

Quality of an early childhood program in rural areas of Zambia



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ABSTRACT

In 2004, Plan introduced the Early Childhood Care and Development (ECCD) program in rural areas of Zambia. The goal of this program was to ensure that all children receive quality care and to prepare young children for going to primary school. This study will provide a description of the quality of the ECCD program in practice and indicate how the quality of the program can be strengthened. In order to examine the quality of the program in practice, observations were carried out at ten ECCD centres. Since the program is community-based, the views of different stakeholders were included in this study as well. Interviews were conducted with caregivers, committee members, grade 1 teachers, head teachers and Plan staff members. The results of this study showed that there is a lack of quality within the ECCD program because several aspects that are relevant to achieve a quality early childhood program are not realized in practice. According to the participants, there is a lack of motivated and trained caregivers. Furthermore, the participants indicated that there are insufficient materials and facilities at the centres. The lack of these elements was also observed during the field visits. If more attention is given to caregivers' training and the monitoring process the quality of the program can be improved. However, it is important that the community is not dependent on the resources of Plan Zambia and that they are able to manage the centre by themselves.

Keywords: early childhood centres; quality care; development; ECCD.

INTRODUCTION

In 1990, the Education for All (EFA) movement was launched at the World Conference in Jomtien, Thailand. At this conference, 155 countries and 150 organisations agreed to universalize primary education and massively reduce illiteracy by the end of the decade. The EFA movement focuses on the need to provide learning opportunities for everyone in the world, from infancy to adulthood (UNESCO, 2006). With the introduction of the EFA movement a globalization of early childhood development took place, with a much broader emphasis on the holistic development of the child (Marfo et al., 2004; Woodhead & Moss, 2007). Since then, governments, bilateral and multilateral donor agencies and non-governmental organisations (NGO's) have been committed to providing basic education for children, youth and adults from all over the world. One of these NGO's is Plan International, one of the oldest and largest children's development organisations in the world.

Plan's vision is of a world in which all children realise their full potential in societies that respect people's rights and dignity. Plan is active in more than forty developing countries across Africa, Asia, and the Americas to promote children's rights and to lift children out of poverty. Zambia is one of the countries in Africa where Plan supports poor children and helps them access their rights to education, health, food security and income generation. One of the main goals of Plan Zambia is to improve the quality of education among all children in Zambia (Plan International, n.d.).

Zambia is a large country in southern Africa with a population of more than twelve million people. The majority of the population (60%) lives in rural areas. Nearly half of the population (48%) is under fifteen years old. Zambia has a weak economy and a shortage of qualified employees to influence the education system in this country. There is a high level of illiteracy, especially in the rural areas and among females. In 2000, only 72% of children between 10 and 14 years of age had received five years of schooling, and 30% of 15 to 24 year olds were illiterate. These numbers reflect the poor quality of education in general. Compared to 1990 (2%), the gender disparity in primary school enrolment had increased to 6.7% in 2002 (IOB, 2008; Plan, 2004).

Various factors influence the school enrolment of children in Zambia. In many families in rural areas, children have cultural responsibilities. Boys are often involved in agriculture and livestock herding. Girls are generally responsible for taking care of younger siblings and are supposed to marry at a young age. Because of these cultural responsibilities, children often are unable to attend school (Ansell, 2005; Plan, 2004). Another important factor that influences the school enrolment of children is the large number of young children that are not well prepared for schooling. This has led to a high level of repetition and dropout rates of children in primary schools. The 2002 Corporate Planning Monitoring and Evaluation (CPME) baseline of Zambia showed that only 55% of children are enrolled in primary school while only 17% of those are enrolled for a complete primary education. The HIV/AIDS pandemic has also contributed in increasing dropout rates and lowering the quality of education. Because of deaths of family members, many children leave school prematurely as no one is left to provide the required financial and moral support. The key issue is that many children still do not complete their basic education, which is of inadequate quality (Plan, 2004).

The Zambian government committed itself to include the Millennium Development Goals (MDGs) and EFA objectives in its education policies to improve the education system.

In 2002, the Ministry of Education introduced free access to primary education, which has resulted in a massive increase in school enrolment. Within six years, enrolment in primary education had increased by 67%; from 1.6 million in 2000 to 2.7 million in 2007 (IOB, 2008). However, although Zambia was successful in improving access to education, the quality of the education system is still insufficient. There is a lack of motivated and qualified teachers and an increase of pupil-classroom ratios, especially in schools in the rural parts of Zambia. The IOB Impact Evaluation report (2008) on primary education in Zambia shows that approximately 70% of the grade 5 pupils do not attain the minimum level of English, whereas no more than 6% actually achieve the required level. The dropout of school is much higher in rural areas than in urban areas which has to do with the fact that parents in urban areas are better educated than parents in rural areas (IOB, 2008). In addition to this, children in rural areas have less access to preschool education and are not well prepared for schooling.

To improve access to preschool facilities in the rural areas of Zambia, Plan introduced the Early Childhood Care and Development (ECCD) program in 2004. The goal of this program was to ensure that all children receive quality care and to prepare those children for going to primary school (Plan, 2004). To get a better understanding of the effectiveness of the ECCD program of Plan Zambia, it is important to have a clear overview of the implementation and quality of the program in practice. The aim of the current study is to describe the quality of the ECCD program in practice and to determine how the quality of the program can be strengthened. In this study the two central questions are:

- *What is the quality of the ECCD program in practice as related to scientific and theoretical standards?*
- *How can the quality of the ECCD program be strengthened?*

To answer these questions, this study is structured as follows. First, a description of the ECCD program will be given, followed by a theoretical background which consists of scientific literature on early childhood programs. The consistency of the description of the program and the scientific literature will be discussed in the last part of the program theory. After the program theory an overview of the research method will be given, followed by the results section. Finally, the central questions of this study will be answered in the conclusion.

PROGRAM THEORY

Program Description

The ECCD program focuses on the development of young children from zero to six years of age. The accent of the program lies on improving children's readiness for going to school and on increasing the likelihood that all children - boys and girls - enter school and complete primary education (Plan, n.d.). According to Plan, children who receive good care during early childhood will benefit more from later education and other social services. By participating in ECCD programs, the inter-generational transmission of poverty will break and future costs of education, medical care and other social spending will reduce (Plan, 2004). The ECCD program can be divided into two parts: the home-based ECCD program for children from zero to three years of age and the centre-based ECCD program for children from four to six years of age. The focus of this study is on the centre-based program, therefore only a description of this program will be given.

Plan is a child-centred community development organization which implies that they work closely with members of the community. An important aspect of the ECCD program is the initial phase where Plan pays attention to sensitize the community about the importance of early childhood development. This sensitization process is done by organizing meetings with important members of the community. Before Plan decides to support the community with an ECCD centre, the community has to indicate if they are interested in the program. If the community is interested in setting up a centre, Plan asks them to establish land for the centre and to identify caregivers and members for the Centre Parent Committee (CPC). The caregivers and committee members are selected by the community by a vote. Plan provides a training program for the caregivers and committee members. During the one-week training program, the caregivers learn about the development of young children and they receive a caregiver's guide book with descriptions of activities that are suitable for young children. The training program for committee members is also one week long. The members get information about the importance of an early childhood program and their responsibilities as a committee. The committee is accountable for the development and management of the centre (Kasonde-Ng'andu, Ndhlovu, Ntalasha, 2008; Llewellyn, 2007).

Besides providing training programs, Plan supports the community by setting up the structure of the centre as well. The community is responsible for manufacturing the bricks to build the centre. Plan provides them with cement and helps them build the centre. A

playground, latrine and borehole are also placed near the centre. In some communities, there is no permanent structure and the caregiver may use a church in which the children can come together. Depending on the resources of the organization, Plan provides the centres with toys and teaching materials as well (Kasonde-Ng'andu et al., 2008; Llewellyn, 2007).

Once there is a structure where the children can come together, the caregiver starts teaching the young children. Working as a caregiver is a voluntary job; however, the community is expected to support the caregiver. The committee and the caregiver decide the amount the parents have to pay to send their children to the centre. The amount varies at every centre, but it ranges from \$1.50 to \$3 per month. The committee members are responsible for paying the caregiver. If parents cannot pay the amount for their child, the members discuss other options to support the caregiver with the parents (Kasonde-Ng'andu et al., 2008; Llewellyn, 2007).

Plan also plays a role in monitoring the centres. Each community has its own Community Development Facilitator (CDF), who works for Plan. To monitor the centres, the CDF visits the centres in his or her community every month. During these visits the CDF observes how the centre is run (Llewellyn, 2007).

Theoretical Background

Definition of Early Childhood, Care and Development

Early childhood care and development can be seen as a provision of services that respond to young children's basic needs for cognitive stimulation, early learning, nutrition, and basic health care (Jamarillo & Tietjen, 2001). Evans, Myers and Ilfeld (2000) define ECCD as follows: '*Early childhood care and development includes all the supports necessary for every child to realize his/her right to survival, to protection, and to care that will ensure optimal development from birth to age eight.*' This definition includes different concepts which all have a certain meaning. To get a better understanding of what these meanings are, the concepts early childhood, care and development are described separately.

