ANALYSIS OF BEST PRACTICES IN ECD CENTRES IN THE EASTERN CAPE PROVINCE IN THE CONTEXT OF LEGISLATION AND POLICY

PHASE THREE POST- INTERVENTION ASSESSMENT REPORT

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CONTENTS PAGE

List of tables

List of figures

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Acronyms

CSD	Centre for Social Development
DOE	Department of Education
DSD	Department of Social Development
ECD	Early Childhood Development
ECCE	Early Children Care and Education
ECDC	Early Childhood Development Centres
ELDA	Early Learning Development Areas
NDA	National Development Agency
NCF	National Curriculum Framework
NELDS	National Early Learning and Development Standards
SDG	Sustainable Development Goals
UFH	University of Fort Hare

Definition of Terms

In the context of this report the Terms are used as defined:

Children with disabilities: A child with a disability is often identified as a child with a long-term problem – often a permanent situation. This can be physical (loss of a limb), sensory (loss of hearing or sight), or cognitive problem (intellectually retarded) (Jablensky, Johnson, Bunney, Cruz... & Kleinman, 2001). Children may have special needs and receive adaptive equipment or assistive devices (artificial orthosis, wheelchair, hearing aid, access to braille etc.), which allows them the opportunity to learn in a conducive environment and be able to grow and develop to lead a functional life.

Impairment: The perception of "disability" is so often associated with what can be seen, such as a person in a wheelchair (Grönvik, 2007). A child's impairment may be short term, observed in their diminished capacity, limited skills, or not being on par (as compared to their peers) for their age level. This may be due to a physical problem (weak muscles), sensory (hearing function due to wax build up / recurring ear infection), cognitive (MVA), socio-psychological-emotional (trauma or abuse / malnutrition) etc.

Developmental Delay is when a child does not reach his or her **developmental** milestones at the expected times. It can be an ongoing major or minor **delay** in the process of **development** (Dosman, Andrews & Goulden, 2012). If a child is temporarily lagging, that is not called **developmental delay. Delay** in development can be defined as a difficulty in achieving specific developmental milestones compared with chronological peers (Racaza, 2013).

Practitioners refers to all ECD education and training development practitioners, i.e.educators, development officers, trainers, facilitators, lecturers, caregivers and including those qualified by their experience, and who are involved in providing services in homes, ECD centres and schools. In respect of educators and trainers, the term including both formally and non-formally trained individuals providing an educational service in ECD (NCF, 2015).

EXECUTIVE SUMMARY

Early Childhood Development (ECD) research has gained momentum worldwide and has become a priority in the government agendas, South Africa included. Neuroscience highlights that almost 90% of a child's brain should be well developed by the age of 5. After the 1994, South African democratic elections, Nelson Mandela's pledge to prioritise the children's needs, have been upheld by many branches of government. The need for knowledge and evidence in ECD policy-making and programming, is widely recognised as critical for the effective implementation of policy, growth and development of this field of practice. A systematic review of education research that was undertaken for the National Research Fund (NRF) evaluated 10,315 texts, and found that there was inadequate character of research available on ECD that could feed into policy-making and implementation. To ensure Child Rights adherence in these formative years, young children should have adequate healthcare, proper nutrition, good quality childcare and nurturing, a clean and safe environment, early learning opportunities and stimulation. In light of the above, the National Development Agency (NDA) in partnership with the University of Fort Hare's (UFH) Early Childhood Development Centre (ECDC), conducted a research study whose main purpose is to inform effective implementation of the ECD policy and produce best practices in ECD centres in the context of legislation and policy.

The research study was conducted in three phases:

Phase One: Baseline Assessment

Phase One was the baseline assessment which was conducted from the 22 November – 2 December 2016 and 23-25 January 2017 in the Eastern Cape Province in four (4) Municipality Districts, namely: Buffalo City, Chris Hani, OR Tambo and Sarah Baartman. 37 ECD centres representing different contexts were identified as the research sites: 10 in Buffalo City; 10 in Chris Hani; 9 in OR Tambo and 8 in Sarah Baartman. ECD principals, supervisors, ECD practitioners and parents participated in this research project. The following dimensions for ECD provisioning were identified as focus areas for understanding practices in ECD centres:

1. Teaching and learning
2. Infrastructure
3. Management of ECD Centres
4. Health, Safety and Nutrition
5. Children with disability

Teaching and learning

The requirement is that teaching for 0-4 years should be provided by qualified practitioners who have undergone formal training for prescribed courses that are responsive to inclusivity and age appropriateness. The children themselves need to be suitably healthy and ready for early learning programmes and stimulation in the ECD centres. The baseline research found that more than seventy percent of the practitioners had qualifications below Matric and fifty pecent did not possess any form of ECD training. This is cause for concern as studies in ECD argue that, for quality ECD programmes, quality teaching is essential and requires quality teachers to provide a learning environment in which children develop in a holistic manner (Atmore, 2012). It emerged that eighty percent practitioners were categorised as poor in teaching competency thereby compromising children's learning. In many ECD Centres implementation of the daily programme was inconsistent, and practitioners were working without standardized curriculum, assessment records and learners' files. In some cases, there were no preparation books and, methods used by practitioners were not relevant to activities carried out. Majority of centres had only one practitioner responsible for bottle feeding, changing nappies and still continue with the daily programme for all age groups. This was an obvious evidence of non-implementation of developmentally appropriate practice because the basic curriculum needs for each age group were not met. Majority of the ECD centres did not follow any prescribed official ECD curriculum, NELDS or National Curriculum Framework (NCF), there was no evidence of ongoing assessment records and were not issuing quarterly progress reports. Pockets of good work were observed in ninety percent of those who possessed ECD level 4 qualification. The dire need for practitioners to possess requisite professional qualification in ECD cannot be overemphasised

Infrastructure

Infrastructure is one of the key requirements for an effective provisioning of ECD services. The centre must have an infrastructure that adheres to norms and standards of learning centres for children 0-4 years. There are laid down specific requirements for children rooms, classrooms, playground and playing materials, and safety regulations. These are important for teaching and learning environment at ECD centres. The study found that most of the infrastructure in ECD centres did not adhere to the norms and standards of learning for children 0-4 years. Many were operating in community halls, primary schools, houses, garages, and church buildings, dilapidated structures or shacks, with inadequate ventilation, poor/lack of ablution systems, absence of lockable kitchens and poor/lack of security fencing especially for ECD centres within close proximity to the road. Generally the poor state of infrustrucure posed a threat to both health and safety of children. It was observed that statistically, infrastructure

in townships was better than in rural centres and comparing across districts, Sarah Baartman is relatively better than other districts while OR Tambo is the worst. Interviewed parents lamented on the safety of the ECD centres citing poor infrastructure as one of the contributing factors to unsafe centres.

Management of ECD Centres

Even though the government declared ECD as a public good, many centres initiated by communities are still mismanaged and unable to offer acceptable ECD benefits (goods), or accountable and responsible services to the public. While the Department of Social Development (DSD) allocates grant or support funding, good governance and accountability which are key to ECD service delivery, are still indistinct. Community participation which is a critical variable for improving the quality of ECD services is still deficient in these centres. The baseline study showed that many practitioners lacked sufficient knowledge on the management of ECD Centres, It was observed that some practitioners operated without assessment records and learner files, non-implementation of developmentally appropriate practices and had inadequate learning resources to engage children in educative play. In some cases, there were no preparation books and there was no consideration for age-appropriateness in grouping children even though the daily programmes were displayed. Only a few principals have received training in early language literacy development and nutrition. The situation called for deliberately planned capacity building programmes.

Health, Safety and Nutrition

Food and nutrition are core variables for teaching and learning. In South Africa, most children from deprived communities go to the centres on empty stomachs making it impossible for them to learn and for practitioners to teach effectively. From the baseline research it emerged that protocols on health and nutrition were not adhered to and food supply was erratic due to lack of funding especially in the unregisterd centres. Assessing the issue of food and nutrition, the study found that the majority of registered centres were not getting the DSD subsidy, they relied on fees for sustainance or resorted to asking parents to pack lunch for children to bring to the Centre. School fees as the only source of funding was inadequate to sustain viable ECD Centres. Health and safety practices in ECD centres was investigated during baseline study which highlighted issues per participating district and per demographical locations. Sarah Baartman district showed much better health and safety conditions while OR Tambo district presented the poorest conditions and, township ECD Centres fared better than it's rural counterparts.

Children with disabilities

They constitute a part of marginalised learners in early learning centres that need specialised care and access to most basic services (UNICEF, 2012). Although the type and extent of disability is diverse and the need for various special support devices critical, the need for inclusivity in the ECD cannot be overemphasised as it is fundamental in addressing basic child rights. During apartheid children “with special needs” from privileged communities were able to access specialised institutions while the rest were rejected, ignored or excluded completely from the system. Post 1994, South Africa radically overhauled government policies to providing services to all children on an equitable basis, acknowledging that deprived education, inequality and exclusion results in perpetuating the poverty cycle. Hence, the study set out to find out the extent of inclusivity of vulnerable – at - risk children, children with disabilities, and those with developmental delays. The baseline study found only three children with disabilities in two centres throughout the four disctricts. Practitioners lacked knowledge of indentifying such children nor the skill to handle them in the centres. Further research through community engagement revealed that parents kept children with disabilities at home. Training practitioners in this aspect became paramount to ensure that the marginalised children enjoyed their right to education.

Phase Two: Intervention Phase

The findings from the baseline report were used to identify the intervention programmes to be implemented in the ECD Centres with the aim of improving quality of service that would benefit all the children attending at the centres. The interventions programmes were designed to benefit all 37 ECD centres, however 16 centres were randomly selected. 8 of these represented the control group (two in each district) and the other 8 were used as the uncontrolled group (two in each district) were purposefully selected for longitudinal studies. The 8 ECD Centres were monitored and supported from October 2018 to May 2019. The interventions implemented by the research team were an attempt to close the gap in knowledge and to support good practices to enhance quality ECD programmes. The aim of the workshops was to introduce new concepts, encouraging participants to investigate further on their own, to demonstrate and encourage the practice of actual implementation practices. The intervention programmes were mostly demonstrative to ensure that all participants were actively involved in ways that allowed them to practice appropriate implementation skills and strategies. The intervention programmes presentation of workshops followed the framework shown below:

Phase Three: Post Intervention Assessment

Phase Three focuses on the post-intervention assessment and, is set out to determine the extent to which the intervention programmes implemented in phase two made strides towards the provision quality early childhood learning in the ECD centres in the Eastern Cape.

TEACHING AND LEARNING

Programme 1: *Introduction to NCF and how to run NCF guided daily programmes*

It is possible to stimulate the gradual transformation of teaching practices through a programme that supports, creates awareness and critical reflection. Much focus was placed on the National Curriculum Framework (NCF) as practitioners were subjected to structured interviews on the exposure to training. It emerged that a good proportion had been trained on the introduction of the NCF and how to run NCF guided daily programmes. There were no differences between the intervention and control groups. Those who had been trained reported deriving a diverse range of benefits that include observing children according to ELDAs, ways of communicating with children, planning for the daily, monthly, and weekly programmes, and how to handle children as caregivers, not as practitioners. However, the outstanding challenges were cited as putting the theory into practice, assessment of children or use of assessment tools, aligning NCF to the school programme and recording of all the documents. Concerns were raised that the level of expectation for planning for the standard of age-appropriate activities was low, with overall comments being below expectation (21%) and so needing improvement (37%). Even though they showed a good understanding of these programmes, exposure to more training would add value to what they already have. Areas identified include implementing NCF guidelines, designing activities according to age, designing age-appropriate materials, grouping children, planning the toy as well as block and book areas, and assisting learners with disabilities.

Programme 2: Running an age appropriate daily programme

Improvement was noted on children's age grouping in some centres, although there was no effective interactive teaching and learning, especially with the baby groups. Effectively running age-appropriate activities is still a challenge due to lack of space to have separate groups, lack of personnel to attend to different age groups, and practitioners have not grasped the concept of making separate planned activities for different groups.

Programme 3 *Assessment of children during teaching and learning in the ECD centres*.

As a result of this training, some practitioners were able to pay particular attention to child development and help assess children and provide guidelines on what to do in certain **circumstances experienced during teaching. There was a noted improvement in the** documentation of observations, developmental milestones, and the identification of gaps. While some positives and benefits were being reported, challenges were expressed using the UFH template. These include (a) specifications on how to record observations into the template, (b) understanding the language on the form, and (c) the intensity of documentation requirements. The dominant concerns came from those that were not part of the intervention. They could benefit from further exposure to training on the assessment of young children, including children with disabilities.

Infrastructure

Programme1: *Creating indoor spaces that promote quality play*

Even though many centres were in a dilapidated state, funds for embarking on structural adjustments and renovation were not available. Hence, practitioners were equipped with skills to create and turn available spaces into educative areas that promote meaningful play, prevent potential health and safety risks, and ways of maintaining available resources. An improvement was noted in the use of indoor and outdoor spaces where structures and grounds permit. Needless to say, such a high level of exposure to training shows the importance attached to learning spaces and augurs well for improvement, especially with the majority being trained by reputable organisations; without doubt, this addressed the gap noted at baseline. Challenges remained, and these included lack of space for partitioning, which was understood to mean that classrooms were already too small to allow adequate spaces for all learning areas. This resonates with findings at baseline that some classrooms were too small for the number of learners. Inadequate toys were also identified as a significant challenge that still needed to be addressed, while others mentions were theft of centre resources and insufficient outdoor resources.

