	.249	.554	97.040			
28	.225	.499	97.539			
29	.195	.433	97.973			
30	.179	.398	98.370			
31	.152	.338	98.708			
32	.122	.271	98.979			
33	.104	.230	99.210			
34	.092	.205	99.415			
35	.065	.144	99.559			
36	.060	.133	99.691			
37	.045	.099	99.790			
38	.033	.073	99.863			
39	.023	.051	99.914			
40	.014	.031	99.945			
41	.010	.023	99.968			
42	.006	.014	99.983			
43	.005	.012	99.994			
44	.002	.004	99.998			
45	.001	.002	100.000			

Extraction Method: Principal Component Analysis.

Appendix 8: Interview Schedule

Section A

I am a University of Botswana doing PhD Studies in Early Childhood Education carrying out a research project on the topic Prospects and Possibilities of Accreditation Standards as a quality measure of Early Childhood Education.

Please answer the questionnaire / interview to the best of your knowledge so as to help me in the research I am doing.

I guarantee you maximum confidentiality and anonymity in whatever information you will provide.

Demographic Information

Please tick in the appropriate brackets

1. Gender

Male

Female

2 **Age**

20-30

31-40

41-50

51 and above

3. Professional Qualifications

Certificate in ECE

Diploma in ECE

Degree in ECE

Masters in ECE

Any Other
4. Experience
2-5 years
6-10 years
11-15 years
16 and above
5. Position Held
ECE Teacher
Teacher Aid
Senior Teacher
Deputy Head
School Head
Section B
Please read the following questions and answer them in the places provided
1. What do you understand by the word accreditation?
2. What is the importance of having accreditation standards in ECE in Botswana?

3. What resource implications exist in preparing for accreditation process?
4. What role should stakeholders play in supporting accreditation efforts?
5. What contextual differences should minimal accreditation standards account for?
6. What incentives for ECE providers come along with accreditation of programs?
7. Are there barriers for accreditation ECE programs?

8. What preparatory activities should the Government of Botswana (BQA) do to improve the successful implementation of accreditation standards?

Botswana
9. What could be the unintended consequences of having accreditation standards?
10. Is there any other issue you would like to add in regards to accreditation in ECE?

Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in

Appendix 9: The interview

- The participant must do 90% of the talking. An interview should not be seen as a dialogue. The whole point is for the respondent to tell the story. As a result, the interviewer should limit their own remarks to listen more and talk less.
- Ask clear and brief questions. It is important to use words that make sense to participants. Questions should be easy to understand, short and free from jargon.
- Ask single questions. Ask one question at a time.
- Ask truly open ended questions. Truly open ended questions do not predetermine the
 answers; they allow room for the participants to respond in their own terms. Ask
 questions that require more of an answer than 'yes' and 'no'.
- Avoid sensitive questions. The participant might feel uneasy and adopt avoidance tactics if the questioning is too deep without necessary support.
- Start with questions that are not controversial.
- Ask experience / behaviour questions before opinion feelings questions
- Sequence questions. 'Funnel' questions from general to specific, and from broad to narrow.
- Sometimes a very general question can be useful in opening the dialog e.g. 'what is your deepest concern about lack of minimal accreditation standards in ECE in Botswana?
- Ask questions only when you do not understand
- Avoid leading questions
- Repeat key questions throughout the interview
- Encourage a free rein but maintain control.
- Allow for pauses in the conversation. Do not let periods of silence fluster you. Give
 the participant a chance to think of what he/ she wants to add before you hurry
 him/her on to the next question. Try not to rush.
- Return to incomplete points. Often the participant does not provide full information at first.
- Conclude interviews with general questions such as "is there anything further that you feel is important?"
- Do not interrupt a good story because you have a good question. Just jot down the question to be asked later.

- If the participant strays into subjects that are not pertinent, try to pull him/ her back as quickly as possible. Keep the participant focused and ask for concrete answers.
- Do not switch the tape recorder on and off, buy so doing you are calling unnecessary attention to the tape recorder.
- Do not use the interview to show off your knowledge, vocabulary, charm, or other abilities

(Adapted from As De Vos et al (2009): p. 288-289)

Appendix 10: Guidelines for Application for a Research Permit



REPUBLIC OF BOTSWANA

GUIDELINES FOR APPLICATION FOR RESEARCH PERMIT

Gaborone 2007

PREFACE

This document provides information needed by any person who wishes to apply for a permit to conduct research in Botswana. Such persons are advised to read it carefully and to follow the various procedures outlined. These guidelines are adopted on the behalf of the country's national research policy.