Early childhood is defined as the period from birth to the age of eight. This period has been identified as the most formative in a child's development, one that will have long-lasting and permanent effects on the life of the child (Evans et al., 2000; Heckman, 2006; Jamarillo & Tietjen, 2001). From birth to the age of eight, a child develops skills to move, think, feel, and interact with people. The extent to which these skills are developed depends on the child's environment. Children below the age of eight learn best when they have objects they can

manipulate, when they have chances to explore the world around them, and when they can experiment and learn by trial-and-error within a safe and stimulating environment (Evans et al., 2000; Tomasello, 1999). The surroundings of the child are also an important factor for the development of the brain. Brain development during the first years of life is based on the experiences of the child. The most rapid period of brain development takes place in the first two years, laying the pathways for significant intellectual, emotional, physical and social functions. From ages two through five, a child develops language skills, fundamental social skills, and the base for 'learning to learn' that translates into school readiness. By age six, the brain has reached 90% of adult size (Blakemore & Frith, 2005; Jaramillo & Tietjen, 2002; Young & Mustar, 2008)

According to Evans et al. (2000), care is one of the key factors in promoting children's development. The concept of care can be defined as a process that results in the creation of an 'enabling environment', which can support the child's optimal development. Care is mainly based on what caregivers (families, communities, services and institutions) are able to provide for the child. Children with consistent and caring attention are generally better nourished, are less likely to become ill and learn better than children who do not receive such care. Conversely, neglected children are susceptible to disease and malnutrition. Children with poor care are also less equipped and motivated to learn. Besides this, Evans et al. (2000) claim that care is embedded in the culture in which a child grows up. It includes what adults and significant others in a child's environment are able to provide, such as a healthy environment, supportive and affectionate interaction, appropriate modelling, stimulation and protection.

Development is defined as the process of change in which the child develops more complex skills of moving, thinking, feeling, and interacting with people and objects in their environment. Both physical growth as well as psychological (mental and emotional) growth are crucial in a child's overall development (Evans et al., 2000; Grantham-McGregor et al., 2007). Learning can also be seen as a crucial aspect of development. It includes the process of acquiring knowledge, skills, habits, and values through experience, experimentation, observation, reflection, study and instruction. The outcome of development is closely related to the quality of care that a child receives (Evans et al., 2000). According to Urie Bronfenbrenner (1979), development means 'a lasting change in the way in which the individual perceives and deals with the environment'. Bronfenbrenner's ecological model of human development consists of different systems that affect the development of children. The micro system is the immediate setting in which the individual finds him- or herself, such as

the home or the classroom. The interrelationship between these settings, for example the link between the child's home and the school, is covered by the meso system. The third layer of the system is called the exosystem. This layer consists not the environment that the child or individual is in but that which has an effect on the child's life, such as the local community and the parental employment. The overall system is called the macro system. This system includes the governmental policies, the culture and social values that have an impact on the development of children (Moritsugu, Wong & Grover Duffy, 2010). Plan operates at three different levels in which a distinction can be made in accordance with the ecological model of Bronfenbrenner. The micro level focuses on the child's family. Attention is given to the behaviour, practices, skills, choices and decision-making powers of families and caregivers. The influence of the community is covered by the exosystem level. This includes services obtained at the community level from the community organizations. National influences on a child's well-being are covered by the macro level. At this level, the focus is on policies, budgets, allocations and systems. ECCD interventions can be delivered separately, but they are closely related and it is more cost-effective to combine them in ECCD centres (Plan, n.d.). All the levels are interconnected rather than independent from one another. Research has demonstrated for instance that the family environment and setting of the school can predict a child's future academic success (Moritsugu et al., 2010). Therefore, it is important that child-friendly, family-focused and community-based programs are offered to support the development of the child.

Over the years, various approaches and programs of child care have been developed. One of these approaches is the home-based support program. The home-based approach emphasizes the importance of the role of parents in a child's development. Parents and other caregivers within the home environment are children's first teachers and therefore play a crucial role in the cognitive and social development of their children. In a home-based approach, the home environment of a child is seen as a 'haven of security' to young disadvantaged children whose families may not otherwise be able to participate in an early childhood program. In the home-based model, parents are encouraged to become actively involved in the development of their children (Evans et al., 2000; Roopnarine & Hosssain, 2007). Other approaches include centre-based care and education programs for children. Centres can be referred to such as kindergarten, day care centre or nurseries, depending on a child's age. In a centre-based program, children have access to different kinds of learning materials to develop cognitive skills. At the centres a child's development is stimulated by

trained and qualified caregivers. The children's parents are less involved within the centre-based approach compared to the home-based approach (Evans et al., 2000; Roopnarine & Hosssain, 2007).

Effects of early childhood programs

As mentioned in the previous part, many studies confirm that the first years of life can be seen as very important years in terms of a child's physical and psychological development. If the child's body and brain develops well, his or her learning potential will increase. Conversely, children who are insufficiently supported by their surroundings run the risk of delayed or debilitated cognitive development (Evans et al., 2000; Jaramillo & Tietjen, 2002). If the brain develops well, learning potential is increased and chances of failure in school and in life are decreased (Blakemore & Frith, 2005; Evans et al., 2000; Jaramillo & Tietjen, 2002; Young & Mustar, 2008). Thus, the success of a child during the period of schooling and the participation of children in society as adults depends to a large extent on the foundations laid during the early years of life (Evans et al., 2000; Heckman, 2006).

These foundations can be laid through preschool or an early childhood program. Numerous studies have indicated that an early childhood program has a positive impact on the performances of children in primary school. The most impressive results on the impact of preschool experiences were found in the High/Scope Perry Preschool program. The High/Scope Perry Preschool program was designed in the United States to alter the causal chain that leads from childhood poverty to school failure to subsequent adult poverty and related social problems. The program includes developmentally appropriate learning materials based on psychological principles of development, small class sizes, staff trained in early childhood development, parental involvement and the importance of the non-educational needs of the child and family (Burger, 2010; Moritsugu et al., 2010). The High/Scope Perry Preschool program is based on participatory learning. In this learning method, the child is considered to be an active and self-initiating learner. The child selects his or her own activities from a variety of learning areas prepared by the teacher. Research on the High/Scope Perry Preschool program shows that due to preschool experiences, educational outcomes of children can be improved and the need for school remedial services can be reduced. Over the past decades, several studies have been conducted to indicate the long-term effects of this program. The evidence of these studies shows that the High/Scope Perry Preschool program has resulted in lowered crime rates, reduced high school dropout, less need

for welfare assistance, increased earning as adults and higher personal wealth (Burger, 2010; Jamarillo & Tietjen, 2001; Moritsugu et al., 2010).

Several studies have ratified the found effects of the High/Scope Perry Preschool Program. According to Burger's review of 2010 and Siraj-Blatchford and Woodhead's study of 2009, children's capacity to learn is improved by early learning opportunities, which could improve children's school performance in the future. Burger's 2010 review shows that early childhood programs reduce school readiness gaps among children from families with a low socioeconomic status. By providing social and cognitive experiences, early childhood programs serve as a supplement to children's home environments. These programs create a familiarity with school institutions and procedures which have a positive impact on formal schooling later on.

Although many studies have been done on the effects of early childhood programs, most of these studies have been conducted in Western societies. To get a better understanding of the effects in non-Western societies, more studies should be conducted in other parts of the world. However, a few studies have already been conducted in non-Western countries. Berlinski, Galiani and Gertler (2006) evaluated the impact of preschool education on primary school performances in Argentina. They concluded that one year preschool attendance increases children's performances in third grade. In addition to this, Berlinski et al. (2006) state that due to preschool programs the degree of attention, participation and discipline of children is positively affected. These effects are crucial for the development of children because behavioural skills are as important to success in life as cognitive skills (Berlinski et al., 2006). Taiwo and Tyolo's study of 2002 was conducted in Botswana in southern Africa. The academic performances of children in grade 1 of primary school were measured by a pupil's assessment. This assessment consisted of English, mathematics and science-related items. The results of this study indicate that children with preschool experiences perform significantly better in the various subject areas than children without those experiences. Taiwo and Tyolo (2002) conclude that early childhood education equips children with required skills which make learning in first grade easier for children. Haihamba, Hayden, Otaala and Zimba's study of 2004 was also conducted in southern Africa. They studied the impact of child care programs in Zambia. This study shows that early child care programs support children's learning and social-emotional development. The program provides a place where the child can play, explore and get prepared for school (Engle, Dunkelberg & Issa, 2008).

Based on the aforementioned studies, it can be said that the development of children is positively affected when children attend an early childhood program before they enter primary school. However, the long-term presence of this positive effect depends on the experiences of the children in higher grades. Children with an initial advantage in skills provided with good instruction in classrooms may learn more than their less skilled peers. Conversely, without enriching and stimulating instruction in the early years of school, the academic skills of preschool attendees may stagnate and their initial advantages may be lost. Therefore, it is important that primary schools provide stimulating instructions and individual attention, so the positive effects of the preschool experiences of the child will remain (Magnuson, Ruhm & Waldfogel, 2007). Plan recognizes the importance of this process by investing in the ECCD program and at the same time investing in the quality of primary schools. If the quality of primary schools improves, children's preschool experiences gained by participating in the ECCD centres will have a long-term impact on the performances of children in primary school (Plan, 2004).