Programme 2: *Maintaining infrastructure*

Previously, due to limited space some display material was pasted on the windows that were rarely open. Through the interventions, practitioners were made aware of the importance for ventilation. Although practitioners cannot do any structural renovations, improvement was noted in the ventilation as practitioners, through training, no longer use windows for displaying learning material except on windows which were rarely opened. However, the lack of ablution facilities remains a health hazard in the majority of the centres. Practitioners were capacitated

in maintaining clean surroundings, although swings and slides were broken in many centres, posing as hazardous for children.

Management of ECD Centres

Programme 1: *Maintaining effective record keeping*

Principals and practitioners were taken through compiling records, learner profile, and conscientized on the importance of keeping updated records. Control centres were dominant over intervention centres in terms of attendance register, class list, observation tool, birth certificate, and assessment records. In contrast, the opposite was true for admission forms and indemnity forms, Thus, there were no clear trends between the two categories, suggesting that the problem of "lack of knowledge in record keeping concerning Programmes, records to be kept" persist and deserves intervention. Conversely, effective record keeping has remained a challenge due to various reasons such as lack of understanding of the forms, language as a barrier because most practitioners are semi-lliterate, lack of monitoring and supervision mechanisms, since nothing compels practitioners or principals to keep records up to date except those that have financial implication like registers.

Health, Safety and Nutrition

Programme 1: *Creating a healthy and safe environment to minimise risks*

It was observed that washing hands with soap was done in all centres although there is no running water in some centres. However, minimal adult supervision was observed in outdoor activities and insignificant adult-child interaction indoors, where for instance, there was one practitioner responsible for as many as 45 children (a combination of 6 babies and toddlers of different ages). In most centres, cleanliness was observed, although overcrowding and substandard infrastructure with poor ventilation was still a challenge. All the centres had the incident book, but only one centre effectively used the book. Generally, it was noted that nutrition in some centres was grossly compromised due to inconsistent food provision, dependent on full registration of the centres. When food runs out, centres reported that they experience a low turnout of children. The dilemma the centres face is that they cannot be registered without adequate essential services, such as water and sanitation.

Children with disabilities

Programme 1: *Applicability of the NCF to disabled children*

Children with special education needs should be identified and supported especially during early childhood. Appropriate early intervention programmes can often reverse the effects of developmental delay and deprivation, allowing children to grow and develop to their full

potential, thereby minimising the need for remedial services to address stunting, developmental lag and social problems later in life. ECD practitioners are in a position to support all parents inclusive of those with children with special education needs. Together they can promote children's well-being, positive identity and sense of belonging while driving comprehensive ECD programmes for quality and equality of opportunity that pays attention to children's holistic developmental domains (NCF, 2015). The purpose of the NCF aims to "actively honour diversity of young children and their capabilities…" (NCF, 2015:4).

Practitioners were introduced to ELDA 1 – Wellbeing and the different components which promote this critical early learning development area. In doing so, practitioners can begin to understand and identify the vulnerable children and those with disability or developmental delay present in the classroom. Practitioners were taken through the NCF to discuss aims, developmental guidelines, examples of activities for promoting Wellbeing Practices for quality early childhood inclusivity. Through discussion with practitioners it came to light that when they observe the children in the ECD Centre, they rely on their experience, rudimentary observation, motherly instinct, and comparison to their own children's development. The biggest challenge was that they might be comparing fast developers to their slow developers.

Programme 2: *Documentation for all children inclusive of children with disabilities*

It emerged in this research that practitioners were not using any document to record their observations about the children especially those of concern with special education needs. Tools were developed that could assist practitioners to properly observe and document information about the children's developmental milestones and possible areas of concern or disability related. Assessment and screening tools introduced to them would help to provide documented evidence of classroom observations so that practitioners could begin to communicate the children's ongoing developmental progression or challenges with parents. Practitioners ususally preferred recording their observations in the observation book, which is more simplified, yet it does not bring out the developmental delays, the special needs, and the various disabilities. The Developmental Milestones Tool allowed practitioners to have an age – and- developmentally appropriate indicator of how babies and children through to 5years develop holistically. The Admissions Profile tool allowed practitioners to capture important information about each chid and their parents. The Overall Health Screening Tool is a referral form for practitioners to use to indicate what the nature of problem area; be it a physical problem or visual or cognitive area of concern etc. There was a need for continuous guidance, monitoring and continuous training due to high practitioner turnover; perhaps also due to the low educational level among the practitioners. Practitioners are also not compelled to keep

updated records in terms of disabilities, developmental delays, and children's cognitive development. Without any supervision and monitoring, practitioners are not accountable to any authority who ensures sensory-motor developmental, educational (cognitive), and socio-emotional development of children is effectively and efficiently documented. The only documents kept up to date are those that have financial implications to them, mainly concerning the feeding of children.

Recommendations

Teaching and learning

- The state teaching and learning in the ECD centres presently is that it is more about care and nurturing for children than cognitive stimulation hence, the need for trained personnel, supervision, and continuous monitoring to ensure children's holistic development occurs.
- There is a need for on-going fundamental training of principals and practitioners on the understanding of the National Curriculum Framework as a way of achieving quality early learning standards for children in the ECD centres

Infrastructure

- There is a dire need for massive infrastructural renovations on ECD centres, and the issue of water and sanitation requires a concerted effort by all stakeholders and arms of government.

Management of ECD centres

- There is a need for on-going fundamental training of principals and practitioners on the understanding of the operational systems for effective management of ECD centres; Continuous post-training, monitoring and evaluation on the practitioners' proficiency in records compilation and use, and assessing children's learning capabilities and recruitment of appropriately qualified personnel to carry out periodic supervision of ECD programmes.

Health, Safety, and Nutrition

- Policy on ablution facilities should be more profound to grant ECD children and the practitioners protection from communicable diseases and minimise safety risks especially by making available children size toilets.
- Policy change to accommodate more children from low-income families to access feeding in ECD centres.

Children with disabilities

- There is a need for more intensified training of practitioners on the use of Watch Points (NCF) and the Overall Health Screening Tools in identifying children with disabilities, special needs, and developmental delayed.
- There is a need for establishing a strong support base, and effective follow up structures and resourceful referral centres for children with disabilities to enjoy their full rights in education and society.

INTRODUCTION

Quality Early Childhood Development (ECD) provisioning cannot be downplayed in a country that has declared it to be a public good. South Africa is a signatory to the 2030 Agenda for Sustainable Development Goals (SDGs) that was adopted by all United Nations Member States, which ratified a historic decision on a comprehensive, far-reaching and people-centred set of universal and transformative goals and targets in 2015 (Costanza, Fioramonti & Kubiszewski, 2016). South Africa is set to conform to the provisions of Agenda 2030 following its membership. In the spirit of South Africa's commitments, the National Development Agency (NDA), in collaboration with the University of Fort Hare (UFH), embarked on a longitudinal study. The first phase of the study was a baseline assessment of the state of ECD practices in 37 ECD Centres in Four District Municipalities of the Eastern Cape province, namely, Chris Hani, OR Tambo, Sarah Baartman and Buffalo City.

Following the dissemination of the baseline results, the study embarked on phase two, which entailed implementing intervention programmes that were considered essential for quality learning in the ECD centres. The interventions planned by the research team were an attempt to close the knowledge gap and to support the implementation of the good practices for the ECD practitioners. Priority was given to the following focus areas: Teaching and learning, Infrastructure, Management of ECD Centres, Health, Safety and Nutrition and Children with disabilities. This document reports on the Post Intervention evaluation, which informs current practices. The report is structured by the focus areas, and reflects the situation at baseline, covers the intervention programmes offered and evaluates the impact of the interventions on the practices in ECD. Literacy, an area recognised as the key to success in education for children from all backgrounds, is the cornerstone of this evaluation.

BACKGROUND

The need for knowledge and evidence in ECD policy-making and Programming is widely recognised as critical for the effective implementation of policy, growth and development of this field of practice. The National ECD programme recommends that research be built into the policy implementation process to ensure that there are on-going reflections and strengthening of processes and practices. Research should accompany the implementation of all new programmes to strengthen systems. It is globally recognised that investing in quality services for infants and young children has a high return later in life (Naudeau et al., 2010). This means that when we lay a good foundation in the early years of life to enable children to perform better in school, they are more likely to be gainfully employed as adults and live as healthy contributing adults for a better society (Naudeau et al., 2010). This is also why the provision of early childhood development (ECD) services is regarded as a public good (National Integrated Early Childhood Development Policy, 2015). Based on the recognition that early childhood development services not only contribute to the realisation of the rights, development and outcomes of the child but also to the growth and development of society as a whole in the medium and long term (Thompson & Lagattuta, 2006; Darling-Churchill & Lippman, 2016). This is clearly indicated in the National Development Plan: Vision 2030, which states: “Make early childhood development a top priority among the measures to improve the quality of education and long-term prospects of future generations.”

The National Integrated Early Childhood Development Policy approved by Cabinet on 9 December 2015, is the latest early childhood development policy for the country which provides for an integrated ECD approach. It sets clear policy positions for the early childhood development sector in rendering services for infants and young children. Furthermore, it brings together the range of services provided across departments to ensure an integrated, comprehensive approach in serving South Africa’s infants and young children as well as their parents. Unless otherwise indicated, (i.e. that a specific policy is repealed), sectoral policies are still valid. However, the National Integrated Early Childhood Development Policy sets clear targets in the transformation of the early childhood development sector and subsequent policy changes.

The policy aims to give direction and facilitate the provision of a comprehensive package of early childhood development services for all infants and young children, including children with special needs, children with disabilities and other developmental challenges. The policy covers the period from conception until the year before children enter formal school or in the case of

children with developmental difficulties and/or disabilities until the year before the calendar year they turn seven (7), which marks the age of compulsory schooling or special education. It provides:

- An overarching multi-sectoral enabling framework of early childhood development services, inclusive of national, provincial and local spheres of government;
- A comprehensive package of early childhood development services and support, with identified essential components;
- Identifying the relevant role players, their roles and responsibilities for the provision of the various components of early childhood development services; and
- Leadership, coordination and collaboration in the delivery of early childhood development services.

A systematic review of education research that was undertaken for the National Research Fund (NRF); evaluated 10,315 texts and found that there is an inadequate character of research available on ECD that could feed into policy-making and implementation. The review makes a compelling case for the establishment of dedicated research capacity and abilities to monitor and study childhood development over a long and sustained period of time. Such an approach emphasises the importance of shifting away from a situation that is characterised by isolated patches of research and institutional infrastructure to an environment in which the research community, research infrastructures, collaborations, and community leaders are knit together to form a coherent and integrative system.

South Africa has made comprehensive ECD programmes a paramount educational priority. The ECD programmes are offered at daycare centres, crèches, playgroups, nursery schools and in pre-primary schools. The survey shows that approximately 50, 8% of the South African children aged 0-4 years attended daycare or educational facilities outside their homes. The survey also indicates that 49% of children in the country remained home and did not attend any ECD programme. This then shows that there is a large proportion of South African children who due to lack of facilities and/or means, miss out on the early childhood development programmes, which are critical in breaking the cycle of poverty.

The University of Fort Hare ECDC embarked on establishment and development of a Early Childhood Development Centre for Excellence in research, teaching and scholarly engagement in the field of Early Childhood Development. The UFH - ECDC represents the University’s commitment to developing a niche academic capacity, effective, replicable evidence-based models for ECD development and research and scholarship in the area of ECD that can contribute to addressing the key questions and challenges related to child

development in South Africa. Specifically, UFH aims to extend its current academic focus on children in the formal schooling system (5 – 9 years of age, including Grade R) to children from birth to four years old.