Applications for research should be directed to Government Ministries under whose portfolio the subject of the research proposals falls. For the various Government Ministries and other relevant institutions see Appendix 1.

GUIDELINES FOR RESEARCH

1. <u>Introduction</u>

Botswana is a multi-party democratic state committed to freedom of speech and dialogue. The nation is founded on our four principles of Democracy, Development, Self-reliance and Unity, which aim to achieve social harmony and give rise to four main development objectives:

Rapid Economic Growth, Social Justice, Economic Independence and Sustained Development.

While development oriented research is a priority, in the interest of expanding knowledge in various fields, research of a more academic and theoretical nature is permitted wherever possible.

Botswana has adopted an open research policy and encourages research. However, it is a small country in terms of manpower, resources and population, and is open to dangers of being over-researched in certain areas. Also in the past many researchers have left the country without depositing copies of their findings. For this reason all research is now subject to careful evaluation. Priority will be given to local institutional research and to research which is of maximum benefit to the nation.

Particular encouragement is given to research relating to geographical areas and subjects not previously extensively studied, as well as to subjects of specific value for the country. At the same time the issue of research permit depends upon the qualifications, references, institutional and financial support of the research, and the clarity and soundness of the research proposal.

It should be noted that not every application, however well substantiated, will meet with government approval. We hope that prospective researchers will understand the reasons for these precautions, and voluntarily comply with the spirit as well as the letter of these Guidelines for Research.

2. Methods of Application

2.1 Research proposal

Written consultation must be initiated with the relevant Government Ministry, research institution or another relevant body in Botswana before finalized funding proposals are submitted to granting agency. For a list of Ministries and other institutions see Appendix 1.

Once the relevant body in Botswana has either reached agreement with the research on the broad aims of the project or expressed its support, the final proposal must then be submitted to the relevant Ministry together with an application for a research permit.

It must be emphasized that even at this stage and although general agreement has been reached with the relevant body in Botswana, the issue of a research permit is not necessarily automatic.

Research permit

Two copies of a completed application form for a research permit must be submitted to the relevant ministry (see summary of ministerial appendix 1). Application forms may be collected from the following places:

- All Government Ministries
- The Botswana High Commission and Embassies abroad
- The Office of Research and Development (University of Botswana)

A copy of the application form is annexed to this document (Appendix 2)

Completed application forms must be accompanied by:

a) A **letter of endorsement** from the applicant's sponsoring institution, funding agency or, if the applicant is not affiliated to any institution, from a person of professional standing in the field of the applicant's discipline, supporting the

application and providing assurance that the research will conform to these guidelines.

- b) Where appropriate **a preliminary list of titles for short issue papers** and/or **progress reports** to be submitted to the relevant Ministry during field work with approximate date.
- c) **Detailed curriculum vitae** for the researcher and Botswana based personnel to be involved (including passport particulars).

3. Resident Permit

All applications, other than citizens of Botswana, are required under the Immigration Act to obtain a temporary residence permit **prior to arrival** in Botswana. It is against the regulations for visitors to change the visitors' permit into a temporary residence permit while visiting Botswana. Applicants outside Botswana should apply to the Botswana High Commission or embassy (if there is one resident) in the country from which they are applying. In the case where there is no Botswana High Commission or Embassy in that country, then the application for a residence permit should be sent to:

The Chief Immigration Officer

P O Box 942

Gaborone

Botswana

Tel: 267 3611300

Fax: 267 3952996

In making this application, a copy of any agreement (by the Ministry Responsible) on the research proposal should be attached.

4. Requirements within Botswana

4.1 The Ministry of Education reserves the right to second staff or students to work with the researcher. The main purpose behind this is to provide training. However, any person seconded will be expected to take an active part in the research programmes.

The responsibility of basic remuneration for the seconded staff or students in this case lies with the relevant and /or the University.

4.2 Where the researcher wishes for his/her own part to obtain assistance from the University of Botswana (UB), applications should be directed to the relevant department at the University of Botswana, Private Bag 0022, Gaborone. Ordinarily, in this case remuneration of students will be the responsibility of the researcher; however the final arrangement will be agreed between the relevant institution and the researcher. Such remuneration should be in keeping with the Government of UB rates for student holiday employment.