Indicators for a quality ECCD program

The aforementioned effects of an early childhood program can only occur when the program meets certain requirements for a quality ECCD program. However, it is difficult to define a universal ECCD model that should be applied in all settings (Evans et al., 2000; UNESCO, 2006). The needs of children in the first eight years of their lives vary in different contexts. An important aspect is cross-cultural differences that determine the setup of an ECCD program. Context-specific early childhood interventions and implementation strategies are required to construct a quality ECCD program. For example, different approaches are needed for children living in refugee camps or in conflict areas than for children living in slums in urban areas (Britto, Boller & Yoshikawa, 2011). It is not appropriate to construct a 'one size fits all' approach to ECCD services, because an early childhood program should be linked to the community, values and needs of a specific area or context. To ensure that the ECCD program fits into the context, the program has to be built on traditional child care practices and respect children's cultural diversity (Britto et al., 2011; Evan et al., 2000). Although there is no universal model, several studies indicate that there are a few components which a quality ECCD program should consist of in every context or setting (Evans et al., 2000; UNESCO, 2006). A quality ECCD program should combine programs that are related to health, nutrition, education and social development. Research shows that a combination of these

dimensions is the key to improve the health, cognitive and social-emotional development of young children (Britto et al., 2011; Evans et al., 2000; UNESCO, 2006)

It is important that the children's family and the community are involved in the program. The children's parents have to be supported in their parenting roles. In an ECCD program, the economic conditions of the family must be recognised in order to determine what resources are available to support the child's growth and development. An ECCD program should respond to this in such a way that children can develop optimally. The ECCD program should build on the strengths of the community (Evans et al., 2000; Myers, 2004). Several studies show that community participation increases the effectiveness of most programs. Involving the community in the ECCD program makes it possible to identify problems and come up with solutions. Due to this involvement, the community creates ownership and accountability concerning the ECCD program (Evans et al., 2000; UNESCO, 2006).

In community-based ECCD programs, caregivers are often community members who work on a voluntary basis. Despite the voluntary aspect of this job, there are some criteria a caregiver must meet. The caregiver has to understand what the program is trying to accomplish and it must be clear for the caregiver that doing activities with the children is connected to the development of those children. The caregivers must also be highly committed to working in the ECCD centre. Although it is volunteer work, caregivers should be aware of the major responsibilities that her or she has. To make an adequate registration of the children and to teach the children in an appropriate way, the caregiver has to be literate (Evans et al., 2000). The caregivers need an interactive child development curriculum with learning activities that focuses on all aspects of a child's development: cognitive, emotional, social, language and physical skills (Myers, 2004; Siraj-Blatchford & Woodhead, 2009; UNESCO, 2006). A complete curriculum should consist of a theoretical framework, the objectives of the program, a set of activities and a methodology for the implementation of these activities, strategies for the caregivers and a system for monitoring activities and evaluation (Evans et al., 2000; Peralta, 2008). In a quality ECCD program, caregivers have adequate and continuous training and supportive supervision. During training programs, the underlying theory and the practical application of the theory must be dealt with. The caregivers should learn in what way the activities that they supervise at the centres are linked to a child's development (Peralta, 2008; Siraj-Blatchford & Woodhead, 2009).

Besides the importance of the involvement of the community and the criteria for a caregiver to achieve a quality ECCD program, quality indicators are also of importance in terms of the learning environment of the children. The centre's building itself must be constructed in a safe and child-friendly area. There must be enough space, lighting and ventilation for each child. Children who attend the ECCD centre should have access to water and sanitation (Llewellyn, 2007; Myers, 2004, Peralta, 2008). In order to be able to speak of a quality early childhood centre, certain equipments and materials should be available. The centre should contain sufficient furniture for the children and for the caregiver (Myers, 2005; Peralta, 2008). In order to carry out the activities in a meaningful way for the children, the caregivers need learning and teaching materials. With these teaching and learning materials, children can be exposed to relevant educational experiences for an easier transition to primary school. Besides teaching and learning materials, recreational equipment should also be available to children for other activities (Myers, 2004; Peralta, 2008; UNESCO, 2006).

Apart from the aforementioned indicators, the way the educational process in the centre is performed also affects the quality of an ECCD program. In a quality program there has to be a small number of children per class and per caregiver, not more than 25 to 30 children in one class (Llewellyn, 2007). For an optimal learning situation, the interaction between the caregiver and children should be warm and responsive. The activities introduced by the caregiver have to be appropriate for the child's stage of development and address the needs of the child (Myers, 2004). There has to be a variety in the activities performed (outdoor and indoor activities) and the lessons prepared by the caregiver should be organized to be part of a daily routine at the centre (Peralta, 2008).

The described indicators needed to achieve a quality early childhood program according to scientific and theoretical standards are assembled in figure 1. These indicators are the basic criteria for a quality early childhood program which are applicable in every context. Although the setup of an ECCD program differs per context, these basic indicators should be included in every early childhood program (Britto et al., 2011; Evans et al., 2000; UNESCO, 2006). If the indicators are included in an ECCD program, the program can be described as a quality early childhood program that effectively supports children's development and learning processes.



Figure 1. Indicators for a quality ECCD program

Program and theory

As mentioned in the theoretical background the outcome of the development of a child is closely related to the quality of care that a child receives during the first years of life (Evans et al., 2000; Heckman, 2006; Jamarillo & Tietjen, 2001). Plan Zambia introduced the ECCD program to ensure that children receive quality care before they enter primary school. Based on the description of the ECCD program of Plan Zambia and the theoretical background, an expectation can be formed about the quality and effect of the program.

The centre-based approach is the basis of the ECCD program of Plan Zambia. The development of the children is stimulated by trained caregivers in a child-friendly environment. Because of the high level of illiterate parents in the rural parts of Zambia, children will benefit more from this approach instead of a home-based approach. Especially children approaching primary school will benefit from this program. Parents of children in rural areas lack knowledge and skills to stimulate the cognitive development of their children. Within the ECCD program, children have the opportunity to learn how to read and write. Literate community members are trained by Plan to become caregivers, so they are able to stimulate the cognitive development of a child. Although caregivers are responsible for taking care of the children, the involvement of parents and other community members is also included in the ECCD program through the setup of a committee at the centres. According to the description of the program, Plan Zambia and the community members construct the building with a borehole and latrines at the centre. Depending on Plan's available resources, the organization will be able to support the centre with materials and equipments as well.

In brief, it can be stated that the indicators for a quality early childhood program are

reflected in the theoretical description of the ECCD program of Plan Zambia. If the program is implemented in practice as described in theory, it can be expected that the program is of quality and contributes to the development of children. Because of this positive effect, Plan's main goal - to improve children's readiness for going to school and to increase the likelihood that all children enter school and complete primary education - could be achieved. To determine the quality of the ECCD program in practice, this study focuses on the observed quality at the centres and the experienced quality of different 'stakeholders'. Since the program is community-based, the experiences of the community members are included in this study. A description of the exact implementation of this study is given in the next section.

METHOD

Context

This study was conducted in the Chibombo district in the Central province of Zambia. The district has a population of 241,612 people. Plan's ECCD program is implemented in the rural parts of the Chibombo district. The district consists of different communities which in turn consist of different villages. In general, a village includes around two hundred households. A household is located at a compound with various huts for family members. The villages are spread far apart and are difficult to reach because of the lack of roads. Most family members work as farmers and produce their own food on the fields. Plan has been working in this area since 2000 and currently works in eleven communities in this district. In the Chibombo district, 64 active ECCD centres are supported by Plan. Of those centres, 29 have a permanent structure. In the cases of centres without a structure, the children meet in churches or in a classroom at a primary school. An ECCD centre is usually constructed at a location accessible to children of different villages.

Design

For this study a qualitative method was used. Because of the open character of data collection in qualitative research, it is possible to obtain in-depth information about underlying motivations, beliefs, desires and needs of the participants. The participants can express their views, give words to their experiences and describe events and situations (Boeije, 2010; Robson, 2002). Two different methods of data collection in qualitative research were used in this study. The non-participant observation method was used during field visits to get an understanding of the quality of the ECCD program in practice. This method made it possible

to attend the program setting without serving a role in the administration or delivery of the service (Boeije, 2010; Posava & Carey, 1997). The qualitative interview is the second method of data collection that was used in this study. This method has been chosen so the participants were able to give their own view on the quality of the ECCD program and to substantiate this view with arguments.

Participants

The participants of this study can be divided into various stakeholder groups: caregivers, committee members, grade 1 teachers, head teachers and Plan staff. In total 87 community members involved in the ECCD program were interviewed. For a schematic overview of the number of participants, see tables 1 and 2. In addition to community members, three Plan staff members were interviewed about the ECCD program. One of these staff members is a Community Development Coordinator (CDC). This person supervises the CDF's and is responsible for the link between Plan and the community. The other two staff members interviewed are CDFs of communities involved in the research.