The Objectives of phase 3– Post intervention evaluation

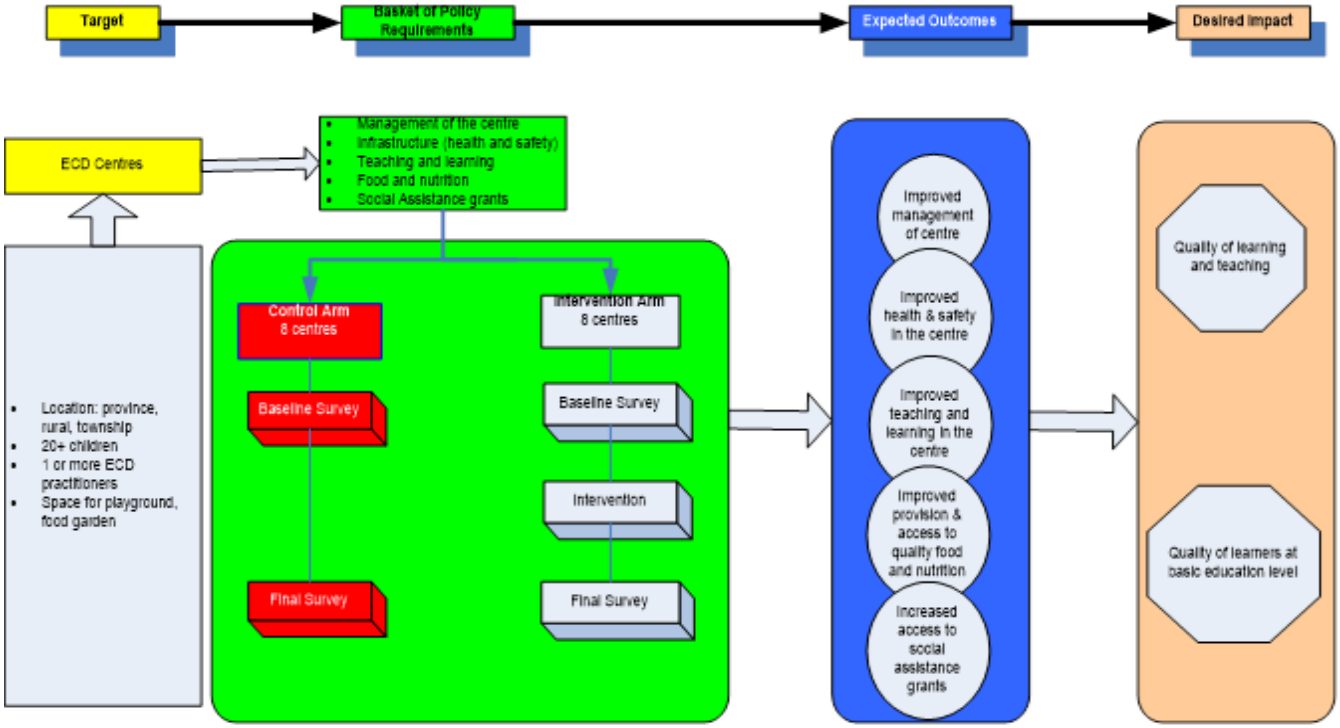
The purpose of the research was to conduct the post intervention evaluation of the research project implemented in the Eastern Cape on the ECD policy. The post intervention evaluation collected information to measure the effect of the interventions that were implemented during Phase 2 of the project and compare the results against the pre-intervention or baseline results conducted during Phase 1 of the project were:

- To evaluate the ECD programme impact (positive or negative) that can be attributed to the implementation of the new ECD policy;
- To draw the lessons that can assist and guide the country to enhance the planning, implementation and monitoring of its ECD programmes, specifically in less resourced areas;

Research Methodology

The ECD policy longitudinal study used a quasi-experiment design framework. The study frame required for the comparison of two sets of samples, which were selected during the start of the research project in Phase 1. At the start of the project, baseline data was collected in both samples and compared to ascertain differences and similarities between the two sampled groups. Interventions were implemented in one group – called the controlled group. In the other group there was no intervention implemented – called the uncontrolled group. Additional qualitative information was collected in all the study sites (controlled and uncontrolled sites) during the first phase of the study. The information collected was to provide the context within which these ECD centres operated. The study was conducted in the Eastern Cape Province, in four District Municipalities: Buffalo City Metro Municipality, Chris Hani, Sarah Baartman and OR Tambo. The sample size of the ECD Centres participating in the study is thirty-seven, (n = 37 ECD centres) half of them are in the controlled group and the other half are in the uncontrolled group.

Figure 1: ECD Centres Research Conceptual Desgn



The study design required comparison of two data sets, using panel data analysis method. The types of study groups (controlled and uncontrolled) on one dimension controlled the panel data analysis. Other data variables were compared against pre-intervention results and post intervention results. The comparison was applied to data sets on all the variables that were used in phase 1 and interventions conducting during phase 2. The study design allowed for measuring of the same variable change over the period of the study. At the same the study compared the differences between the two groups (controlled and uncontrolled).

Social and educational environment research

The first aspect used social sciences techniques to conduct research which observed characteristics of ECD interventions, children who attend ECD Centres, ECD practitioners, environmental conditions such as infrastructure, learning materials and access to food and nutrition for 0-4 and management of the ECD centres are correlated with success. The interventions evaluated included: ECD infrastructure; teaching and learning; and management of ECD centres. These are critical ECD structural and process areas that can be inform how the centre is responding to the needs of children. These centres are a source of childcare,

child education, community resource and therefore are classified as Early Childhood Development Centres (ECDC) in the community.

Quasi-Experiment design

The UFH – NDA ECD research is a quasi-experiment study. The quasi-experimental design selected two groups, upon which the variable were tested, without any random pre-selection processes. This study design brought in features from both experimental and non-experimental designs. Measured variables were defined in the same parameters for both groups so that they can be compared. This method was chosen to maximize internal and external validity. A number of interventions were implemented during Phase 2 in the controlled ECD centres only. In order to do this requires a clear counter-factual where those enrolled in the programmes are compared against a group with similar observable and unobservable characteristics.

The study population was classified into different categories of factors that would be tested and compared in the following areas:

Teaching and learning – is there teaching and learning taking place appropriate to age? Is teaching provided by competent practitioners? Does the ECD centre have access to recreational facilities, teaching and learning materials that are age appropriate?

Appropriate environment for ECD centre – is the infrastructure at the centre appropriate for teaching and learning? Are the staff in the ECD centre trained in managing the environment to meet standards? Are there occupational health and safety measures for both teachers and children in the centre? Are the children having access to appropriate food and nutrition diet?

Appropriate management of ECD centres – is the ECD centre registered? Is there a management committee that meets regularly? Are parents involved in the management and the running of the centre? Are there any management and financial control systems in the centre? Do principals and practitioners have an organised system of documentation management inclusive of assessments and reporting record keeping?

Accessibility to children with disabilities- Are practitioners able to identify disabilities, learning challenges and developmental delays in children? Are practitioners able to handle children with disabilities and developmental delays? Do principals and practitioners have an interactive relationship with parents regarding the children's developmental progression? Are there follow up structures and referral centres available?

Selection bias, cause, and effect

In their set of guidelines on programme evaluation Heckman & Vytlacil (2007) point out that the central problem in evaluation lies in constructing a counterfactual to the programme, particularly where there may be more than one outcome associated with it. Furthermore, Heckman & Vytlacil (2007:1) argue that "there are many possible counterfactuals of interest for evaluating a social programme". Therefore, you may want to exclude the effects of other interventions that may be present that may influence the outcomes. They continue to state that "a full evaluation entails an enumeration of all outcomes of interest for all persons both in the current state of the world and in all the alternative states of interest, and a mechanism for valuing the outcomes in the different states."

These outcomes include the direct benefits received, the level of the behavioural variables of the participants, and the cost of the intervention. Heckman, LaLonde and Smith (1999:18) also suggest that, when assessing the gains of a programme that has redistribution objectives, it is important to consider:

- How widely the programme gains are distributed among participants;
- How the programme impacts of particular groups within the distribution;
- Whether the distribution of gains dominates the outcomes of those that do not participate.

Heckman, LaLonde, and Smith (1999:20) point out that "most of the empirical work in the literature on evaluating government training programmes focuses on means and in particular on one mean counterfactual: the mean direct effect of treatment on those who take treatment." The emphasis of the group over the individual counterfactual "recognizes the inherent impossibility of observing the same person in both states at the same time," and by "dealing with aggregates, rather than individuals, it is sometimes possible to estimate group impact measures even though it may be impossible to measure the impacts of a programme on any particular individual."

Duflo et al. (2008:5) show that doing so requires that the untreated comparison group would have exhibited similar outcomes had they received the treatment, and similarly the treated group would have experienced similar outcomes to this group had they not received the treatment. This is seldom the case when individuals are able to self-select into a programme because there may be unobservable characteristics associated with these people that motivate participation or warrant selection in the first place. If these characteristics play a role in determining the effect of the intervention this, in turn, may lead to biased estimates of the true impact of the programme. It follows that while the exogenous nature of the intervention

implies that the causality necessarily runs from the intervention to the outcomes of the individual, it is not sufficient in that the outcome may be determined endogenously by the individual's unobservable characteristics.

However, when the unobservable characteristics associated with the individuals are identically distributed in both the intervention treatment and comparison groups – which is possible in a sufficiently large sample when assignment to a particular group is random – the effect of selection in the comparison of the two groups is mitigated.

The study there looked at the rural and township based ECD centres in the Eastern Cape Province. The exposures of interest were:

- Does the ECD infrastructure meet the minimum requirements outlined on the ECD Norms and Standards?
- Nutrition – What type of diet should be and is provided to children at the ECD centres?
- What type of learning material should be and currently used?
- Are the levels of ECD practitioners aligned to the ECD Norms and Standards?

Study population

The participants for the study were principals and practitioners in selected ECD Centres. The study population only included ECD centres that participated in the NDA-UFH longitudinal research study within the Eastern Cape Province in both rural and township areas.The research was carried out in three phases which were:

- Phase 1 -Baseline Assessment;
- Phase 2- Intervention Programmes;
- Phase 3- Post-intervention Assessment.

Based on feedback to the baseline report, interventions prioritised the following areas:

1. Teaching and learning
2. Infrastructure
3. Management of ECD Centres
4. Health, Safety and Nutrition
5. Children with disability

The interventions implemented by the ECD team were an attempt to close the gap in knowledge and to support good practices to enhance quality ECD programmes. Although the intervention programmes were designed to benefit all 37 ECD centres, a random sample of 16 centres was targeted; 8 for the treatment (two ECD centres in each district) and eight as

the control group (two ECD centres in each district). Table 2 shows the distribution of the 16 centres by category and by district and type of location.

Table 1: Controlled and uncontrolled centres by district and location

Controlled ECD Centre	Uncontrolled ECD Centre	District	Type of Location
Fundisa	Siyaphakama	Sarah Baartman	Township
Port Alfred	Siphucule	Sarah Baartman	Township
Sinoncedo	Joyful babies	Buffalo City	Informal Settlement
Nompumelelo	Khazilethu	Buffalo City	Rural
Bongolwethu	Save the children	Chris Hani	Township
Ikhwezi	Nompumelelo	Chris Hani	Rural
Falakhe	Upper Ngqwarhu	OR Tambo	Township
Langalibalele	Khanyilanga	OR Tambo	Rural

Table 2: Baseline findings, gaps and related intervention programmes

Focus Areas for quality ECD provisioning	**Key Finding**	**Implications for legislation and policy**	**Recommendations (possible intervention)**	**Intervention programmes implemented**
1 Teaching and learning Training/ mentoring of ECD practitioners Quality of ECD programmes offered	Very few practitioners possess the right ECD qualifications There is no standardised curriculum implemented in the ECD Centres	There is need to professionalise the ECD Sector There is a need for advocacy in the use of NCF	Develop programmes to capacitate practitioners on basic knowledge in ECD Capacity building workshops on NCF to be initiated	**Programme 1:** Introduction to NCF and how to run NCF guided daily programmes **Programme 2:** Running an age-appropriate daily programmeme **Programme 3:** Assessment Practices in teaching and learning practices in ECD.
2.**Infrastructure** of ECD Centres	State of infrastructure is generally poor; however, some districts are relatively better (Sarah Baartman ECD centres have better scores on infrastructure, even though by norms and standards, it is still regarded as poor)	Children are vulnerable and there is limited room for growth in centres with inappropriate infrastructure. Fiscal allocation towards the sector needs revision	Capacitation of practitioners on the maintenance, safety and the use of available indoor and outdoor spaces.	**Programme1:** Creating indoor spaces that promote quality play **Programme 2:** Maintaining infrastructure

Focus Areas for quality ECD provisioning	Key Finding	Implications for legislation and policy	Recommendations (possible intervention)	Intervention programmes implemented
3 Management of the ECD Centres.	Generally, in the majority of ECD centres, there was lack of knowledge in record keeping concerning programmes, records to be kept and sourcing extra funds apart from school fees to sustain the centre with quality of services like meals, playing and learning material to be used	Centres are generally under-resourced. Managers generally lack financial and record keeping knowledge.	Capacitating of managers and practitioners on maintaining effective record keeping and implementing an age appropriate daily programme	**Programme 1:** Maintaining effective record keeping
4 Health Safety and Nutrition	Food provisioning is a challenge in most centres, thereby compromising the health state of children.	There is a need for subsidy for children to access nutritious meals.	Capacitating practitioners in creating safe environment and keeping high hygienic standards and developing vegetable gardens.	**Programme 1:** Creating a healthy and safe environment to minimise risks
5 Children with disabilities	There are few children with disabilities recorded in the centres, and there are no clear support structures, like infrastructure that is appropriate for various types of disabilities, practitioners and principals did	The infrastructure model should contain provisions for physically disabled The practitioner and centre management should all receive periodic training on	Training of principals and practitioners on a) identification of children with disabilities and developmental delays using the Watchpoints in the NCF	**Programme 1:** NCF applicability to disabled children **Programme 2:** Documentation for all children inclusive of children with disabilities

Focus Areas for quality ECD provisioning	Key Finding	Implications for legislation and policy	Recommendations (possible intervention)	Intervention programmes implemented
	not know how to deal with children with disabilities.	handling children with disabilities.	b) Dealing with children with disabilities and documenting children in the screening tools.	

RESEARCH FINDINGS

Demographics

A total of 16 centres (eight for the controlled, at two per district) and eight as a uncontrolled group (two per district) were sampled for the study from which 28 ECD practitioners (1 male and 27 females) participated in the study. The participants were evenly split between the controlled and uncontrolled categories. The first data set was collected via a self-administered assessment structured questionnaire. Table 4 shows how respondents were distributed across districts.