4.3 Supervision

The Government Ministry or the responsible institution will have the right to visit the researcher at any reasonable time and/or designate a reference group to which the researcher will be responsible to ensure that the general terms of the permit issued are being observed.

4.4 Regular Progress reports

A progress report, which shall include short description of investigations and findings, will be submitted either to the relevant Ministry at intervals that shall be specified in the permit.

4.5 Interim Reports Prior to Departure from Botswana

Before leaving the country the researcher must provide a preliminary report to the relevant Ministry, which will detail all findings but which will not absolve him/her from submitting later work accepted for publications, thesis etc. If so required the researcher will present a soft copy, seminar and/or a paper for local publication.

4.6 Statutory deposits of resulting publications

Five copies of all publications including the thesis resulting from the research should be submitted for deposit at the National Archives, the Research and Development Office, the Botswana Library Services (1 copy each), and to the affiliating body in Botswana

(2 copies) within two months after the date of publication.

5. **Special Guidelines**

Several Government Departments and other Institutions such as the Department of Wildlife, Tourism, the Rural Sociology Unit, the National Museum and the University of Botswana and so on, have their own additional requirements. These are drawn up in the form of guidelines and must be obtained from the relevant body prior to the formulation of the research proposal.

LIST OF MINISTRIES

Ministry	Summary of Portfolio	Contact Address
1. State President	Administration of Justice; constitutional matters relating to judiciary, National Assembly, House of Chiefs, Public Service Commission and Auditor General; coordination of government affairs; coordination and management of HIV/AIDS, disaster and refugees; corruption and economic crime; elections; defense; human rights; internal security; intelligence services; Ombudsman; legal affairs; parliamentary affairs; Police; public service management; security guards services	The Permanent Secretary to the President Private Bag 001 Gaborone Botswana Telephone: 267 3950 800
2. Ministry of Agriculture	Agricultural education, training, information services, marketing, planning and statistic; Animal Health and production, agroforestry, agricultural land use planning and utilization, conservation and management; control of imports and exports of agricultural products; crop production; fisheries.	The Permanent Secretary Private Bag 003 Gaborone Botswana Telephone: 267 3950 500
3. Ministry of Communications, Science and Technology	Communication, information, broadcasting and media services; information and technology infrastructure and development and maintenance; telecommunication services; science and technology research development.	The Permanent Secretary Private Bag 00414 Gaborone Botswana Tel: 267 39007 230
4. Ministry of Education	Educational planning, statistics, broadcasting and research;	The Permanent Secretary

	curriculum development; non- formal, pre-school, primary, secondary and special education; teacher training and development; vocational training; student career services, loans and grants.	Private Bag 005 Gaborone Botswana Tel: 267 3655 400
5. Ministry of Environment, Wildlife and Tourism	Environmental policy and management, tourism development; forestry; meteorological services, wildlife utilization, management, conservation, education and extension services	The Permanent Secretary Private Bag BO199 Gaborone Botswana Telephone: 267 3971 405
Ministry	Summary of Portfolio	Contact Address
6. Ministry of Finance and Development Planning	Administration of public funds, debt management, revenues and procurement, custody and disposal of assets; application and negotiations for external funding; banking and other financial institutions; government development programmes; budget administration; taxation; customs and excise; securities and bonds; relationships with international financial and economic organizations.	The Permanent Secretary Private Bag 008 Gaborone Botswana Telephone: 267 3950 100
6. Ministry of Foreign Affairs and International Cooperation	Bilateral and multilateral relations; Botswana missions abroad; consular affairs; diplomatic immunities and privileges; foreign policy and relations; governance and international community; state protocol and functions.	The Permanent Secretary Private bag 00368 Gaborone Botswana Telephone: 267 3953