Table 1. *Overview of participants – ECCD centres*

<i>ECCD centre</i>	<i>Caregivers</i>	<i>CPC members (10 committees)</i>	<i>Observation</i>
Kasensa	-	-	Yes (pilot)
Munema	2	4	Yes
Buyantanshi	2	5	Yes
Mbwate	4	6	Yes
Santanda	2	7	Yes
Chabota	-	4	No (not functioning)
Sipondo	2	3	Yes
Suse	1	4	Yes
Chikankata	1	6	Yes
Kawama	2	4	Yes
Mupulekese	2	2	No (closed)
Kashitu	2	-	Yes
<i>Total</i>	<i>20</i>	<i>45</i>	<i>10</i>

Table 2. *Overview of participants – primary schools*

<i>School</i>	<i>Grade 1 teachers</i>	<i>Head teachers</i>
Mututu school	1	1
Lombwa basic school	1	1
Munema middle basic school	1	-
Chankumba basic school	1	1
Kampekete basic school	1	1
Nachiyaba basic school	1	1
Chamuka basic school	1	-
Kaputi basic school	1	1
Malombe basic school	2	1
Kabanga primary school	1	1
Chikonkomene basic school	1	1
Mupulekese basic school	1	-
<i>Total</i>	<i>13</i>	<i>9</i>

Instruments

The observations at the ECCD centres were performed using a list of indicators for a quality ECCD centre. These indicators were gathered from scientific literature on the aspects of a quality ECCD program. An observation tool was constructed with the observable indicators (see appendix 1). The four key observation areas were: the physical learning environment, the social-emotional learning environment, the daily routine (activities) and the learning materials. These four areas partly determine the quality of an ECCD centre.

The other two indicators, community involvement and trained caregivers, could not be observed and were included in the interviews with the different stakeholders. The participants were interviewed using a semi-structured interview method. A topic list was set up for each stakeholder group (see appendix 2). The topic list was divided into a general part and a specific part. In the general part the focus was on the participants' background information. The caregivers, head teachers and grade 1 teachers were asked to tell something about their qualifications and teaching experiences. The committee members were asked about their experiences as a committee member. The caregivers and committee members were also asked whether they had received training and what their views were on this training. The aim of these questions was to determine whether the indicator 'trained caregivers' is involved in the program in practice. The interview with the Plan staff members also started with questions about their experience as a Plan staff member. General questions were asked as open questions to direct the style of the interview. The specific part of the interview included

questions on the participants' views on the goal, quality and challenges of the ECCD program. All stakeholders were asked what according to them the main goals were of the ECCD program. By asking this question it became clear whether the stakeholders' perception on the goals of the ECCD program were in line with the actual intended goal of the program. The grade 1 teachers and head teachers were also asked whether they observed differences between children who come from an ECCD centre and children who come directly from home into grade 1. Furthermore, the participants were asked what according to them the key components were for a quality early childhood program. Then the participants were asked how they would describe the quality of the existing ECCD centres on the basis of the mentioned indicators for quality. Finally, the participants were asked how they experienced challenges within the ECCD program and how the program could be improved.

Procedure

The data collection took place during a period of eight weeks. On average, two ECCD centres and two primary schools were visited per one week. Due to holidays, in some weeks only one centre or school was visited. At the first visited ECCD centre a pilot observation was performed. In this observation, it was examined whether the observation tool was useful for observing the ECCD centres. The changes that were made after this pilot observation were minimal. The observations at the ECCD centres were done in the morning while the children were being taught by the caregiver. The average observation time was two hours. During those two hours, various activities were observed. The researcher took place in the back of the centre to get an overview of all the children and the caregivers. Notes were made in a notebook with use of the observation tool. All the activities performed at the centre during the observation time were described, taking into consideration the physical learning environment, social-emotional environment, daily routine and materials. In total, ten observations were done at different ECCD centres in the Chibombo district.

The interviews with the caregivers and CPC members took place on the same day as the observation. At centres where more than one caregiver was present, the caregivers were interviewed together. The CPC members were interviewed in groups as well, so they could give their views on the ECCD centre as a committee. In some cases, a volunteer of Plan participated as a translator because some members were not able to express themselves in English. The interviews at the ECCD centre took place in the centre or outside the centre under a tree. The interviews with grade 1 teachers and head teachers were performed at

twelve different primary schools. The interviews with the teachers took place in a class room or in the head teacher's office. Before the start of each interview, the participants were asked for permission to record the interview. The interview questions followed after an introduction about the research and an explanation about the anonymity of the interview.

Analysis

The notes that were made during the observations at the different centres were converted into a scheme (see appendix 3). This overview was used to describe the observed quality at the ECCD centres. The interviews were recorded on tape and a transcription was made of each interview. These transcriptions can be obtained from the researcher. After transcribing all the interviews, a code system was generated to label all the participants' answers. The same codes were assigned to fragments dealing with the same theme. After labelling the answers, the number of times a specific code was mentioned was noted into different schemes. A separate scheme was constructed for every subject in order to get a clear overview of the participants' answers. In appendix 4, one of these schemes is added as an example. The answers of the various stakeholders were compared to determine whether the answers were consistent with or contradictory to each other.

RESULTS

The results section is divided into two parts. In the first part, the key notes made during the observations are described. In the second part of the results section the most important findings of the interviews are shown.

I. Observations

Observations were carried out at ten ECCD centres supported by Plan Zambia. The number of caregivers at the centres ranged from one to four. In general, there were 20 to 30 children present at the centres. At one ECCD centre the number of children was 72. The ages of the presented children at the centres varied from two to eleven years old. The majority of the children were four to six years. At some centres, a registration book was kept to record the number of registered children and number of presented children. In most cases, half of the registered children were not present.

Physical learning environment

Eight of the ten visited ECCD centres had a permanent structure supported by Plan, the structure being a one room building. The building consists of a concrete floor and a thatched roof. There is adequate light and ventilation due to open spaces in the wall. However, the floors in the ECCD centres were dusty because of these open spaces. One of the ECCD centres visited had been constructed by community members on their own initiative. The walls of this centre were built of clay with a sand floor. The other ECCD centre without a permanent structure conducted the program at a church. Six of the ECCD centre's interior were equipped with tables and chairs. The chairs in one of these centres were in poor condition and broke when the children sat down. In the other four centres, children were sitting on stones or tree trunks.

The centres are located near several households and villages. At five centres there was a playground with swings and slides. Two of those playgrounds were of poor quality because of broken swings and slides. There was access to water at five of the ten ECCD centres visited. The boreholes were located near the centres. Latrines had been constructed at five centres. The children of two other centres make use of the latrines of the churches.

All the centres lacked teaching and learning materials. Eight centres did have a black board and chalk that was used during certain activities. Two ECCD centres had building blocks for the children and at three centres there were posters with images of animals. There was insufficient material available for all children and most of the materials were dirty or damaged. There was no store room at the centre in which the materials could be kept. The materials were brought by the caregivers from their homes. During one of the observations a caregiver used leaves and stones from outside to do activities with the children.

Activities & Interaction

Various kinds of activities were performed at the centres. During the activities the caregivers were very friendly and relaxed towards the children. Most of the interactions with children were in the mother tongue. There were no distinctions between activities for children of different ages. Most activities were too difficult for the youngest children and it was not possible for them to engage in those activities. The activities intended for the younger children, on the other hand, were not challenging enough for the older children. The caregivers did not use a timetable or schedule for a daily routine. A lot of different activities were performed in a short time and started unannounced. The children often did not know

what the caregivers expected of them.

The most common activity that was performed at the ECCD centres was singing songs. The children sang songs about the alphabet or the days of the week. Usually the caregiver started singing and the children followed the caregiver. These songs were repeated between five and ten times. Counting was also one of the most common activities at the centres. Several times a caregiver wrote numbers on the black board from one to ten. The children had to count together from one to ten out loud and they had to repeat this a few times. With a stick the caregivers pointed to a number and one of the older children had to say the number. Children were often not able to do this and could only count in the fixed order from one to ten. The children were supposed to watch or listen and then copy the caregiver. At some centres there was attention to writing activities as well. The youngest children could not participate and got bored most of the time. Physical activities were also performed at the ECCD centres, such as a jumping game in a circle. During the break the children could eat whatever they had brought from home. The children had to share the food with the children who did not bring food from home. At the centres with a playground, the children were allowed to play outside after eating.

Good answers and positive behaviour was encouraged by the caregivers. If a child had given a correct answer, the other children and caregivers praised this by clapping and singing *“well done, well done, such a good boy/girl”*. Bad behaviour was also monitored by the caregivers. Children who did not concentrate or walked in the centre during an activity were corrected by the caregiver. There was no individual attention during the activities. Questions were only answered in the class discussion and with a specific child. Because of the lack of individual and personal attention, the children had a passive attitude.

II. Interviews

Goal of the ECCD program

The goals of the ECCD program as described by the participants can be divided into two main goals: preparation for primary school and socialising young children.

Preparing children for primary school

Preparing children for primary school was stated as the main goal of the ECCD program by the majority of the participants. Half of the questioned caregivers indicated that children at the centre learn basic things to prepare them for grade 1. By attending an ECCD centre, children

will learn how to appreciate education and they will get an idea of the principles of education. One of the caregivers stated: *“Before they go to the formal school they should learn to get used to the things they will get there.”* Five of the ten committees also named preparation for primary school as the main goal of the early childhood program.

At the primary school most of the interviewed grade 1 teachers and head teachers argued that the ECCD program was introduced to prepare children for going to grade 1. Nine of the thirteen grade 1 teachers mentioned that at an ECCD centre, children get knowledge about the basics of writing and counting. Because of this basic knowledge the ECCD program contributes to the transition to primary school. Five head teachers of the involved primary schools claimed the same as the grade 1 teachers: *“I think the goal is to ensure that children are able to write, especially their names and numbers from one to ten before they enter grade 1.”*

The interviewed staff members of Plan Zambia did not mention preparation for primary school as a specific goal of the ECCD program. However, the staff members stated that all children should pass through an ECCD centre before they go to primary school. The main goal according to the Plan staff is not necessarily preparing children for grade 1 but ensuring a child’s holistic development. This holistic approach focuses on issues of social, cognitive and physical development.