Table 3: Percentage practitioners from each district (baseline and post-intervention)

District	Baseline (N=49)	Post intervention (N=28)
Chris Hani	20	25
Sarah Baartman	31	39
BCM	31	29
OR Tambo	18	7
Total	100	100

In the post-intervention, the majority of respondents were from Sarah Baartman (39%), followed by BCM (29%),Chris Hani (25%); and OR Tambo was the least represented (7%). When compared with baseline, Sarah Baartman and Buffalo City Municipality (BCM) consistently rank highest while OR Tambo is consistently the least.

Table 4: Practitiner's Age characteristics baseline and post internevention

Baseline (N=49) sent		End line (N=28)	
Age category (years)	Per cent	Age category (years)	Per cent
20 – 24	4.1	21 – 25	3.6
25 – 29	20.4	26 – 30	10.7
30 – 34	14.3	31 – 35	14.3
35 – 39	18.4	36 – 40	14.3
40 – 44	12.2	41 – 45	25.0
45 – 49	8.2	46 – 50	7.1
50 – 54	6.1	51 – 55	7.1
55 – 60	10.2	56 – 60	7.1
61+	6.1	61+	10.7
Total	100	Total	100.0

The table portrays a difference between the number of practioners who participated in the studies (N=49 and N=28). The variance was due to the fact that at Baseline data was collected from 37 centres as compared to the 16 centres at Post-intervention phase. The majority of the practitioners are in the age range of 31-45 years, a trend noted at baseline, where the majority of the practitioners were found in the age range of 30-44. This finding augurs well for the 'energetic' delivery of programmes.

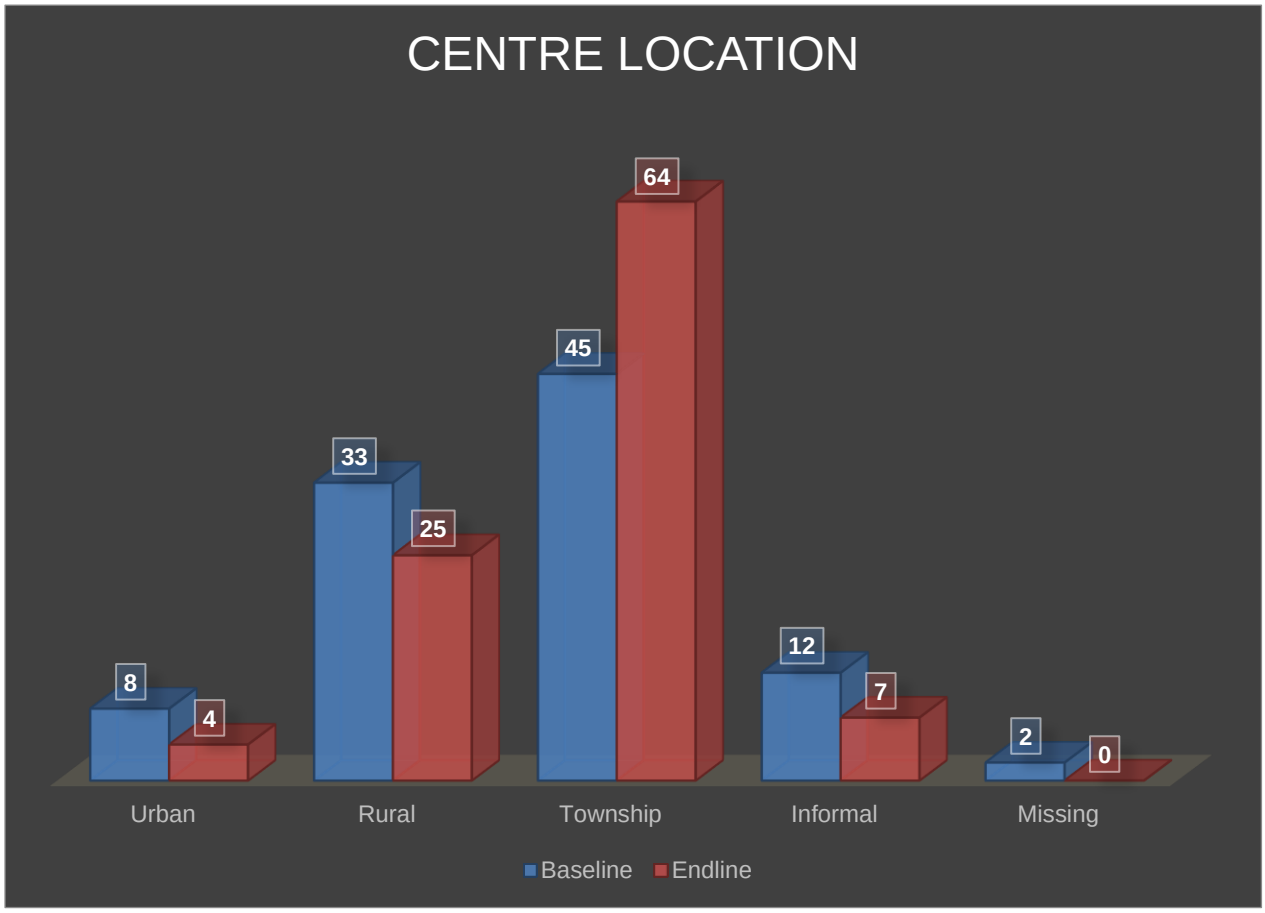


Figure 2: Location of centres for ECD practitioners

It is clear from figure 2 that most of the ECD practitioners came from centres located in townships (64%), a trend similar to the situation at baseline (45%). This is followed by rural areas, with the least number in urban locations. This finding is a reflection of the general pattern of centre locations in the province.

Academic qualifications and ECD teaching experience

Invariably, academic qualifications reflect the extent to which someone can readily adapt to new situations and is trainable. Meanwhile, the experience of teaching at ECD would always add value to children's learning experiences. Practitioners were asked to indicate

their academic qualifications and years of teaching at ECD level. Findings were compared to the status of the same variables at baseline. Table 6 below gives the results of the assessment.

Table 5: Practioners academic qualifications and ECD teaching experience

Academic qualifications		At baseline (N=49)	Post intervention (N=28)	
	Below Matric	71	32	
	ABET	6	25	
	Matric	19	36	
	Post Matric	4	7	
	Total	100	100	
ECD Teaching experience (years)		Baseline% (N=49)	Post intervention% (N=28)	
	0 -1	20.4	0-3	17.9
	2 – 4	36.7	4-6	32.1
	5 – 7	16.3	7-9	7.1
	7+	24.5	10+	42.9
	Missing	2.0	Missing	0
	Total	100	Total	100

Data in Table 6 above shows that most practitioners had Matric as their academic qualifications (36%) followed by those below Matric (32%). It is still a concern that those with Matric and above are fewer than those below, meaning that ECD programmes are still implemented by practitioners with weak qualifications. Such a situation does not augur well for meaningful teaching and learning. On a positive note, the situation at post-intervention compares favourably with baseline, where the proportion of those with Matric and post-matric were much fewer (23%). In addition, there is a massive decline of practitioners with below Matric (71%) at baseline and 32 % at post-intervention. This means that, overall, ECD learners are taught by practitioners with better academic qualifications at post intervention as compared to those at baseline.

For teaching experience at ECD level, the majority of the ECD practitioners have ten or more years of experience. Given the difference in the range of years of experience, a comparison was difficult with baseline. However, suffice to say that the post-intervention stage has more experienced practitioners. The high unemployment rate in other sectors could be a blessing for ECD as matriculants join the band of practitioners.

TEACHING AND LEARNING

Teaching and learning is regarded as one of the most important interventions in facilitating learner preparedness for overall development, including future learning. For that reason, it was not only necessary to identify it as one of the key research focus areas but also to track its evolution from baseline through intervention programmes to post-intervention assessment. The reality would enable comparison with the legislative framework and policy perspectives. Invariably, such an approach would pave the way for recommendations for policy and practice.

The status of teaching and learning at baseline study

The baseline study identified, among other areas, training and mentoring of ECD practitioners and the quality of ECD programmes as essential aspects for interrogation. Unsurprisingly, key findings revealed that, very few practitioners possessed the right ECD qualifications, furthermore, there was no standardised curriculum implemented in the ECD Centres. These findings were telling and worrying, given the importance of the teacher and the right curriculum to children's learning. This finding prompted consideration of interventions that would address these gaps.

Interventions proposed and implemented

The longitudinal research study sought to understand what would become of these gaps and their effects on the delivery of ECD programmes in the centres. The gaps were validated through a consultative process between the NDA and ECD teams that led to building consensus around what gaps needed to be targeted. Intervention needs were identified and addressed through capacity building interventions of: (a) practitioners on basic knowledge in ECD and (b) NCF through workshops. Three programmes were prioritised under teaching and learning as follows:

Programme 1: Introduction to NCF and how to run NCF guided daily programmes
Programme 2: Running an age appropriate daily programme
Programme 3 Assessment Practices of teaching and learning in ECD centres.

The findings are derived from combination of three assessment tools which are:

- structured self-assessment questionnaire for ECD practitioners on various teaching and learning dimensions;

- a researcher' administered semi-structured interview guide that allowed probing beyond the self-assessment by practitioners; and
- An observation checklist used by researchers to provide for an external, independent view.

The tools allowed for corroboration and validation of findings. At the end of each section, the report reflects baseline situation to guide decisions on the identification of gaps. The findings commence with some demographics.

ECD professional qualification

This was an issue at baseline, and the assessment sought to understand the post-intervention status of ECD practitioners' professional qualifications. These were compared with the situation at baseline.

Table 6: Professional Qualifications: ECD practitioners Before and After Intervention

ECD Professional Qualifications				
Level	At baseline		At end line (post-intervention)	
	Frequency	Percent	Frequency	Percent
1	3	9	4	14
2	0	0	0	0
3	0	0	0	0
4	20	63	20	72
5	2	6	4	14
Other/None	7	22	0	0
Total	32	100	28	100

An analysis of table 6 reveals that the post-intervention assessment had better qualification spread compared to the baseline period. For example, 86% of the practitioners (72% with level 4 and 14% with level 5) had a minimum of level four qualifications at the end line compared to 63% at baseline. In addition, no one has the 'other/None' qualification at the end line, while baseline had as much as 22%. This shows an improvement in the level of professional qualification, consistent with the letter and spirit of the national ECD policies. This situation should allow for better service delivery in the ECD centres. The table also shows that at baseline 9% practitioners were at level 1 as compared to 14% at post-intervention phase.

Training Framework

The training framework used was an important assessment area. It does not only benchmark the training with policy requirements but also speaks to issues of relevance, as far as practising at ECD level is concerned. Respondents were asked to indicate the training framework that had been used during their training

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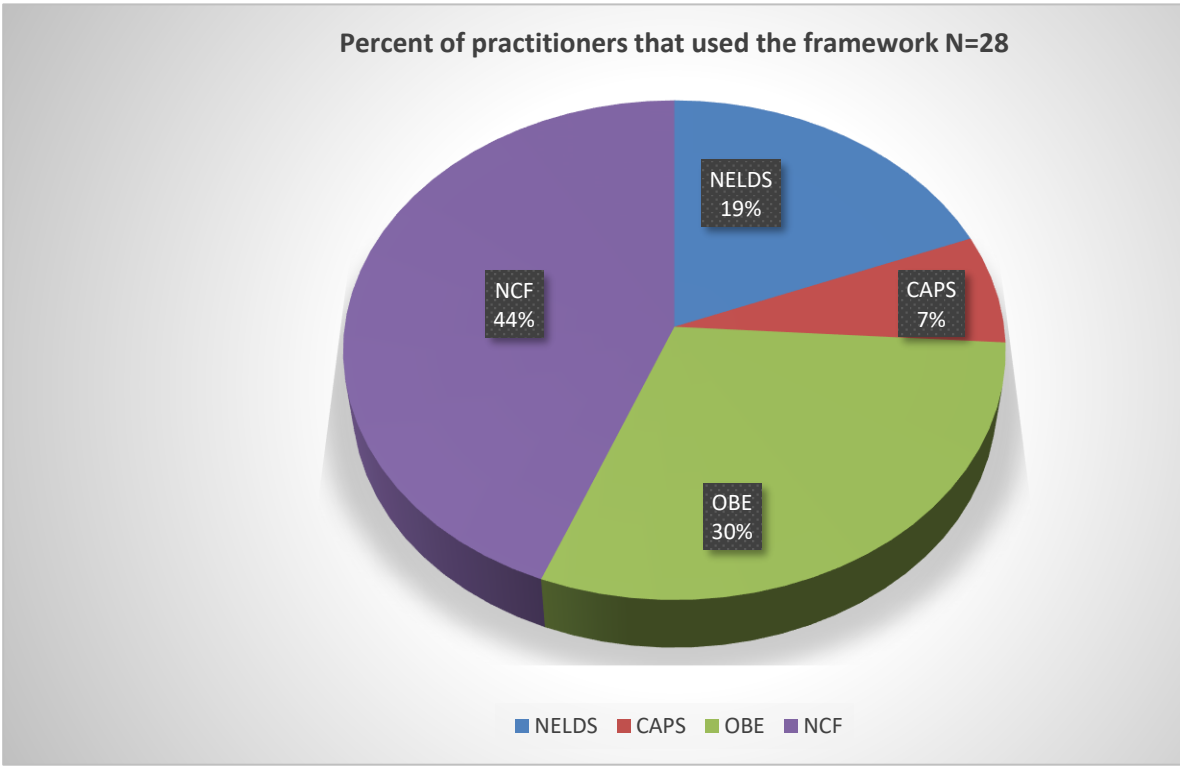

Figure3: The training framework

A good proportion of practitioners were trained via NCF (44%), OBE (30%), NELDS (19%) and CAPS (7%), a sign of bias towards the recommended NCF. The diversity of providers, some of whom may be community and private though providing the richness of options raises questions of accreditation. This is an area for the Department of Basic Education to look into in order to enforce its policy standards and benchmarks.