		875
7. Ministry of Health	Food quality control; health manpower development and training; hospital services; international health matters; primary health are policies; public health; supervision of public and private health services; technical support services	The Permanent Secretary Private Bag 0038 Gaborone Botswana Telephone: 267 3952 00
8. Ministry of Labor and	Anthropological research;	The Permanent Secretary
Home	cinematography; civil and vital registration; coordination of gender	Private Bag 002
Affairs	and youth affairs, custody and rehabilitation of prisoners;	Gaborone
	immigration, passports and citizenship; labor policy and legislation; marriage legislation and policy; national archives and records management; library services; occupational health and safety; art and culture; religious organizations; sports and recreation.	Botswana Telephone: 3611 100
9. Ministry of Lands and Housing	Administration, allocation and leasing of tribal land, sale of state and freehold land; land and housing policies, government estate management; internal boundaries; land use and national physical planning; rent control and policy; surveying and mapping; town and regional planning	The Permanent Secretary Private Bag 00434 Gaborone Botswana Telephone: 3904 223
10. Ministry of Local Government	Community development; customary courts and law; district and tribal administration and development; local authorities; drought relief and rehabilitation;	The Permanent Secretary Private Bag 006 Gaborone

local government finances; social	Botswana
welfare; old age pension; primary	
education; primary health care;	
rehabilitation services; remote area	
development programme; rural and	
urban roads; settlement policy;	Telephone: 267 3656
village infrastructure and land	600
servicing	

Ministry	Summary of Portfolio	Contact Address
11. Ministry of Minerals,	Assessment and development of	The Permanent Secretary
Energy and Water Resources	water resources, and national energy requirements; allocation and recording of water rights; control of	Private Bag 0018
	imports and export of minerals,	Gaborone
	energy and water policies; geo-	Botswana
	science research, information management and dissemination;	
	minerals investment promotion, prospecting and resource management; petroleum	Telephone: 267 3656 600
	management and strategic reserves; citing and construction of dams	
12. Ministry of Trade and	Administration and enforcement of	The Permanent Secretary
Industry	trading laws; bilateral, regional and multilateral trading arrangements;	Private Bag 004
	business counseling, mentoring, consultancy and advisory services;	Gaborone
	consumer affairs, education and protection; domestic trade; import	Botswana
	and export control, facilitation and promotion; industrial development policy and programmes, intellectual property issues.	Telephone: 267 3601 200
13. Ministry of Works	Air Services, Architecture and	The Permanent Secretary
and Transport	Building Services, Civil Aviation; Government transport, Railways;	Private Bag 007
	Road Traffic, Transport and Safety, Road Infrastructure development and maintenance; Citing,	Gaborone

Construction and Maintenance of	Botswana
Governmental Buildings and sewage	
Schemes.	
	Telephone: 3958500

LIST OF OTHER RELEVANT INSTITUTIONS

Institution	Summary of portfolio	Contact Address
1. Office of Research and Development	Development of University of Botswana's research capabilities. Research policies covering research priorities, intellectual property protection, ethics and commercialisation of research output.	The Director, Private Bag UB 00708, Gaborone Botswana. Tel: + 267 3552 900
2. National Archives and Records Services	National archives and record management	The Director, P O Box 239, Gaborone Botswana. Tel: + 267 3911 820
3. National Museum and Art Gallery	Art and culture	The Director, Private Bag 0014, Gaborone Botswana. Tel: + 267 3974 616
4. Botswana National Library Services	Library services	The Director, Private Bag 0036, Gaborone Botswana.

	Tel: + 267 3952 288
5. National Assembly	Clerk of the National Assembly PO Box 240
	Gaborone, Botswana Tel: +267 361 6800

Appendix 11: Research Permit Application Form

REPUBLIC OF BOTSWANA

Research Permit Application Form

Two copies of this form should be completed and signed by the applicant who wishes to obtain a permit for conducting research in the Republic of Botswana, and sent to the

Permanent Secretary of the relevant Ministry

(See guidelines for addresses). These forms should not be submitted unless the Guidelines for the Research have been carefully studied. A copy of any project proposal submitted to

funding agencies must accompany this application. Please refer to annexure I attached to this

application form. Fill this form in full.

Description of the Proposal

1. Title of Research

Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early

Childhood Education in Botswana.

2. Name and Address of Applicant

Title: Mr. / Mrs. / Miss/ Dr. / Prof:

Mrs Naledi Binnie Mswela

Telephone: Mobile 74205626

Fax: None

E-mail Mswelanb@mopipi.ub.bw

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3. Name and address of home institutions (if any) which you are affiliated

University of Botswana

Private Bag 0022

Gaborone

4. Name and address of supervisor of research in home country or responsible referee:

Professor R. N. Lekoko

Department of Adult Education

Block 247/459

P/Bag 00702

Gaborone

Research plans

5. a) Main aims (general)

- a. To determine minimal essential areas to be addressed by accreditation standards
- b. To explore some necessary preparatory activities to be done for the development of concise accreditation standards.