Teaching children how to socialise with others

The second goal of the ECCD centre most often mentioned by the participants relates to the social development of children. Seven caregivers stated that children at an ECCD centre learn to socialise with others. According to the caregivers and two committees, the socialisation process is therefore one of the main goals of the early childhood program. At the centres, children of different ages get the opportunity to mix with friends. The other goal of the program on a social level is that children will learn how to behave in class.

Five grade 1 teachers mentioned socialisation of young children as a main goal as well. According to the teachers children at an ECCD centre have to learn how to interact with other children: *“The goal of the program is that children will be able to work together and that they can cooperate.”* The head teachers and Plan staff did not mention the socialisation process as a standalone goal of the ECCD program.

The goal of the ECCD program as described by the participants is in accordance with the intentional goal of the ECCD program of Plan, namely to improve children’s readiness for

going to school. The participants indicated that they appreciate the ECCD program because of its focus on young children. They also mentioned the importance of the program for the social development of a child. The majority of the participants pointed out that they are grateful that Plan introduced the program in this area so they have the opportunity to achieve these two goals with the children of the communities.

Effects of the ECCD program

At the primary schools the grade 1 teachers and head teachers were asked whether there was a difference between children who attended an ECCD centre and children who came straight from home into grade 1. The grade 1 teachers and head teachers both indicated that a clear distinction can be made between those two types of pupils. According to the teachers, the ECCD program can be seen as a foundation for the development of a child. At some primary schools, the ECCD program is an entry requirement. Five of the twelve visited primary schools first enrol the children who attended an ECCD centre. After the enrolment of those children the schools enrol children who come straight from home. The main differences between ‘ECCD children’ and ‘non-ECCD children’ are notable on a cognitive and social level.

Cognitive level

The majority of the teachers mentioned that children who attended the ECCD program perform better in class than children who did not go to an ECCD centre. ECCD children already have some basic knowledge and skills when they enter primary school. Eleven grade 1 teachers mentioned that those children are able to write their names and identify numbers. They are also able to express themselves in English: *“Most who come from ECCD centres they know how to speak good English at their level”*. On the other hand, children who come straight from home do not have any basic knowledge when they enter grade 1. For those children it is their first time entering a class room and having to use learning materials: *“But those who come straight from home, I can say they don’t know anything. Even how to hold the book, you will find they hold the book upside down.”* Because of the differences between those children on a cognitive level, the teachers described the ECCD children as *fast learners* and non-ECCD children as *slow learners*.

Social level

All the teachers indicated that there is a clear difference between ECCD children and non-ECCD children on a social level. The most striking difference is that ECCD children do not experience any difficulties in interacting with peers. According to the teachers, the reason is that those children learned how to interact with others during the ECCD program. The children who come from an ECCD centre already know how to behave in class. They concentrate in class and do not feel shy asking or answering questions: *“Those who come from the ECCD centre are familiar with the teacher and they don’t feel shy. They even answer questions.”* However, children who entered grade 1 without attending the ECCD program experience many problems on a social level. Sixteen teachers mentioned that those children feel afraid when they come to school and are shy in class. They find it difficult to interact with other children and with the teacher: *“Mainly those who did not go for ECCD, they give a lot of problems. They can’t even excuse themselves to go to the toilet. And in most cases we find them crying.”*

Because of the described differences between ECCD children and non-ECCD children, teachers experience some challenges in class. A number of grade 1 teachers emphasized that the children who entered grade 1 straight from home need a lot more attention, although it is not possible to give individual attention to those children because the number of children per class is too high. The teachers indicated that it is therefore important that they encourage the non-ECCD children to participate actively during activities in class. Although the majority of the teachers said that there is a clear difference between ECCD and non-ECCD children, one of the head teachers was not convinced of those differences: *“The differences between those children is very minimum because of the teaching method at the ECCD centre.”* Because of this statement it is important to note that the differences between ECCD and non-ECCD children mentioned above do not apply everywhere.

Components for a quality ECCD program

Many aspects for a quality ECCD program were discussed by the participants. A description will follow of the components that were most often described by the different stakeholders.

Trained and qualified caregivers

At the ECCD centres, both the caregivers and committee members talked about the importance of a trained and qualified caregiver. The majority of the caregivers said that a trained and qualified caregiver is one of the most important aspects in achieving quality. This

was explicitly emphasized by fifteen out of twenty interviewed caregivers. The caregivers described the meaning of a trained and qualified caregiver in different ways. Some caregivers mentioned that a person has to follow a special course on early childhood for at least six months in order to be able to give quality education at an ECCD centre: *“Caregivers need at least a preschool training about how to handle children. At least for six months or so.”* According to other caregivers, a three-week training program is sufficient to teach young children: *“The training should be at least three weeks.”* Six of the ten committees involved in this study mentioned that a trained and qualified caregiver was an important component for a quality ECCD program.

Many grade 1 teachers and head teachers that participated in this study talked about the importance of a trained and qualified caregiver as well. Twelve of the thirteen grade 1 teachers who participated in this study indicated that a trained caregiver contributes to the quality of an early childhood centre: *“They have to undergo training. Like these days there is an early childhood course. They should have that or any other early childhood training.”* This was emphasized by six head teachers as well.

Plan Zambia mentioned that the qualities of the caregiver influence the quality of the ECCD program. One of the Plan staff members said that a caregiver should be able to read and write. A literate caregiver can interpret the information in the caregiver’s guide book and put it into practice. Another staff member from Plan stated that a caregiver should have enough knowledge about early childhood: *“A caregiver should be knowledgeable and trained. We need caregivers that understand what ECCD is all about. Because they are the ones that are putting knowledge in the small ones.”*

Teaching and learning materials

Sufficient and adequate teaching materials - according to the caregivers and committee members - are important in achieving quality at an ECCD centre. Thirteen caregivers mentioned various kinds of materials that are needed for quality education. They all stated that a quality early childhood centre should have books and pencils for the older children to prepare them for primary school. For the younger children it is important that there are toys to play with. The importance of these materials was also recognized by six of the ten committees that were interviewed: *“A quality ECCD centre should have some learning aids, especially in terms of books and what children like, for example toys and all of that.”*

All the grade 1 teachers and head teachers who participated in this study said that

learning materials are a key component for a quality ECCD program. The teachers indicated that the toys at the centre serve the function of interesting and attracting the children to the centre. One of the head teachers stated *“In terms of materials they should have quality materials which may arouse the interest of the young ones who are going to the centre.”*

The Plan staff members did not mention specific teaching and learning materials that are important to achieve quality at an ECCD centre. According to Plan, a centre should have child-friendly play materials. The presence of these materials is a good contribution to shape the children in an appropriate way at the ECCD centre.

Infrastructure and surroundings

In addition to the discussed components, all the participants mentioned infrastructural aspects and surroundings as important components of a quality ECCD program. At the ECCD centres, the caregivers and CPC members stated that the program has to be carried out in an adequate and suitable building for young children: *“What makes a centre of quality is a good standard infrastructure for the children, they need a permanent building.”* To receive quality education, the children have to have furniture so they are able to sit down in class. The children need desks on which to do writing activities. The surroundings of the building also determine whether the program is of quality. Four caregivers and four committees mentioned the importance of the presence of toilets and water near the centre: *“A quality ECCD centre needs a toilet and good resources for water.”*

The components toilets and water were mentioned by a few grade 1 teachers as well. In terms of the surroundings of a quality ECCD centre, the teachers most often spoke of the presence of a playground. According to five grade 1 teachers, a playground near the ECCD centre would add value to the program. A playground motivates young children to come to the centre. The children should be able to play with each other during the break and after the lessons. One of the grade 1 teachers stated: *“The playground should be equipped with what is needed for the children, there should be swings so the children will be motivated.”* The importance of the environment was also mentioned by the head teachers. Half of the participating head teachers mentioned that a quality program includes an attractive building with proper furniture for the children.

One of the Plan Zambia staff members emphasized that access to water and toilets is a condition for quality. Without water resources, it is not possible to speak of a quality centre. The children who attend early childhood centres should be able to go to the toilet and drink

water or wash their hands. Plan Zambia indicates that providing hygienic conditions for children at the centres is one of the main components in achieving quality in the ECCD program.

Challenges within the ECCD program

All the stakeholders were asked how they would describe the quality and challenges of the ECCD program. Eleven participants indicated that they experienced the quality of the centres as poor. The majority of the participants did not specifically describe the quality of the program but mentioned several problems they faced within the ECCD program.