Table 7: Attendance to other trainings/workshops

Course	Frequency	% age
First Aid	6	23
Home Based Care	2	8
Computer course	7	27

Budget management	1	4
Bookkeeping	3	11
Basic ECD	7	27
Total	26	100

Table 8 presents a situation that is similar to baseline data, in that the practitioners participated in various courses and workshops in addition to their professional training. The additional trainings appear largely relevant: First Aid in consideration of the health and safety needs of young children that are prone to injury and basic ECD as a basic toolkit for ECD practitioners to provide the know-how on the operations and handling children. All ECD personnel should be encouraged to get relevant training on survival skills.

Teacher competency

Teacher competency dimension took into account five sub-dimensions of personal skills, creativity and reflective practice, understanding and knowledge, inter-personal relations and capacity building needs. These are key competency dimensions of teaching and learning that the longitudinal research sought to establish. Comparison with similar dimensions at baseline would provide a measure of whether there were any gains or not from stage 2 interventions. The following sections take a close look at each of the sub-dimensions.

Personal skills

Responding practitioners rated themselves along 18 dimensions of personal skills, all of which are critical in executing the responsibilities of an ECD practitioner. For ease of analysis, these were grouped into five teacher personal skill dimensions of personal attributes, planning skills, developing teaching resources, managing children and time and reflecting on professional practices. Each of the 18 personal dimensions were then rated on a scale of 1 to 4 (1=poor, 2=average, 3=good, 4=excellent). Ratings for each group were summed-upand an average rating was obtained for the group. The ‘average’ results are depicted in figure 4 for a visual display of trends:

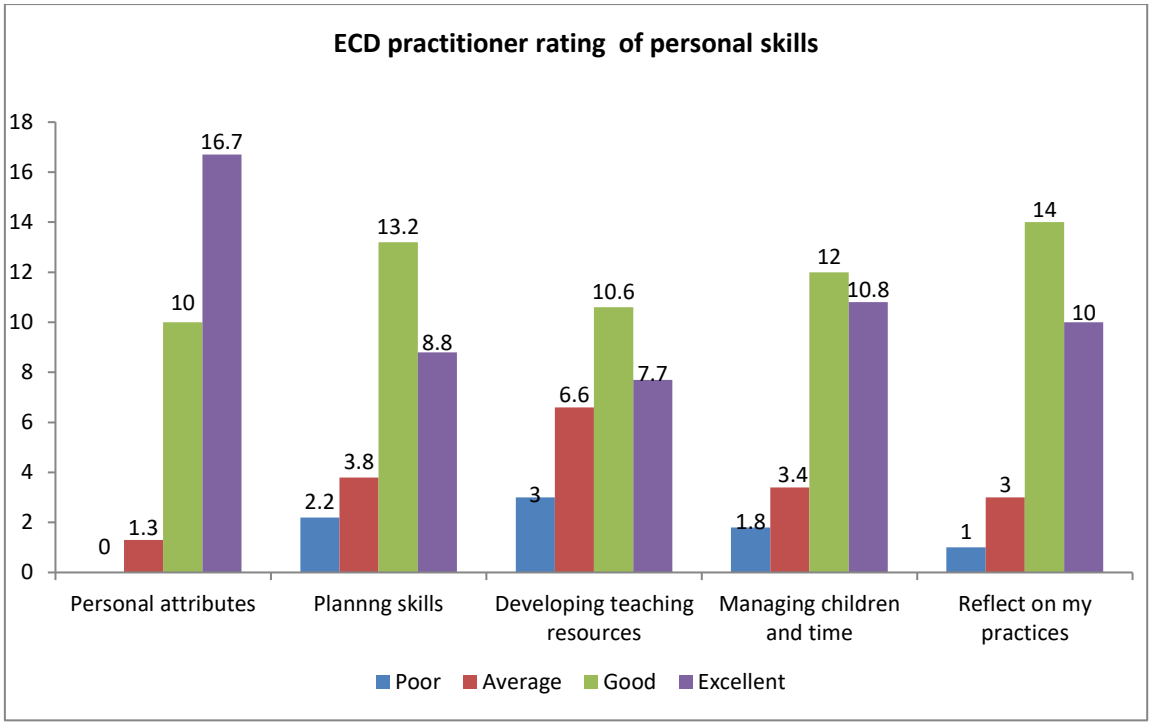

Figure 4: Practitioners' personal skills

Overall, an overwhelmingly positive rating is evident on the personal skills regime. At the personal attribute level (passion for working with small children, voice projection when teaching and punctuality), are attributes that practitioners considered themselves to possess, with overwhelming ratings of good to excellent. Planning skills embraced sensitivity to the age of learners, ability to develop plans for teaching and learning daily, weekly, monthly and quarterly plans. However, there was less commitment to daily and weekly planning; with more preference for monthly and quarterly plans. These ratings were assessed against a post-intervention observation tool used by research to corroborate or otherwise individual practitioner assessment. Overall, researcher observations confirmed practitioner commitment to the preparation of plans (daily, weekly and monthly). The standard of plans was also considered as meeting expectations, although there could be room for improvement. However, though rated favourably in terms of presence, concerns were raised that the level of expectation for planning for the standard of age appropriate activities was low, with overall comments being below expectation (21%) and so needing improvement (37%). This is obviously an area for attention in the next interventions. Attempts to compare with baseline ratings did not yield much as these variables did not feature in that assessment.

Developing teaching resources includes own resources, assessment plan for all children, and use of that plan to assess children weekly, monthly or quarterly. Although faring well,

this was the least average rankings for all dimensions under this category. Expectedly, the 'poor' and 'average' ratings are much higher than for other categories. The assessment plan, in particular, came under the spotlight amid calls for improvement. The observation ratings did not show much difference from personal assessments. Regular assessment of children is a necessary skill, and its depressed rating warrants attention in any future intervention.

There did not seem to be any significant issues from the self-assessments and observations on the management capabilities of both children and time. According to observations, there is evidence of considerable good practices, especially as they relate to detection of abuse cases and knowledge of what measures to take even if it is based on suspicion. A final personal skill was the ability to reflect on one's practice. This was overwhelmingly good to excellent rating, although there might be a need to understand the nature of their perception on reflection even more.

The baseline might not have been very specific on these teacher personal skills. However, the assessments allowed practitioners to reflect on their practices while researchers provided some indication that there were already good practices, which future initiatives could only build on.

Creativity and reflective practice

Creativity and reflection are about the manner the classroom should 'vibrate' in the course of learning episodes. These are what distinguish one practitioner from the other, with a consequent effect on learners. Part of this study was to assess, from practitioner perspective, and be validated by the researcher on-site observations on: i) how creative the practitioners were, ii)their disposition towards reflecting on their interaction with learners. Table 8 is composite and shows the perspectives of practitioners and the observations by the researchers.

Table 8: Practitioners' self-assessment and researcher observations

	Practitioner self-assessment (N=28)		Researcher observations (N=28)	
	Poor to average (%)	Good to excellent (%)	Agree with assessment (%)	Meets expectation (%)
Can use different teaching methods	25	75	92.9	78

	Practitioner self-assessment (N=28)		Researcher observations (N=28)	
	Poor to average (%)	Good to excellent (%)	Agree with assessment (%)	Meets expectation (%)
Make variety of teaching/learning resources	14.3	75.7	96.4	67.9
Caters for all children (include special needs)	17.9	82.1	35.7	35.7
Attend to needs of all the children in class	7.1	92.9		
Reflect on interactions with children daily	17.9	82.1		

The findings show overwhelmingly good to excellent responses from practitioners across all five creativity dimensions; confirming their use of different teaching methods (75%) and adapting them to cater for all children, including those with special needs (82.1%) and the utilisation of diverse range teaching and learning resources (75.7%). They rated highly their propensity to reflect on their interactions with children at the end of each day (82.1%). Observations revealed that practitioners used a variety of teaching methods in their lessons (92.9%) and in agreement they met the expectations as highlighted by 78%. The observers also showed that practitioners used varied teaching resources (96.4%). Whereas observers agreed with practitioners on most creative and reflective dimensions, they differed on accommodating of all the children, especially those with special needs. Only 35.7% of of the 28 observations confirmed appropriate adaptation of teaching method to meet the needs of such learners, with a similar percentage (35.7%) indicating that the evidence they saw met expectations. Overall, practitioners in Sarah Baartman (67%) appear more inclined to supporting children with special needs while those in Chris Hani and OR Tambo were least supportive. This is a clarion call for sensitivity to the needs of children with disability and developmental delays, that is flagged as an area needing attention, requiring capacity building, especially in those districts where it is most neglected.

Understanding and knowledge

Teaching delivery is a function of sound understanding and knowledge of the laid down content and its basic principles, together with those practices that translate these into useful teaching arrangements. Practitioner self-rating statements included the use of curriculum

guides [NCF and ELDAs], appropriateness of teaching arrangements and assessment rationale reporting progress. Observations were made on the extent of agreement with statements and the extent of meeting expectations.

Table 9: Use of the ELDAs in the NCF document

	Practitioner self-assessment (N=28)		Researcher observations (N=28)	
	Poor to average (%)	Good to Excellent (%)	Agree with statement (%)	Meets expectations (%)
Use NCF development guides in teaching	39	61	89.3	64.3
Use ELDAs in teaching/learning activities	29	71	96.4	71.4
Group children appropriately by age	21	79	96.4	71.4
Understand key elements in assessment	46	54		
I can compile progress reports for children	32	68		

From practitioners' perspective, grouping children appropriately by age was the highest self-rated practice (79%), followed by the use of ELDAs in teaching/learning activities (71%). Compiling progress reports for children came next (68%). Although rated above average, the rest were lower down the rank scale. At 61% rating, use of NCF guidelines was rather disappointing; however, it only reflects the truth about exposure to these desired standard curriculum guides, which is supposed to be their key reference curriculum document. Understanding of elements in the assessment process, a key knowledge area for ECD teaching and learning, was ranked lowest (54%). Researcher observations noted that NCF guides and ELDAs were commonly in use (89.3% and 96.4% respectively), and that children were grouped appropriately by age (96.4%). The highest percentages came from Sarah Baartman and Chris Hani and there was little difference between controlled and uncontrolled groups. Overall, their perception of the extent to which they met expectations was above average (64.3%, 71.4 and 71.4% respectively). The need to provide further support while ensuring the standards of performance are raised need not be overemphasised.

Interpersonal relations

Inter-personal relations are an important aspect of the ECD practitioner's work. They take into account those significant others that have a bearing on children's learning. The self-rating tool asked about the practitioner's relationship with parents, fellow practitioners and school management. The results are shown in figure 5 below.

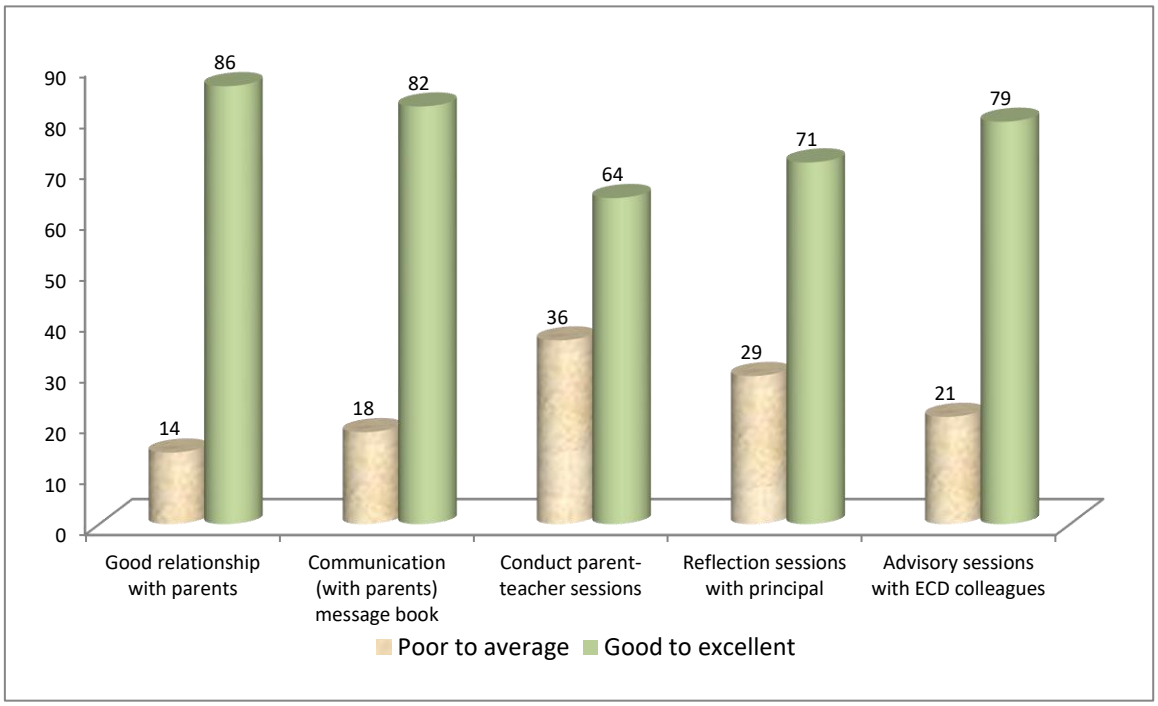

Figure 5: Interpersonal relations

Relations were generally said to be healthy with all categories of stakeholders: parents, manifesting through message book for communication purposes, colleagues for advice about classroom practices and principals for reflection sessions on work practices. The physical sessions were preferred quarterly, even though some were taking place monthly and weekly. These are a reflection of positive support on various teaching/learning facets and should be encouraged across all centres.