Objective: detailed description of issues/problems and/or topics to be investigated, relevance of the research; hypothesis etc.

Issues to be dealt with are as follows:

- a. What impact, if any does having minimal accreditation standards have on the quality provision of ECE?
- b. What resource implications exist in preparing for or participating in accreditation assessment process?
- c. What role should stakeholders play in supporting minimal accreditation efforts by the Government?
- d. What contextual differences should minimal accreditation standards account for?
- e. What incentives for ECE providers come along with accreditation of programs?
- f. Are there barriers for minimal accreditation ECE programs?
- g. What preparatory activities should the government of Botswana (BQA) do to improve readiness for the successful implementation of the accreditation standards?
- h. What could be the unintended consequences of having minimal accreditation standards?

Problems:

Built-In Bias

Perhaps the strongest objection to qualitative research is that the quality of the
research depends too greatly on the individual researcher. Due to the fact that I shall
be designing the type of questions I will ask, that by its own inadvertently influence
the results due to own personal beliefs. To alleviate built-in bias I shall recognize it in
research.

Challenge to Repeat

• Because qualitative research is so inextricably entwined with the individual researcher, it is extremely challenging for other researchers to repeat qualitative

studies. This makes it hard to confirm or deny the results of the original study. In the field of early childhood education, one of the challenges of repeating qualitative study is that different elements of the original study can't be repeated; the service providers will all be different, as will the school and classroom environment, the methods of teaching and the styles of learning. One way I will overcome the challenge of repeatability will be to distinguish, in my report, between repeatable practices and the no-repeatable results that will emerge from those practices.

Perceived Lack of Rigor

• Quantitative research can demonstrate rigor by including a wide variety of numerical and statistical data, while the rigor of qualitative research is harder to demonstrate because it often involves the qualitative analysis of qualitative data. A researcher can apply a wide variety of interpretive models and can apply a single interpretive model in multiple ways to a variety of texts. Therefore, it's difficult to generate a unifying set of criteria for determining whether that researcher's work is truly rigorous. In this study one way in which the researcher will fight against this perceived lack of rigor will be to generate sets of criteria against which the rigor of field-specific qualitative research can and should be judged.

Time Consuming

• When the researcher is applying qualitative models of analysis to qualitative or numerical data, the research process can be long and tedious because the researcher must carefully pore over the data in detail while she crafts her analysis. For example, in this study I will have to compile a comprehensive account of all the providers used in the study. I must examine the responses of all of them. Even after spending all this time and energy getting their opinions, I shall have no guarantee that I have covered everything. In order to compensate for the time-consuming problem in this study, I will use qualitative research projects, such as writing historical accounts, as team based or collaborative.

Topics:

Accreditation

Standards

Quality in Early Childhood Education

Relevance:

It is hoped that this study will make a significant contribution to the quality of provision of ECE in Botswana with particular reference to the importance of minimal accreditation standards in ensuring quality provision of ECE.

This study is intended to contribute with minimal accreditation standards as guidelines to assist those proving ECE in Botswana. BQA and other policy makers are likely to make informed decisions about the processes to engage in as they move towards developing minimal accreditation standards.

In addition, this study is expected to unveil contextual factors such as learners backgrounds, low economic, rural population that may affect how what needs to be regulated can be sensitive to the relating to ECE institutions, where accreditation standards are developed, it may also be necessary to appraise the resource implication and return on investment, although not much can be achieved in respect of this item, the findings may be an eye opener of what can be invested and to what extent,

Finally, this study is able to contribute barriers, perceived or anticipated should minimal accreditation standards be enforced, such barriers may help BQA and other policy makers to find means of investigating against these as the standards are implemented. Significant information about what minimal accreditation generally means to providers express their experiences in the field of ECE.

The study will also assist those providers that are not providing minimal quality standards to do so, so as not to violate the minimal accreditation standards.

Parents the beneficiaries of the service will also be comfortable in knowing that they are choosing programs that meet the minimal accreditation standards.