Motivation of caregivers

The motivation of caregivers is seen as the major challenge at the ECCD centres. The ECCD program assumes that the community members - mainly the parents - contribute to the motivation of the caregivers. All the interviewed participants mentioned that in practice this contribution barely exists. Parents do not pay the caregivers for various reasons. The ECCD program is implemented in rural areas where people can be classified as poor. In these areas parents cannot afford the amount they have to give to the caregivers. The reason that parents do not pay the caregivers also has to do with the lack of educational background of parents. Many parents do not see the value and importance of the ECCD program. Priority is given to field work so the parents can support their children with food. The parents prefer to take their young children to the fields so they can help their parents instead of taking their children to an ECCD centre. Parents appreciate primary education more than early childhood programs because primary education is included in government policy and is free for all children. A Plan staff member stated: *“Because government has declared primary education is free. And now you want a child at an ECCD centre to pay. So parents will say: No I wait until my child can go to primary school.”*

Thirteen caregivers mentioned that the lack of payment makes caregivers unmotivated to work at the ECCD centre. Without motivation, it is hard for the caregivers to support themselves and continue taking care of the children at the centres. One of the caregivers indicated: *“The other caregiver stopped last year because we are not being motivated. Because we have to sacrifice our own time. Instead of me doing things at home to benefit for my own, now I come here to teach other people’s children and I get nothing.”* Plan Zambia stresses that if a caregiver no longer wants to work at the centre, this will have an impact on the ECCD program.

Another community member will then have to be trained to work at the ECCD centre. Plan Zambia does not always have the resources to train new caregivers. As a result, in some cases a new caregiver may have to take care of the children at the centre without being trained.

Lack of facilities

The second main challenge of the ECCD program is the lack of facilities. The caregivers and committee members indicated that the absence of certain facilities causes the lack of quality at the ECCD centres. Fifteen caregivers and three committees mentioned that there are not enough teaching and learning materials at the centres: *“The materials we have to teach the children are not adequate and there is not enough.”* The caregivers pointed out that the available materials at the centres must be stored in the homes of the caregivers because of the absence of a store room. Robbery is one of the problems that the caregivers deal with. It is not possible to store materials at the centres because of the open windows people can enter the building to take the materials: *“The structure is not that good. The way it was built, you cannot store anything. From outside they get inside the building and take things.”*

Another issue that was mentioned by five caregivers and two committees was the lack of food at the centre. There is no kitchen at the centre so the caregivers are not able to prepare food for the children. Some children bring their own food to the centre but a lot of children do not bring anything with them: *“There is not enough food for all children. You will find that this child is eating and that another child is not eating.”* The caregivers indicated that a lot of children are hungry when they come to the centre and they cannot concentrate or participate during the program. Other problems of the program are related to facilities around the centres. Three committees mentioned that there is no access to water near the centres and that the playground is in a bad condition.

Recommendations to improve the ECCD program

After discussing the challenges of the ECCD program, the participants were asked what could be done overcome these challenges and to improve the quality of the ECCD program.

Trained and qualified caregivers

The majority of the participants mentioned trained and qualified caregivers as a key aspect for improving the ECCD program. Plan provides a one-week training program for caregivers before works start in the centre. Eight caregivers pointed out that this training is not sufficient

to take care of young children. The caregivers want to participate in more training to acquire more knowledge about taking care of young children. One of the caregivers stated: *“I think we should have more workshops because the year before the last one it was never again. We had the last one in 2009. So from 2009 there has been no training up to now.”* According to thirteen teachers at primary schools, the ECCD program should introduce qualified preschool teachers to improve the quality of the program. One of the Plan Zambia staff members said that the one-week training program of the caregivers is sufficient to handle children at the centre. To improve the ECCD program, the content, and not the duration of this training should be altered: *“So for me extending days will not be the solution, but the solution will be on the content, what are we talking about.”* Another staff member of Plan Zambia emphasized that caregivers should have continued training during the year. The focus of the training should be on the gaps that were identified during the monitoring visits and the skills of the caregivers should be improved.

Motivated caregivers

At the ECCD centres, five caregivers and two committees mentioned that motivation for the caregivers and more teaching materials are needed to improve the ECCD program. Motivated caregivers were also indicated by eleven teachers and all of the Plan staff members as an aspect for improving the quality of the program. Different approaches have been given on how caregivers can be motivated. Sensitization of parents is the approach that was most often mentioned by the participants. Community members and parents have to be more aware of the importance of early childhood care and development. A head teacher stated: *“Parents are the ones who have the responsibility to take the children to the ECCD centre. They must be taught to see the need of taking their children to the ECCD centre. And during the sensitization period these parents must be taught about the encouragement of the teachers who are teaching their children.”* If parents are aware of the importance of the ECCD program, they might appreciate the concept and understand why they have to support the caregivers.

A few participants mentioned that parents are not able to motivate caregivers. According to those participants, Plan Zambia should motivate the caregivers to reach quality at the ECCD centres. However, the staff members of Plan Zambia emphasized that sensitizing parents about the importance of ECCD is the main solution for the issue of unmotivated caregivers. Motivating caregivers is not necessarily about paying them: supporting the program is also a way to motivate the caregivers. A Plan staff member said: *“I think, it is not every parent that have the money to pay. We are dealing with vulnerable households. But if these*

vulnerable households are handled very well they can even be the one that produce the materials that we are looking for, or slash the grass at the ECCD centre, or plow a field for the ECCD centre. But the way people have seen payments is in terms of money." The involvement of the community in the ECCD program is important to improve the program.

Role of the government

The government is not involved in the ECCD program at the moment. Thirteen teachers and Plan Zambia indicated that the involvement of the government in the program will influence the quality of the ECCD centres. According to the participants, the government should introduce an early childhood policy. To ensure that early childhood becomes a policy, first the government has to consider ECCD a priority: *"ECCD is not a priority for the government. So we need people who can advocate so the government sees ECCD as a priority."* Twelve teachers emphasized that the program will improve if the government employs trained preschool teachers to work at the centres. The payment of those teachers should also be one of the government's responsibilities. One head teacher stated: *"The government should come in in terms of payments of the preschool teachers. Because Plan cannot afford to build schools for us, to renovate schools and then also pay the teachers. So they need to work hand in hand with the government"*. A Plan Zambia staff member mentioned that the role of Plan is to lobby and involve the Ministry of Education in the ECCD program.

CONCLUSION & DISCUSSION

In 2004, Plan Zambia introduced the ECCD program in rural parts of the country. In this program, the focus is on improving children's readiness for going to school and on increasing the likelihood that all children enter school and complete primary education (Plan, n.d.). This study was conducted to explore the quality of the ECCD centres supported by Plan Zambia. It was examined how the ECCD program is implemented in practice and how different stakeholders experience the quality of the program. In addition to this, it was examined which indicators are needed to strengthen the quality of the ECCD program. Based on the theoretical background, the ECCD program of Plan Zambia could be expected to be of quality and have a positive effect on the cognitive and social-emotional development of children. This was expected because the theoretical description of the ECCD program stated that the program includes all the aspects that are needed to achieve a quality early childhood program (Evans et al., 2000; Myers, 2004; Peralta, 2008; Siraj-Blatchford & Woodhead, 2009; UNESCO, 2006).

However, the results of this study show that the ECCD program is not implemented in practice as described in theory.

Quality of the ECCD program in practice

The first question of this study was ‘*What is the quality of the ECCD program in practice as related to scientific and theoretical standards?*’. In the theoretical background indicators for a quality early childhood program, according to different international studies, were discussed. There is no standard or universal model that can be introduced in all settings because of cross-cultural differences (Britto et al., 2011; Evans et al., 2000). However, there are several indicators that form the basis for a quality ECCD program. A quality program should combine aspects of health, nutrition, education and social programs to provide a holistic approach to children (Britto et al., 2011; Evans et al., 2000; UNESCO, 2006). Several of these indicators correspond to the discussed aspects during the interviews. Trained caregivers, adequate teaching materials and facilities were mentioned by the participants as key components for a quality early childhood program. The view on the duration of training for caregivers to achieve quality differed among the participants. Access to water and latrines were also described as necessary components for quality.

Evans et al. (2000) pointed out that the inclusion of the indicators for quality in an early childhood program ensures that the development and learning process of children can be influenced effectively. According to the interviewed grade 1 teachers and head teachers, the ECCD program has a positive effect on the cognitive and social development of a child. The described effects of the teachers are consistent with the studies that have examined the influence of preschool experiences on the performances of children in primary school. Early childhood education reduces school readiness gaps and equips children with required skills which make learning in grade 1 easier for children (Burger, 2010; Taiwo & Tyolo, 2002). It can be said that in the ECCD program of Plan Zambia, children are prepared for primary school and therefore perform better on a cognitive and social level than children who did not attend the program.

Despite this positive effect as described by the teachers, the quality of the ECCD centres can be described as insufficient. The participants indicated that not all the mentioned aspects for a quality ECCD program are reflected in practice. Because of the lack of motivated caregivers and facilities, some of the participants indicated that they perceive insufficient quality at the ECCD centres. Based on the observations and interviews it can be

stated that the ECCD program of Plan Zambia mainly consists of the construction of a building. There is a lack of quality within the ECCD program because several indicators for quality are not being realized in practice. It is the community that tries to involve children in the program to improve the transition to primary school. The caregivers make an effort to nurture and educate the children but they lack knowledge about how to handle children of different ages. Because of the lack of knowledge, resources and facilities, the ECCD program cannot be properly implemented in practice.