Capacity building needs

Given the importance of capacity building in the quest for excellence, a group of questions sought to assess levels of exposure to training received in respect of key ECD teaching and learning categories; including basic early childhood skills, understanding and use of NCF and other dimensions perceived to be good practices for teaching and managing ECD classrooms. The results are shown in table 11 below.

Table 10: Areas of training received

	Poor to average	Good to Excellent
Basic early childhood care skills	3	25
Understanding and using the NCF	11	17
Making various resources for teaching and learning	5	23
Learning through play	1	27
Assessment of children during play	1	27
Creating and maintaining safe infrastructure	8	20
Managing effective record keeping	9	19
Implementing age appropriate programmes	3	25

The ratings are skewed heavily towards good and excellent. The heavy slant towards learning through play and assessing them during play is an encouraging feature that places due emphasis on 'play' as a teaching model at ECD this level. Practitioners also rated basic Early Childhood Care (ECC) skills and implementing age appropriate programmes considerably high, as areas where they had been capacitated. Comparatively, capacitation in understanding and use of the NCF, managing effective record keeping and creation and maintenance of safe infrastructure emerged as areas where the system could do better.

Much focus was placed on NCF as practitioners were subjected to structured interviews. Several questions were asked around exposure to training. Out of this, an additional layer emerged that a good proportion had been trained on the introduction of the National Curriculum Framework (NCF) and how to run NCF guided daily programmes. There were no differences between the controlled and uncontrolled groups. Those that had been trained reported deriving a diverse range of benefits that include observation of children according to ELDAs, ways to communicate with children, planning for the daily, monthly and weekly programmes and how to handle children as caregivers, not teachers. However, the outstanding challenges were cited as putting the theory into practice, assessment of children or use of assessment tools, aligning the NCF to the school programme and recording of all the documents. It would be recalled that the issue of understanding the principles of the assessment process has already been flagged as an area needing attention.

Specific focus was made on the Mathematics manual to which UFH had introduced to the practitioners. This is reported to have contributed to improved interactive skills with children when supporting early learning with the identification of numbers and providing guidance to choose relevant activities to assist in teaching. However, some identified challenges they

still experienced regarding using the UFH manual. There was a proportion that said they hoped they would get post-training support on the use of the manual, which includes children confusing numbers when taught to count, children understanding concepts at different speeds and the need for additional resources to help in teaching.

Assessment practices of teaching and learning

Assessment practices were considered too important an area of training to omit. It all starts with whether the practitioners had received training on how to assess children, to which yes/no response was required. Eighty per cent of respondents confirmed having received some training on the assessment practices of teaching and learning. This high proportion was not surprising, as the question did not specify whether beneficiaries were restricted to those who participated in the intervention, a situation corroborated by the wide range of trainers identified as UFH (25%), CSD and Department of Education (31.3%), principal (12.5%) and Khululeka ECD development (12.5%). As a result of this training, they were now, among other things, able to pay particular attention to child development and help in assessing children as well as provide guidelines on what to do in certain circumstances experienced during teaching. Documenting observations was also reportedly being done more thoroughly, while developmental milestones were being recorded and the identification of gaps was noted as being much stronger.

Reporting of observations was done in the observation book.. While a number of positives and benefits were being reported, challenges were expressed on the use of the UFH template. These include (a) specifications on how to input observations into the template, (b) complicated language of the form and (c) the intensity of documentation requirements. The greatest concerns came from those that were not part of the intervention. They could benefit from further exposure to training on the assessment of young children as well as children with disabilities.

INFRASTRUCTURE

Infrastructure provision is a key facilitating factor for teaching and learning. For the teacher, it is the embodiment of an atmosphere where s/he can organise meaningful teaching in a safe and conducive environment. For learners, it provides the ‘homely’ atmosphere where they can meaningfully engage in learning. Whereas, at baseline, the focus was on the physical infrastructure in the form of buildings, the post-intervention assessment focused more on creation and management of indoor learning spaces and outdoor equipment for safe and meaningful learning.

The state and status of infrastructure at baseline

Although there were variations across districts, the state of infrastructure was found to be generally of a poor standard. Even those that rated better than others were still far from meeting requisite norms and standards. Besides infrastructure with reference to buildings, the baseline also established that practitioners were not capacitated enough on the maintenance, safety and use of available indoor and outdoor spaces. Consequently, the latter aspects (indoor and outdoor spaces) became the prime focus of the intervention and the post-intervention assessment regarding infrastructure.

Interventions proposed and implemented

Emanating from these findings was the agreed position that the intervention programmes needed a focus on creating indoor spaces that promote quality play and maintenance of available infrastructure. Additionally, the programmes sought to capacitate practitioners on how they could promote safety measures in the current ECD centres. The participating practitioners were duly trained in designing and managing indoor and outdoor learning spaces. Activities included facilitators sharing on first aid kit, maintenance of premises inside and outside and, subsequently, availing norms and standards for ECD centres. Meanwhile, participants shared further details on safety and cleanliness, which are covered in a later section.

Findings from post-intervention assessment

The findings were outcomes of self-assessment by practitioners and site visit observations by research teams. A total of 28 practitioners assessed themselves, while observations were done in 16 centres. The prime focus was on management and safe use of indoor and outdoor learning spaces and resources.

Use of available infrastructure

In line with the post-baseline intervention, the assessment sought to find out whether they were trained to create and organise indoor learning spaces, who trained them and ideas they benefitted from the training. About 88% (N=24) practitioners indicated they had been trained on creating and organising indoor spaces in their centres. The training providers were UFH (47%), CSD and DOE (30%) and other (23%), including private providers and centres themselves. Needless to say, such a high level of exposure to training shows the importance attached to learning spaces and augurs well for improvement, especially with the majority being trained by reputable organisations. Without doubt, this addresses the

gap noted at baseline; that practitioners were not capacitated in the area of maintenance and organising of these spaces.

The question of ideas obtained and their usefulness in their work was a good sequel to the training question. Participants identified the key takeaways as i) ability to divide indoor spaces according to the theme area and ii) creating spaces for learners that are age appropriate. Other ideas revolved around keeping containers for re-use, maintaining neatness of learning areas, creating own resources for use and how to teach children during play. The diversity is not just about numbers but a reflection of the breadth and depth of ideas that practitioners could learn from enriching children's learning experience. It also emerged that they were capacitated on dividing the available spaces and how to organise them appropriately, according to age, which is not only addressing the gap identified but also acknowledges the value and relevance of the training.

As part of the training package, the UFH team consciously provided a checklist on maintaining indoor spaces and outdoor environment, which proved useful to those that had received the training. They reported being able to carry out routine audits of what had been done, how it was done and what still needed to be done. The provision of training and supporting materials did not necessarily solve all problems. Challenges remained, and these included lack of space for partitioning, which was understood to mean that classrooms were already too small to allow adequate spaces for all learning areas. This resonates with findings at baseline that some classrooms were too small for the number of learners. Inadequate toys were also identified as a significant challenge that still needed to be addressed, while other mentions were theft of centre resources and insufficient outdoor resources.

The issue of infrastructure, no matter how well provided, would never be the answer without health and safety considerations. This centred on messages that they communicate to parents about the issue of health and safety in ECD centres. Key messages from practitioners to parents included keeping harmful objects away from children, teaching their children about hygiene and providing them with healthy food. Although the training had assisted them in managing their children and facilitating learning, they insisted that more was required in areas like how to create a clean and clear outdoor environment, health and safety in ECD centres.

Assessment of infrastructure was also undertaken via researcher observations, whose focus was to confirm the availability and status of the infrastructure. This represented an 'outside' view of the state of infrastructure in the learning centres, as it relates to the creation and organising of indoor and outdoor spaces and their facilitation towards the creation of a

conducive learning environment. Statements were provided describing the status of various aspects of the infrastructure, and researchers had to confirm agreement (or disagreement) with the statements. The following table shows the proportion of those on the affirmative.

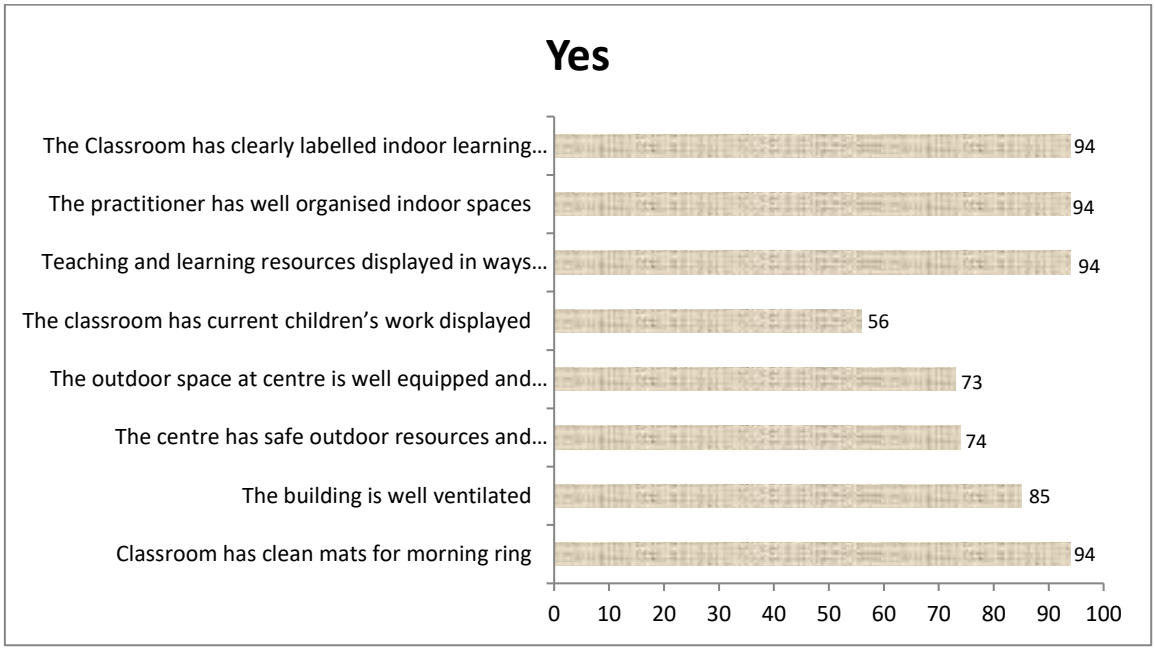

Figure 6: Percentage confirmations across the eight statements

The overwhelming 'yes' response on five of the eight infrastructure areas: classrooms having clearly labelled indoor learning areas (94%), practitioner having well organised indoor spaces (94%), displayed teaching and learning resources easily accessible by all children (94%) and classrooms having clean mats for morning ring (94%) were confirmation that indoor space provision and utilisation was good, except for the display of current children's work that was ranked lowest (56%). Ratings on outdoor resources and playground (73% and 74% respectively) were subdued, meaning that improvement was still needed in this area than indoor spaces. Furthermore, the rating on the ventilation of buildings was 85%, confirming that the buildings were well ventilated.

At baseline, the practitioners' impressions, researchers' observations of infrastructure and parents' views were restricted to classrooms, ablution facilities, perimeter fence and cooking area. The overall conclusion at the time was that the infrastructure was of a poor standard, mainly because classrooms were too small for the numbers enrolled, failing to meet minimum space standards, with many centres operating in shacks that were poorly ventilated. Dilapidated structures, poor/absence of ablution systems, absence of lockable cooking area; poor condition/absence of perimeter fencing were commonplace. The baseline report concluded that the poor state of infrastructure posed a threat to both the health and safety of children. Because of the shift in focus of the post-intervention

assessment, which included ventilation as the only aspect referring to buildings, this made it difficult to assess overall condition of classrooms. On a positive note, Figure 5 above attests that 85% of the respondents indicated that there was good ventilation. This positive insight could be attributed to the knowledge gained by practitioners during the intervention phase. Previously, due to limited space some display material was pasted on the windows that were rarely open. Through the interventions, practitioners were made aware of the importance for ventilation.

MANAGEMENT OF ECD CENTRES

Literature is awash with research that much of successful learning interventions have to do with management of the learning institution and the learning arrangements. Identifying management as an area for focus in the longitudinal study was a deserved priority. The full story of management could only be told following a consideration of the baseline status, the management-targeted intervention and the post intervention assessment.