Children on the other hand will be afforded services that will be providing quality education and care that could develop them in a holistic manner.

d) Methods or techniques

The mixed method design was used for this study. The rationale for using mixed method designs is used when a researcher feels that using one method would not provide the depth of

understanding needed to fully comprehend the phenomenon being studied (Shannon-Baker, 2016). In this case, the use of a qualitative approach on its own would not have been sufficient to provide the researcher with the priority aspects that participants felt were necessary to include in MAM proposed by the study. This study sought to understand teachers' views about what could be included in the MAM. Consequently, the qualitative approach as a form of communication tool was used as suggested by Shannon-Baker (2016).

The study adopted the use of qualitative and quantitative methods. The rationale for the use of mixed method was that the study sought to solicit views and perceptions of teachers in ECE basing on the overarching research questions. As stated by Cresswell, (2013) the qualitative method acquires non-numerical data from participants, and this includes experiences, opinion, descriptions and definitions, etc. As this study was interested in exploring participants' opinions, perceptions and experiences of the teachers ECE, the phenomenological approach was the most appropriate for exploring such lived experiences regarding their views about accreditation (Vagle, 2018; Baker, 2016). At the same time, the study was also interested in numerical quantitative data to triangulate the data. This was done basically to find out if the numerical data would complement the non-numerical data (Cresswell, 2013).

Similarly the researcher aims at obtaining soft data in the form of impressions, words, rather than hard data in the form of numbers (Vagle ,2018). Also the researcher opted for the qualitative study because the study is about real life situations that are genuine and sensitive to socio – historical context (Neuman , 2003). A qualitative research will provide will provide the study with rich information about social process in a particular being ECE's in Botswana. Again the qualitative has been chosen for its ability to explore attitudes, experiences as well as acquiring in depth opinions from participants. At the same time the researcher opted for a qualitative research design because it fits the problem to be studied perfectly. Similarly the qualitative design will address the following:

- Explore experiences, opinions and perceptions of participants in relation to ECE provision.
- Explores and describes life experienced by the participants and allows them to give meaning to experiences (Baker,2016).

Prospects and Possibilities of Accreditation Standards as a Quality Measure of Early Childhood Education in Botswana

Allows participants to interpret their experiences in a manner that makes sense to

them.

Interest in words and experiences rather than statistics and numerical figures in

contrast to quantitative approaches.

Like it has already been stated, this study shall explore the experiences, opinions and

perceptions of participants in relation to provision or their involvement in Early Childhood

Education. This focus established qualitative approach as the most suitable. This approach is

a subjective process-oriented approach. It is subject because it explores and describes life

experienced by the participants of the study will allow them to give meaning to these

experiences (Cresswell, 2014).

When asked a question such as 'What does early childhood mean to you?' The

researcher's intention is to let them interpret their experiences in the manner that makes sense

to them. It is based on the types of questions asked as well as the researcher objectives to be

achieved that qualitative research is defined in terms of interest in words and experiences

rather than statistics and numerical figures of those interested in quantitative approaches

(Baker, 2016) explain that qualitative research is all about a systematic collection and

analysis of subjective narrative data organised and natural fashion.

As Holloway further explains the situation within which the experiences has taken place is

usually unique for each participant constituting rich knowledge and insight that brings out the

unique social context and nuances of that which has been experienced.

6. Budget for the costs in Botswana (give detailed breakdown of research costs such as

subsistence, traveling, local staff, secretarial service, seminar, printing etc). Please state

the amount in Pula

Travelling: P10, 000

Audio Recorders: P10, 000

Research Assistants 10 P20, 000

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Total: P40, 000
7. Name and address of financial sponsor(s) of the research (if appropriate)
The University of Botswana
Private Bag 0022
Gaborone
8. Has funding already been obtained? (No)
a) If yes, please state the total amount granted, and the name and address of the funding agency:
Not Been Funded
b) If no, what steps are being taken to ensure sufficient funding?
None
9. If you have previously done research in Botswana please give details of the research.
No
10. Name and address of institution in Botswana to which the researcher is to be affiliated
University of Botswana
Private Bag 0022
Gaborone

11. Details of Botswana – based personnel that will be involved (names, functions, qualifications).

Research Assistants for Data Collection (Graduate Students)

Principal Researcher MEd – Manager of the Research – N. B. Mswela

Supervisor – Coordinator of the Research – Prof. R.N Lekoko

12. Places in Botswana where the research is to be undertaken

Gaborone Pre- Schools – Comprising Privately Owned, Government Owned, and Non – Profit owned.