Recommendations to strengthen the quality of the ECCD program

The second question of this study is '*How can the quality of the ECCD program be strengthened?*'. During the interviews the participants discussed the challenges they experienced concerning the ECCD program. The main challenges are unmotivated caregivers and the lack of materials and facilities. To meet these challenges the participants indicated that the caregivers have to receive more and better training. Raising awareness is one of the solutions that the participants mentioned to ensure that the community is willing to motivate the caregivers. The participants also pointed out that the government has to play a role in the ECCD program to achieve quality at the centres. Based on the observations and interviews it can be stated that there are some aspects that can be improved to strengthen the quality of the ECCD program. To work on the quality, it is important to take the current strengths of the ECCD program into account. A notable strength is the fact that because of the introduction of the program by Plan Zambia, people are more aware of the importance of early childhood care and development. In a few years Plan established large numbers of ECCD centres in rural areas of Zambia. As a result, a lot of young children have the opportunity to attend the program instead of staying at home or working in the fields. This is a very important shift for children who grow up in rural areas of Zambia. The ECCD program invests in the development of those children and improves the readiness of children for going to primary school. By the introduction of this holistic program in rural areas Plan Zambia indicates that every child, regardless of their background, has the right to grow up in a child-friendly environment where the child's social, cognitive and physical development is stimulated. To increase the impact of the program on the development of the children, the quality of the program can be strengthened by improving some aspects of the ECCD program.

The involvement and support of the community is a key indicator for a quality ECCD program. To create ownership and accountability in the community a lot of awareness must be

raised among the community members (Evans et al., 2000; Myers, 2004; UNESCO, 2006). The caregivers and committee members are often already convinced of the importance of the ECCD program but there is still a lack of appreciation among the children's parents. The committees and caregivers can organize meetings with the parents to involve the parents in the program. Plan Zambia can support this process by sending the CDF to the community to participate in this meeting. During this meeting, parents can be made aware of the fact that the first years of a child's life form the foundation for the further development of the child. Parents also have to be informed that it is their responsibility to provide food for their children when they send their children to the centre and that they have to motivate the caregivers. Currently, parents consider motivation paying the caregivers money. In the meetings, it can be explained to the parents that they can support the caregivers otherwise. Parents can support the caregivers by helping them at the centres or they can pay the caregivers in kind.

At the moment, Plan provides a one-week training program for caregivers. Some of the interviewed caregivers mentioned that the training is too short and that they would like to have more knowledge about the development of children and how to take care of and teach young children. To achieve quality at the centres, caregivers have to be trained continuously to improve their skills and teaching methods. According to Myers (2005), quality education can be achieved if caregivers implement activities that are appropriate for the child's stage of development and address the needs of the child. During training, caregivers should learn how children of different ages should be handled. Currently, the community does not have the knowledge to train the caregivers independently. However, Plan Zambia does not have enough resources to provide continuous training for every caregiver. To improve the training of caregivers, Plan Zambia could train one person in every community who will then be responsible for organizing training for the caregivers of the nearby centres. So, instead of training every caregiver, Plan can train and support one person who will be able to provide continuous training for other caregivers.

The surroundings of the centre also play a key role in achieving quality at an ECCD centre. In some cases Plan constructed a borehole, latrines and a playground near the centres. However, there are several centres where these facilities have yet to be established. To achieve quality at the centres, the children should have access to water and sanitation at every centre. Without access to water and sanitation, the health aspect of the program is inadequate and the children cannot fully participate in the program (Myers, 2004; Peralta, 2008). Instead of building more centres, Plan could use their available resources to improve this aspect at the

existing centres. So, in the future at every centre there will be a borehole, latrines and a playground. The presence of sufficient and adequate teaching or learning materials is also an indicator for quality. However, Plan Zambia does not always have sufficient resources to provide teaching materials for the centres. When a centre is constructed the community has to be aware that it cannot depend on Plan's resources. To ensure that materials are present at the centres, Plan could teach the community to collect or design materials independently through a workshop.

Once an ECCD centre is constructed and running, it is important that these centres are monitored. The committee members indicated that they experience challenges in the monitoring activities. To improve the monitoring process, Plan Zambia could invest more in training committee members to teach those people how to run the centre. The committee members have to be aware that they have to organize their own meetings to discuss the challenges that the community members experience in terms of the ECCD program. In the theoretical description of the ECCD program it is mentioned that the CDF is supposed to visit the centre every month. Unfortunately, in practice there are gaps in Plan Zambia's monitoring process. To improve the centres, the CDFs should visit the ECCD centres consistently and regularly. During those visits, the caregivers and committee members can discuss the problems they face and they can look for solutions in consultation with the CDF.

A lot of resources are needed to improve the mentioned aspects to strengthen the quality of the ECCD program. Plan Zambia is an NGO, implying that their resources depend on the donations they receive. Because of their limited resources, Plan Zambia should invest more in the existing centres instead of the construction of more new centres. At the moment, the quality of the program is questionable and has to be strengthened to increase the impact of the program on the development of the children. If Plan Zambia uses the available resources to improve the existing centres, the ECCD program can be of better quality. Currently, Plan already is advocating an early childhood stand-alone policy in Zambia. This is an important process that has to be continued to involve the government in the ECCD program. If Plan is able to improve the quality of the existing ECCD centres, these centres can serve as an example to convince the government to invest in early childhood centres in rural areas of Zambia.

LIMITATIONS & IMPLICATIONS

Several limitations have to be taken into account in the results of this study. First, in some cases a translator participated in the interviews because of the language barrier between the participants and the researcher. The answers of the participants were translated from the local language into English. This translation process could have distorted the answers of the participants and may include the translator's interpretations. Secondly, the committee members were interviewed as a group. Only a few members participated actively during the interview and answered all the questions whereby not all the participants were heard. This may have led to the loss of valuable information and an incomplete view on the opinions of the committee members. This limitation also applies to the group interviews with the caregivers. Finally, during the observation part of this study the researcher made use of the non-participant method. Because of the presence of an observer, the caregivers could have acted differently than they normally do. In some cases, the caregivers were not informed that they were going to be observed. This made some caregivers nervous and that could have lowered their effectiveness.

Although these limitations have to be considered, they seem to not have a severe impact on the reliability of this study because of the use of different methods of collecting data. Observations and interviews were used to collect data in various ways to get a more reliable view on the quality of the program. By interviewing different stakeholder groups, the data could be compared to determine if the answers were consistent with or contradictory to each other. Due to the involvement of caregivers, committee members, teachers and Plan Zambia staff members, it has become clear which aspects are of importance in strengthening the quality of the ECCD program.

REFERENCES

- Ansell, N. (2005). *Children, youth and development*. New York: Routledge.
- Berlinski, S., Galiani, S. & Gertler, P. (2006) The effect of pre-primary education on primary school performance. *Journal of Public Economics*, 93, 219-234.
- Blakemore, S. J. & Frith, U. (2005). *The learning brain: Lessons for education*. Oxford: Blackwell Publishing.
- Boeije, H. (2010). *Analysis in qualitative research*. London: Sage.
- Britto, P. R., Boller, K. & Yoshikawa, H. (2011). Quality of early childhood development programs in global contexts - Rationale for investment, conceptual framework and implications for equity. *Social Policy Report*, 25, 1-31.
- Burger, K. (2010). How does early childhood care and education affect cognitive development? An international review of the effects of early interventions for children from different social backgrounds. *Early Childhood Research Quarterly*, 25, 140-165.
- Engle, P. L., Dunkelberg, E. & Issa, S. (2008). ECD and HIV/AIDS: The newest programming and policy challenge. In M. Garcia, A. Pence, & J. L. Evans (Eds.), *Africa's future, Africa's challenge: Early childhood care and development in Sub Saharan Africa* (pp. 285-315). Washington, DC: World Bank.
- Evans, J. L., Myers, R. G. & Ifield, E. M. (2000). *Early childhood counts: A programming guide on early childhood care for development*. Washington, DC: World Bank.
- Grantham-McGregor, S., Cheung, Y. B., Cueto, S., Glewwe, P., Richter, L. & Strupp, B. (2007). Developmental potential in the first 5 years for children in developing countries. *The Lancet*, 369, 60-70.
- Haihambo, C., Hayden, J., Otaala, B., & Zimba, R. (2004). *HIV/AIDS and the young child: an assessment of services provided to children affected and infected by HIV/AIDS in Windhoek, Namibia*. Windhoek, Namibia: University of Namibia Press.
- Heckman, J. J. (2006). Skill Formation and the Economics of Investing in Disadvantaged Children. *Science*, 312, 1-3.
- IOB Impact Evaluation (2008). *Primary education in Zambia*. The Hague: Policy and Operations Evaluation Department.
- Jamarillo, A. & Tietjen, K. (2001). *Early childhood development in Africa: Can we do more or less? A look at the impact and implications of preschools in Cape Verde and Guinea*. Washington, DC: World Bank.
- Llewellyn, D. (2007). *Plan Zambia – ECCD profile*. Zambia: Plan Zambia.