The status of management practices at baseline

There was a key difference between baseline and post-intervention phases. At baseline, management assessment was an area for principals and centre owners, hence the focus on infrastructure and financial issues. Although heavily skewed towards infrastructure and financial management, the baseline assessment also commented on lack of knowledge in record keeping concerning programmes and records to be kept at centres. The post-intervention assessment targeted ‘practitioners’ with a focus on management of centre records and programming. Thus, the post-intervention assessment had a focus on aspects that the NDA project could readily influence through its interventions.

Intervention proposed and implemented

The main focus of the interventions was related to capacitating managers and practitioners on maintaining effective record keeping and implementing an age appropriate daily programme. The specific intervention programme implemented was Maintaining Effective Record Keeping. It is on the basis of this intervention programme that much of the assessment was made.

Findings from post-intervention assessment

Maintaining effective records keeping

In the letter and spirit of the intervention programme, interviews delved into the importance of records ordinarily kept at ECD centres. Table 12 shows the results:

Table 11: ECD facilitators' assessment of the importance of key centre records (N=28)

Importance of ECD centre resource file is …	Frequency	Per cent
to assess what resources are at the school and what we need	10	35.7
ability to refer to the file when looking for documents	7	25
keep confidential information about children	2	7.1
making templates record keeping easier	1	3.6
No response	8	28.7
Total	28	100

The importance of children's profiles is …	Frequency	Per cent
safe keeping of children's information and work	9	32.1
to show parents the progress of their children	8	28.7
To keep all details of a child in case of emergency	6	21.4
No response	5	17.8
Total	28	100
Importance of the child's portfolio of evidence is …	Frequency	Per cent
all the activities are filed in this portfolio	3	10.7
to check progress of the child learner	18	64.3
to keep contact details of parents in case of emergencies	2	7.1
No response	5	17.8
Total	28	100
Importance of attendance register is …	Frequency	Per cent
checking and confirming children's attendance	21	75.0
To protect the centre if there is a crisis or injury when it occurs	2	7.1
to check enrolments	1	3.6
No response	4	14.3
Total	28	100

There were variations depending on perceived specific use of each. However, sub-themes that captured specific uses of each record were dominated by the attendance register's confirming children's attendance (75%) and checking children's progress (64.3%) from the child portfolio evidence. Other records of moderate importance included the ECD centre resource file for assessing what resources the school possessed and what it needed (36.7%). The rest of the records ranged from perceived low to below average in their importance.

Recognising the importance and actually living by it could be two different things. Part of the assessment went on to focus on which records the centres actually kept and used. A researcher observation guide was used to check on the availability of records that were

classified under ECD centre resource files and Children's profiles. The results are shown in table 12 overall and by centre intervention category (controlled or uncontrol):

Table 12: Researcher observations on availability of ECD centre records (N=28)

	Available (total)	Intervention	Control
ECD centre Resource File			
Admission forms	23	13	10
Indemnity forms	23	13	10
Attendance register	26	10	16
Incident book	14	6	8
Class list	24	10	14
Observation tool	26	10	16
Report template	21	10	11
Children\s profile			
Road to Health	23	11	12
Birth certificate	27	11	16
Details of parents	25	13	12
Assessment records	23	10	13
Indemnity Forms	23	13	10
Development screening	18	8	10

Availability of records varied according to type and also whether the centre was intervention or control following the post-baseline intervention. Overall, most records were found to be commonly available, except for development screening (f=18) and incident book (f=14). Control centres were dominant over intervention centres in terms of attendance register, class list, observation tool, birth certificate and assessment records. In contrast, the opposite was true for admission forms, indemnity forms and indemnity form. Thus, there were no clear trends between the two categories.

The assessment also noted the insufficiency of merely recognising the importance of the records, but issues related to their use. A further question was related to the challenges in compiling and maintaining (keeping them updated) the files. Responses of no problem at all (40%) and compiling records is time-consuming (40%) are near opposites. With a further 16% admitting problems of compiling and maintaining the files and 4% accusing parents of unwillingness to buy files to store their child's information, the overall picture points to

concerns around file management, suggesting that the problem of “lack of knowledge in record keeping concerning programmes, records to be kept” persist. This area deserves intervention.

Running age appropriate daily programme

The assessment also took focus on understanding of both the daily programme and age and developmentally appropriate programmes. Responses show that practitioners have a clear understanding of these programmes, with all respondents associating daily programme with ‘an outline of activities for the day’ and 77% associating age and developmental appropriateness with ‘programmes designed according to child’s age’. Although this level of detail has no comparison to baseline, it demonstrates unprecedented understanding of the needs of the ECD learners and how to organise learning. Furthermore, the question of utilisation attracted responses that included the grouping of children for programmes according to both age and ability. Even though they showed a good understanding of these programmes, exposure to more training would add value to what they already have. Areas identified include implementation of NCF guidelines, designing activities according to age, designing specific age-appropriate materials, grouping children, planning the toy as well as block and book areas as well as how to assist learners with disabilities.

HEALTH, SAFETY AND NUTRITION

At baseline, the research found that most of the ECD centres were not registered because the infrastructure failed to meet the set norms and standards by the Department of Social Development (DSD). Ablution facilities, boundary fence with lockable gates, safe grounds and separate clean lockable kitchens were areas that needed improvement to ensure the health and safety for children. Due to non-registration, some centres could not access any subsidy from the Department of Social Development, meaning that they had to rely on school fees as the only source of funding. This was mainly inadequate to sustain the needs of the centre. Lack of subsidy made centres fail to offer meals, thereby compelling children to bring their own food from home. The observation was that Centres did not display the menu showing the type of food served and, in some cases, the health of children was compromised.

Interventions proposed and implemented

Since there was nothing that the ECD team could do in terms of structural development in the centres, they designed an intervention programme that was meant to help practitioners

create safe indoor and outdoor spaces to minimise the risks. Secondly, the programme aimed to help ECD centres take cognisance of health and safety issues that often proved to be a hindrance in them being granted full registration. The other focal point for the team was the nutrition of the children.

It should be noted that some of the activities in this focus area are intertwined with other focus areas, such as infrastructure and the management of ECD centres. The ECD team had to ensure that practitioners followed the safety rules laid down in the DSD Norms and Standards. Information was collected through face to face interviews and observation. While most of the observations in the infrastructure were concerned with the use of indoor and outdoor spaces, in this focus area, the emphasis was on safety in those spaces and how practitioners adopted health and nutrition aspects.

Safety issues

Safety of children in the centres is paramount; hence, the ECD team conscietized practitioners on Chapter 5 and 6 of Norms and Standards, maintenance and safety of indoor and outdoor premises and adult-child supervision that is a must all the time. Figure 6 gives us a picture of the situation at post-intervention. These assessments were done per centre, even though individual practitioners were interviewed.

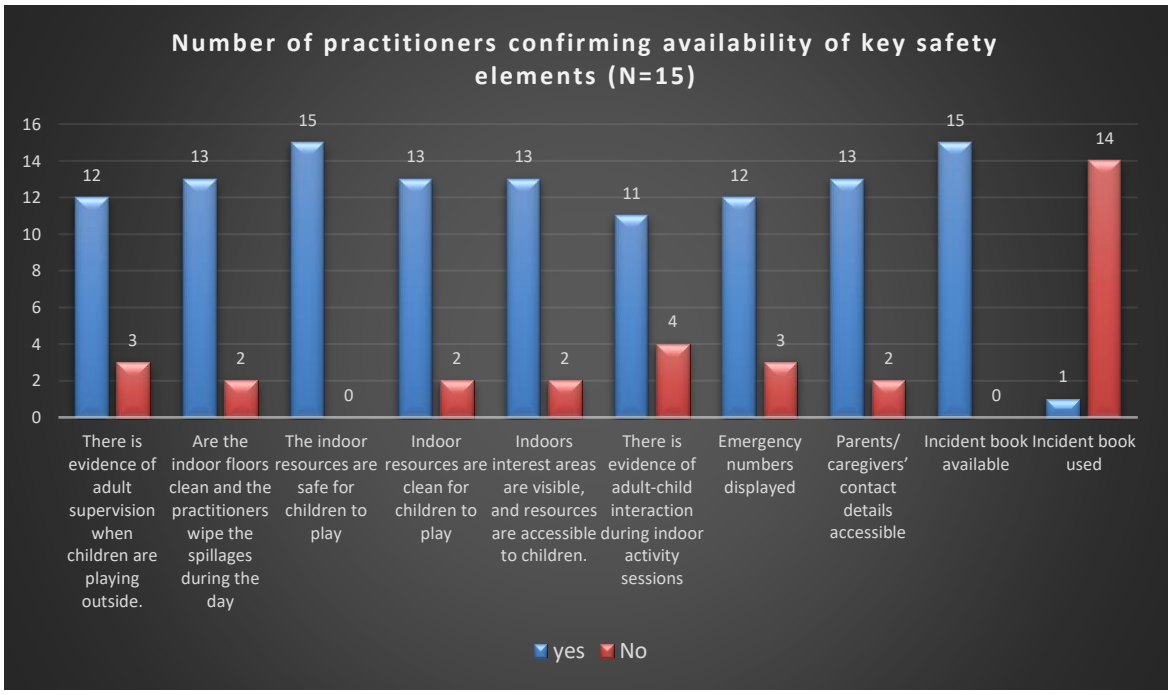

Figure 7: Confirmation of safety elements in the centres

Figure 7 shows the responses and observation on the heath issues in ECD centres. Responses indicate that, in most centres (80%), there is evidence of adult supervision when children are playing outside and there was 73.3% adult-child interaction during indoor activities. This is a clear indication that interventions played a vital role to ensure teaching and learning was taking place in and outside. However, minimal adult supervision was observed in outdoor activities (20%) and 26.7% adult-child interaction indoors. This is where there was a single practitioner responsible for as many as 45 children (a combination of 6 babies and toddlers of different ages). Cleanliness was observed in 86.7% centres and, in 13.3% centres, the challenge was overcrowding and substandard infrastructure with poor ventilation.

Overwhelmingly, in all the centres, indoor spaces were found to be safe for children, while in 86.7% centres indoor resources were found to be clean and safe for children to play with. It is important that learning toys and indoor spaces are kept clean to avoid the spread of bacteria that could be harmful to children. Interest learning areas were visible in 86.7% of the centres; parents'/caregivers contact details (86.7%) were displayed on the walls as well. Similarly, 80% of the centres had emergency numbers displayed. The remaining percentage of centres that did not have interest areas were too small and crowded, while others could not have wall displays because it's a corrugated structure. All the centres had the incident book but only 6.7% effectively used the book. There are a few reasons the incident book is not popular, and these are stated in the overall observation section.

Health

Maintaining the health of children is of paramount importance in the ECD centres. It should be noted that the Ministry of Health and the social workers also place a high demand on the health issues of children in the centres. At baseline, the research noted that the health of the children was compromised due to lack of knowledge on keeping healthy habits and lack of ablution facilities.

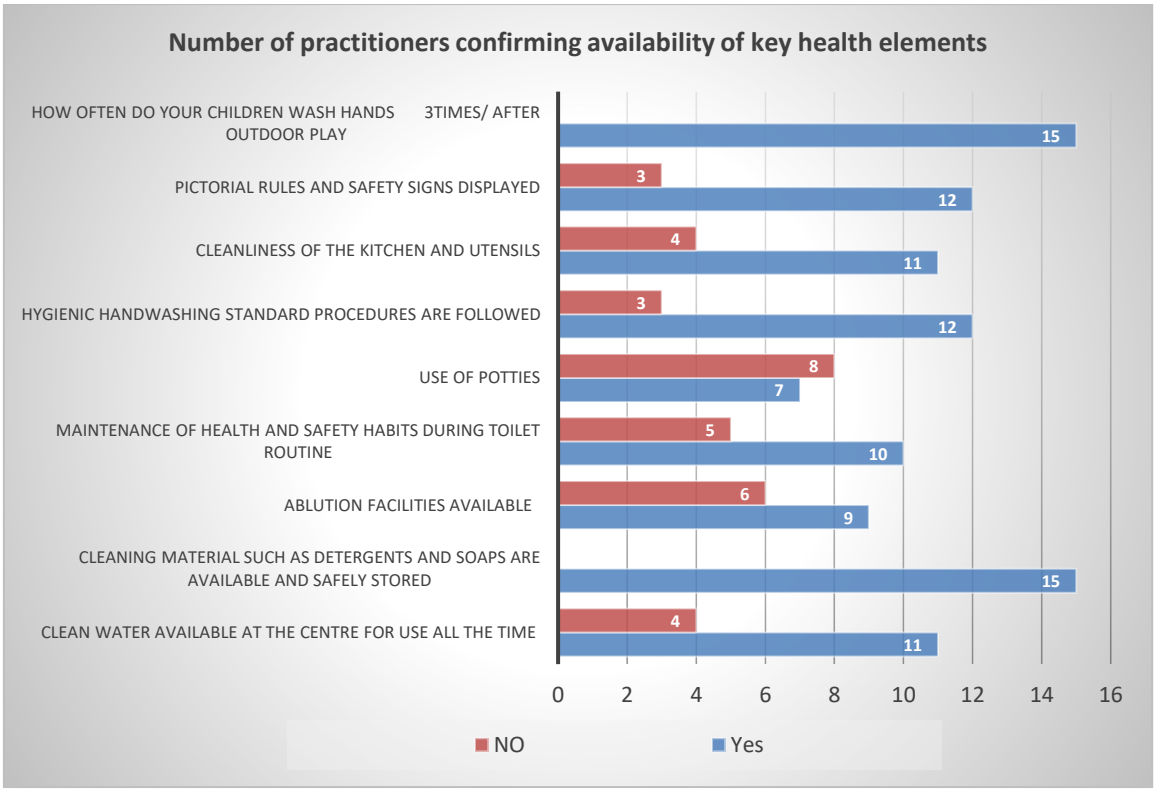

Figure 8: Availability of key health elements

It is essential that centres ensure healthy habits are adopted to avoid the outbreak of any infection. Researchers found that in all the centres children were made to wash their hands at least three times, that is, before meals, after using the toilet and after any outdoor activity. However, only 12 (80%) followed the hygienic handwashing standards of using soap and running water, while 20% washed hands in a dish. It is easy for children to pass on bacteria to each other. The same applies with regards to picture rules as 80% of centres have pictorial rules, safety signs and hygienic standards of washing hands displayed on the walls, while 20% do not have them. Although 100% of centres had cleaning material and detergents, 26.7% centres had kitchens that were not so clean. While it may not be an excuse, the infrastructure of some centres needs serious attention, as they are crowded small shacks that compromise both health and learning.