13. Proposed time – schedule for the research

1st June, 2016 – 31st December, 2018.

14. Plans for dissemination of research findings

Ministry of Education – Pre- School Division, Authorities in Botswana dealing with the ECE.

Botswana Qualifications Authority

Ministry of Lands

Ministry of Health

Parents

School Managers

15. How are the research findings going to be used in the home country?

The research findings will be of benefit to the Ministry of Education – Pre- School Division as well as the stakeholders mentioned in Item 14, more especially the consumers of the services, the parents, BQA, teachers as well managers.

16. Any other information
None
17. Signature of applicant:
18. Date
For Official Use Only
Action taken:
Action Officer: Date:
Permit: Granted/ Deferred/ Rejected
ANNEXURE 1
i) Submit the following passport particulars:
Name :
Date of Birth :
Nationality :
Passport Number :

Place of Is	ssue:					
Date of Iss	ssue :					
Date of Ex	xpiry:					
ii)	Submit of Research Proposal					
iii)	Attach an up to date Curriculum Vitae					
iv)	Applicants from foreign countries are advised not to leave for Botswana before obtaining a research permit from the relevant Ministry					
v)	Statutory deposit of resulting publications:					
_	publications should be directly deposited with the following institutions and any artments as may be specified in the permit.					
	1.Permanent Secretary Ministry of Education Private Bag 005 Gaborone, Botswana					
	2. Director, Botswana National Library Services, Private Bag 0036 Gaborone, Botswana					
	3. Director, Botswana Archives and Records Services, P O Box 239 Gaborone, Botswana					
	 User Ministry and/or affiliating body. Director, Research and Development Office, Private Bag 0022, Gaborone 					

For any correspondence pertaining to research permit issued, always quote the

Botswana

permit reference number.

vi)

Appendix 12: Research Permit

3					
3	¥	Office of the Deputy Vice Chancellor (Academic Affairs) Office of Research and Development			
-					
3	UNIVERSITY	Corner of Notwane and Mobuto Road, Gaborone, Botswana	Pvt Bag 00708 Gaborone Botswana	Fax: [267] 395 7573 E-mail: research@mopipi.ub.bw	
3	BOTSWANA	Gaborone, Botswana	Dotswaria	e-mail: restarchigmophp.uo.bw	
3					
3	Ref: UBR/RES/IRB/SOC	C/GRAD/065			
3	28th July 2017				
***	Permanent Secretary Ministry of Basic Educati	on			
3	Private Bag 005 Gaborone, Botswana				
3	RE: REQUEST FOR E. NALEDI BINNIE MSW		A RESEARCH PROPOS	SAL SUBMITTED BY Ms.	
3	from the relevant arm of C	Sovemment, The Office of Re	esearch and Development	ald obtain a Research Permit at the University of Botswana g facilitating the issuance of	
3	Research permits for all U	JB Researchers inclusive of s	tudents and staff.		
_	I am writing this letter is	a support of an application (for a research permit by I	Ms Naledi Binnie Mswela, a ela has proposed to conduct a	
3	study titled "Prospects Childhood Education in	and Possibilities of Accred Botswana". The overall ob	litation Standards as a jective of the proposed st	Quality Measure of Early udy is to explore practices in d as the basis for developing	
3	minimal accreditation sta to the quality of provision	ndards. It is hoped that the fir	ndings of this study will m ion (ECE) in Botswana w	ake a significant contribution ith particular reference to the	
3	The Office of Research	and Development is satisfied	with the process for data	a collection, analysis and the	
2	intended utilisation of fin	dings from this research.	of this application		
3				OUTY OF ROS	
3		ual cooperation and assistant	ie (jai)	JERSITY OF BOTS	
3	Sincerely,		((*	2817 -07- 28 *)	
_	(Mosaco		1/4	A349 14 W W W W W W W W W W W W W W W W W W	
3	Dr M. Kasule Assistant Director for R	esearch Ethics, Office of R	esearch and Developmen	10 A 10 10 10 10 10 10 10 10 10 10 10 10 10	
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