- Kasonde-Ng'andu, S., Ndhlovu, N. & Ntalasha, N. (2008). *Evaluation of early childhood care and development and basic education program*. Zambia: Plan Zambia.
- Magnuson, K. A., Ruhm, C. & Waldfogel, J. (2007). The persistence of preschool effects: Do subsequent classroom experiences matter? *Early Childhood Research Quarterly*, 22, 18-38.
- Marfo, K., Agorsah, F. K., Bairu, W. W., Habtom, A., Ibetoh, C. A., Muheirwe, M. R., et al. (2004). Children, families, communities, and professionals: preparation for competence and collaboration in ECD programs. *International Journal of Educational Policy, Research, & Practice*, 5, 31 – 60.
- Moritsugu, J., Wong, F. W. & Grover Duffy, K. (2010). *Community psychology*. Boston, MA: Pearson Education; Allyn & Bacon.
- Myers, R. G. (2004). In search of quality in programmes of early childhood care and education - Paper commissioned for the EFA Global Monitoring Report 2005, *The Quality Imperative*, 1-30.
- Peralta, M. V. (2008). Quality: Children's right to appropriate and relevant education. In Bernard van Leer Foundation (Ed.) *Early childhood education: questions of quality* (pp. 3-12). The Hague: Bernard van Leer Foundation.
- Plan (n.d.). *Plan's community-managed ECCD programs*. Zambia: Plan Zambia.
- Plan (2004). *Country strategic plan for ZAMBIA (2004-2013)*. Zambia: Plan Zambia.
- Plan International (n.d.). *Plan Zambia*. Retrieved at November 22, 2010, from <http://planinternational.org/where-we-work/africa/Zambia>.
- Posava, E. J. & Carey, R. G. (1997). *Program evaluation methods and case studies*. New Jersey: Prentice-Hall.
- Robson, C. (2002) *Real World Research: A resource for social-scientists and practitioner researchers*. Oxford: Blackwell.
- Roopnarine, J. L. & Hosssain, Z. (2007). The roving caregiver program: a family-based early intervention programme for enhancing early childhood development and parenting. In Bernard van Leer Foundation (Ed.) *Strengthening the young child's care environment* (pp. 25-29). The Hague: Bernard van Leer Foundation.
- Siraj-Blatchford, I. & Woodhead, M. (2009). *Effective early childhood programmes*. Milton Keynes: The Open University.
- Taiwo, A. A. & Tyolo, J. B. (2002). The effect of pre-school education on academic performance in primary school: a case study of grade one pupils in Botswana.

International Journal of Educational Development, 22, 169-180.

Tomasello, M. (1999). *The cultural origins of human cognition*. Cambridge: Harvard University Press.

UNESCO (2006). *Strong foundations: early childhood care and education*. Paris: United Nations Educational, Scientific and Cultural Organization.

Woodhead, M. & Moss, P. (2007). *Early childhood and primary education*. Milton Keynes: The Open University.

Young, M. E. & Mustar, F. (2008). Brain development and ECD: a case for investment. In M. Garcia, A. Pence, & J. L. Evans (Eds.), *Africa's future, Africa's challenge: Early childhood care and development in Sub-Saharan Africa* (Directions in Development: Human Development 42700, pp. 71-91). Washington, DC: World Bank.

APPENDIX 1 – Observation tool ECCD centres

Date:

District:

Community (village):

Name ECCD centre:

Number of caregivers:

Start and end time ECCD centre:

Start and end time observation:

Details – children present	Boys	Girls	Total
Number of children age 3			
Number of children age 4			
Number of children age 5			
Number of children age 6			
Total number of children present			

Details – children registered	Boys	Girls	Total
Number of children age 3			
Number of children age 4			
Number of children age 5			
Number of children age 6			
Total number of children registered			

Indicators for observation

Based on Evans, Myers and Ifeld (2000); Llewellyn (2007); Myers (2004); Peralta (2008); Siraj-Blatchford and Woodhead (2009).

* Give a description of the observed activities – note the beginning and end time of each activity.

A. Description of the physical learning environment

- **Seating area/classroom:** child-friendly environment, furniture, light and ventilation
- **Hygiene:** access to clean drinking water, sanitation facilities, soap
- **Conditions of the learning materials:** clean, child-friendly

B. Description of social-emotional environment

- **Caregiver-child interaction:** caregiver talks to children, ask questions, listens to responds, supportive, warm, friendly, encourages positive behaviour, monitors negative behaviour
- **Child-child interaction:** positive, friendly and kind to each other
- **Activities:** work/play in groups, opportunities to work/play alone, appropriate activities for different ages

C. Description of daily routine

- **Greetings:** caregiver greets the children by name
- **Literacy activities:** storybooks, storytelling, book reading, rhymes or songs, alphabet activity
- **Mathematical activities:** days of the week, counting songs or rhymes
- **Corner play:** free play activities, caregiver observes the children during free play time
- **Outdoor play:** free play time or organized games/activities with caregiver, opportunities for children to jump/run, show coordination, body movements
- **Closing:** reflection on day, farewell songs

D. Materials:

- Mats
- Blackboard
- Books
- Pencils
- Posters
- Small figures (animals/dolls)
- Puzzles
- Board games

APPENDIX 2 – Topic List Interviews

- *Introduction:* Introduction of research, thank the interviewees for participating, ask for permission to record the interview, give an indication of the time the interview will take, explain the intention of the interview (interested in opinions, experiences and ideas), anonymity interviews.

Background information (*open questions -> indicates the style of the interview*):

- Can you introduce yourself (age, qualification/experience as caregiver/teacher/committee member)

Part for caregivers, committee members and Plan staff – Organization of the ECCD program:

- Can you tell me something about the organization/structure of the ECCD centre (how many hours per day/week is a child attending the ECCD centre, number of staff members in a class, different groups and ages)
- In what way is there a distinction between groups of different ages?
- What kind of activities are organized in the ECCD centres? (distinction between social, emotional and cognitive development?)
- What is the purpose of these activities? / To what does it contribute?
- What kind of materials (books, play materials) are used in the ECCD centres?
- How is it measured if children of the ECCD programs make a progress in their performances (distinction between social, emotional and cognitive development?)
- Are the parents of the children involved in the ECCD programs? If yes, in what way?

Part for grade 1 and head teachers – Effects of the ECCD program:

- In what way do you think that the ECCD programs contribute to the performances of children in primary school? (short and long term effects)
- Is it important for children to attend ECCD centres before coming into grade one? Can you give reasons for your answer?
- Do children who have an ECCD background perform different in class on cognitive level? If yes, in what way (examples)? If no, why do you think there is no difference?
- Do children who have an ECCD background perform different in class on social level? If yes, in what way (examples)? If no, why do you think there is no difference?
- What are the most important things that you notice/observe between the performances of children with an ECCD background and children without an ECCD background?

Part for caregivers, committee members, grade 1/head teachers and Plan staff – Goal & quality of the ECCD program:

- What are according to you the main goals of the ECCD program?
- What are according to you the key components of a quality ECCD program? (what does a quality ECCD centre need?)
- What is your view on the quality of the current ECCD centres?
- Can you tell me something about the challenges that you experience within the ECCD program?
- What can be done to work on these challenges and to improve the quality of the centre (what is the role of Plan in this process)?
- What is the level of appreciation in the community about the ECCD program?
- Do you experience changes (raising awareness/accessibility) in the community due to the ECCD program?
- Do you have recommendations / suggestions for the ECCD programs, especially for the transition from ECCD to primary school?

Closing:

- Talk things over / conclusions
- Thanks

APPENDIX 3 – Scheme observed quality ECCD centres

	Presented children	Registered children	Permanent structure	Furniture	Play ground	Water	Latrines	Teaching materials	Literacy	Math	Corner play	Outdoor play
1. Kasensa	28	45	X (not used during observation)	-	-	X	In church	Cars (not at centre)	Songs	Counting	-	X
2. Munema	13	38	X	X	-	-	-	Papers	Songs & alphabet	Counting/days of the week	-	-
3. Buyantanshi	25	47	X	X	X	X	X	Blocks (not clean)	Songs & alphabet	Counting/days of the week	-	X
4. Mbwate	27	36	X	X	X -bad condition	X	X	Papers, pencils	Songs	Days of the week	-	X (break)
5. Santanda	23	35	X	X (broken)	X	X distance	X -bad condition	Posters, pencils	Writing & Songs	Counting	-	X (break)
6. Sipondo	22	22	X	X	-	-	X	- (black board)	Songs & alphabet	Days of the week	-	-
7. Suse	16	25	X	X	X -bad condition	X	In church	Blocks & posters	Songs	Counting/days of the week	X	X (break)
8. Chikankata	24	36	X	-	-	-	X	Books & black board	Songs & storytelling	Counting/days of the week	-	-
9. Kawama	72	118	- (no floor)	-	X	-	-	Abacus & books	Songs & alphabet	Counting	-	X (break)
10. Kashitu	40	80	- (church)	-	-	-	- (no structure)	Posters	Songs & alphabet	Counting/days of the week	-	X
Total			8	6	5	5	5					

APPENDIX 4 – Analyzing scheme interviews: Improvements for the ECCD program

	Caregivers	CPC - Committees	Grade 1 teachers	Head teachers	Plan Staff	Total
Motivation for caregivers	N=5	N=2	N=4	N=7	N=3	N=21
More training for caregivers / qualified caregivers	N=8		N=7	N=6	N=1	N= 22
Sensitization of parents / community	N=2	N=3	N=5	N=4	N=3	N=17
More materials	N=8		N=4	N=5	N=1 (local production)	N= 18
Better coordination / management	N=4	N=1	N=1	N=1		N=7
Store room	N=2	N=1				N=3
Separate group for different ages		N=1	N=4	N=1		N=6
Involvement government			N=7	N=5	N=3	N=15
Cooperation with primary schools			N=1	N=1	N=1	N=3
Improvement structure/building			N=2	N=1		N=3
Curriculum for the caregivers				N=2		N=2
Other content of the training					N=1	N=1