In addition to declaring ECD to be a public good, South Africa went on to produce a National Integrated Early Childhood Development Policy (2015), which set short-term, medium-term and long-term goals that were to be achieved by 2017, 2024 and 2030, respectively. Of interest is 5.1 on the provision of basic services, such as water, sanitation and energy; Shelter and housing; and Play, recreation and cultural activities. The study found inadequate provision of ablution facilities in ECD centres with the hardest hit being Chris

Hani district, where 40% centres visited had no toilets at all. It was also observed that in 60% centres where toilets are available, they are adult size. It emerged that some centres had pit latrines, posing a health hazard to children; hence their reliance on potties. The difference between the controlled and uncontrolled centres was not much but depended on the location of the centre.

Nutrition

The Department of Health (2013) Infant and young child feeding policy states that “Optimal nutrition during infancy and childhood is critical to ensuring optimal child health, growth and development. A child’s development is dependent on three factors which are genes, environment and nutrition.” At baseline, many centres had not displayed the menus followed to ensure nutritious food is served at the centres.

Table 13: Key nutrition indicators

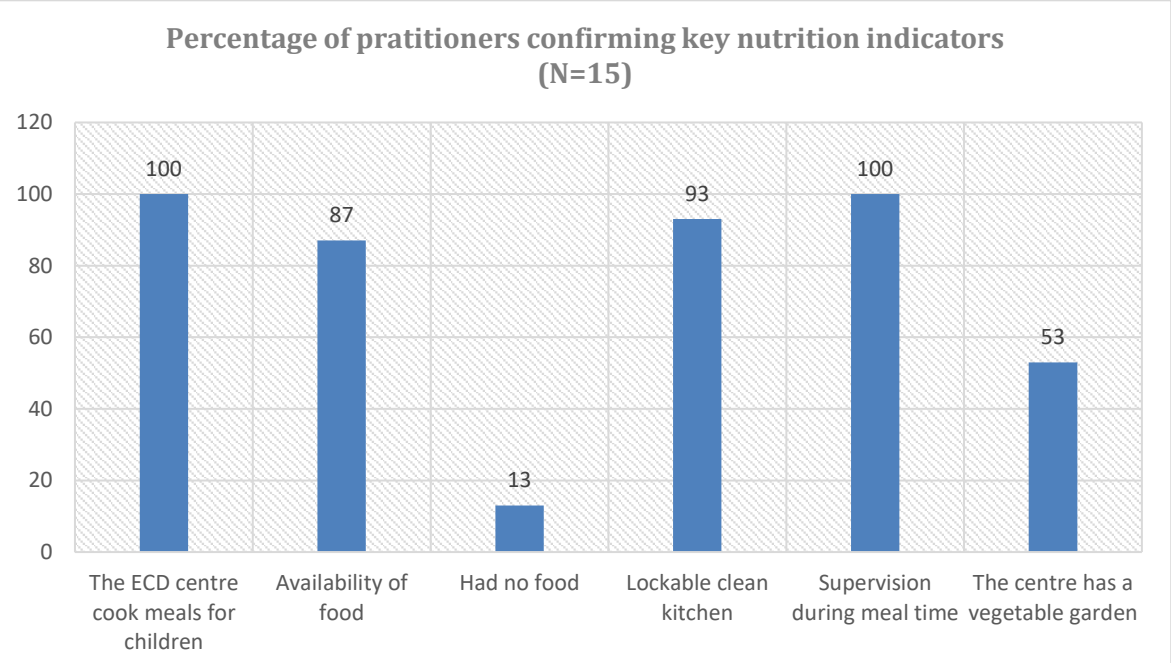

Table 14 indicates the availability of food and the efforts of the centres to ensure children have proper nutrition. In this reseach data was supposed to be collected from 16 ECD centres but on the day of data collection one centre was deserted hence, the number 15. Research found that all centres prepare meals for children. However, at the time of data collection, 87% of the centres had food, while 13% did not have food supplies. Without food, children were compelled to bring food from home. This is where practitioners need to be vigilant on the type and state of food brought that children bring to the centre. Researchers found that 93% of the centres had separate lockable kitchens, while the other 7% felt

insecure keeping their stuff in the kitchen because they had had repeated burglaries. In all the centres researchers found that children are supervised at mealtime to make sure food is healthy and in a good state for consumption.

Vegetable gardens were found to be ideal for centres to subsidise healthy food but only 53% had gardens, while 47% centres did not have gardens due to factors such as lack of space, lack of water and lack of manpower to cultivate the gardens. It was established that ECD centres in Sarah Baartman had thriving gardens because they had support from the farms in which the centres are situated. It is this area that needs the commitment of parents and the community to support the ECD centres in other districts.

Generally, it was noted that nutrition in some centres was grossly compromised due to inconsistent food provision which is dependent on full registration of the centres. When food runs out, centres reported that they experience a low turnout of children, which further negatively impacted on the operations of the centres that relied on fees as the main source of income. The dilemma the centres face is that, without adequate essential services, such as water and sanitation, they cannot be registered. There is inadequate provision of quality, age play-based and context appropriate early learning programmes in all care and early learning settings visited. This is one of the long-term goals that the government envisaged to achieve by the year 2030.

CHILDREN WITH DISABILITIES

Practitioners at Baseline

The baseline research found that many practitioners operated without learners' files, such as confidential profiles, assessment and records for children, inclusive of those with disabilities, special needs and developmental delays. Practitioners were operating without the tools that could help them with the assessment criteria. As a result of the absence of the assessment tools, practitioners were not well versed in identifying disabilities, special needs and developmental delays other than those that are visible to the naked eye, which is mostly physical. Hence, only three children with disabilities were identified in all four districts. This low number raised grave concerns about the whereabouts of children with disability and developmental delays. It became obvious that practitioners could not identify some forms of disabilities and developmental delays which are not obvious to the physical eyes. Besides, practitioners felt that they were not adequately knowledgeable in managing children with disabilities. It was also revealed that parents were probably keeping children at home, yet that is infringing on the child's right to education. Another thorn in the flesh in

this study was the disclosure by practitioners that parental involvement in their children's early learning experiences was negligible.

Gap filling intervention

Following the revelation of the challenges faced by practitioners in dealing with diverse disabilities in children, the UFH ECD team capacitated practitioners with programmes that would promote best practices towards quality ECD learning in the centres. The first programme was to elucidate the applicability of the National Curriculum Framework (NCF) document to children with disability, special needs and developmental delays. The NCF states that children with physical, intellectual or sensory impairments and medically fragile may experience barriers participating in learning. It, therefore, becomes crucial that those tasked with the care and education of babies and young children be well prepared to offer the best practices that are inclusive of such children. The second programme introduced the Developmental Screening template and the Overall Health checklist that would help practitioners to know the telltale signs indicating some form of disability or developmental delay. The third programme was embedded in the community dialogues, which involved parents on the first day and, on the second day, practitioners were further educated on how they could use the tools to identify, observe, document and communicate their concerns or signs of disability and delays in milestone development.

PROGRAMME 1: *NCF applicability to children with disability and developmental delays*

This first session aimed at assessing the depth of knowledge practitioners had about the importance of planning developmentally appropriate activities, inclusive of children with disability. Interactive activities were done to improve their understanding of inclusivity, so that, with the new skills, they would have an inclusive education programme that addresses all children inclusive of those with diverse disabilities effectively. Assessment of practitioner's knowledge revealed that practitioners did not know how to plan and adapt activities to accommodate children with disabilities, special needs or developmental delays. Hence, they were introduced to ELDA 1 (NCF), for practitioners to understand young children's Wellbeing together with progression of developmental milestones as the critical foundation for understanding causal factors of disability, vulnerability and developmental delays. They were taken through the NCF to discuss aims, developmental guidelines, examples of activities for promoting Well-being Practices for quality early childhood inclusivity. However, post-intervention showed little progress as only one practitioner had referred to the NCF Watch Points to identify children with disabilities. Developmental delays

that are not corrected promptly tend to become future learning barriers that often cause dropout, as children plateau out of the school system.

Programme 2: *Use the screening tools to collect data of children with disabilities*

Again, responses from practitioners in knowledge sharing and assessment session demonstrated their need to understand children's growth and development across various domains, such as social-emotional, language and communication, cognitive and motor-physical competencies. Subsequent site visits to ECD Centres also established that practitioners were not recording children's developmental progression and developmental delays, including those of children with disabilities, as they had no Screening tools. The second programme then introduced practitioners to the use of various screening tools that they were to use in recording children's abilities, disabilities and developmental delays. Developmental screening tools, inclusive for all children and the Overall Health Screening tool for identifying children with disabilities and developmental delays, were introduced.

Without any effective recording of observations, practitioners were unable to communicate the children's ongoing developmental progression or challenges with parents. Some practitioners raised their concerns about children who were not recorded, and there was no documented evidence on the noted problems, hence, when these problems are disclosed to parents, they often reacted negatively by removing their child from the ECD Centre. This session aimed at equipping practitioners with knowledge, skills and values of establishing and maintaining effective records regarding children's developmental progress, as well as indications of disabilities and developmental delays. The Admission Profile Tool and Overall Health Screening Tool as a referral tool was given to all ECD Centres and practitioners were encouraged to observe, document, and report on problems areas and focus more on the Overall Health Screening Tool so that parents of children with disabilities and developmental delays could seek additional assistance from specialised services.

Table 14: Use of screening tools to collect data on children with disabilities

ITEM	YES	NO	%
I use the Watch Points in the NCF to identify children with disability	1	14	93.3%
I use the Watch Points to identify children with developmental delays	1	14	93.3%
Use Overall health		15	100%
Evidence of entries in the Screening tools		15	100%
Assessment template records		15	100%

Table 15 indicates that 93.3% (14) centres did not use the Watch points in the NCF document in identifying children with disabilities and identifying children with developmental delays. The only positive answer came from one trained Principal. This response might be true but the practitioner in the same centre was not aware of the existence of such tools. Equally disappointing was finding that all the centres were not using the Overall Health screening tool as there was no evidence of any entries in these tools. It would seem like there is very little shift from the baseline report. There could be various reasons to explain this situation. Firstly, training was done over a short time period and there wasn't time to monitor and supervise practitioners using these tools. Secondly, practitioners are crippled by their level of academic capacity to understand and fully comprehend the importance of these tools. Thirdly, they have no obligation to use them because at the end of the day they are not accountable to any authority. When asked on the strategies they used to identify disabilities and milestone development, the table below shows their response.

Table 15: Strategies to identify milestone development and forms of disability

Strategies used to identify children with disabilities	Only 1 principal had referred to the watch point and found it useful. Practitioners use experience and observation
Strategies used to identify developmental milestones	Practitioners use motherly instinct. Comparison to the development of their own children.

The researchers also found that only one practitioner had referred to the Watch Points document to identify children with disabilities, while all the practitioners relied on their experience, observation, motherly instinct and comparison to the development of their own children. The biggest challenge was that they may be comparing fast developers to their slow developers.

Programme 3: *Community Dialogues*

Community dialogues were the third form of the intervention strategy, which included parents and practitioners to engage in discussion about issues of disabilities in the ECD centres. The low number of children with a disability had raised some concerns about their whereabouts. Furthermore, while visiting the ECD centres, the UFH ECD team identified and found from emerging data common disabilities such as Autism, Foetal Alcohol Syndrome, ADHD, Physical Disability and Speech, Language and communication

disorders, together with hearing impairments. Hence, these dialogues were meant to provoke intense interactive conversations that would lead to better understandings of diverse disability issues in the ECD Centres. The target audience for the community dialogues were all parents, caregivers, practitioners, principals, School Governing Bodies and representatives of ward committees. Beside Mrs Judith Dirks (the UFH Occupational Therapist), guest speakers such as Mrs Antoinette Bruce-Alexander (Autism South Africa, Eastern Cape Coordinator and parent to a young adult with Autism) elaborated on Autism, and Mrs Sylvia Mphitso (SANCA, East London) talked extensively about FAS. The team explained some characteristics that could flash red flags, thereby indicating signs and symptoms of a disability that may not be physically visible. The participants had the chance to assess children in their care, and some were at last relieved as they had never understood the traits presented by their children.

The community dialogues were followed by the practitioners' workshop that strengthened their knowledge on planning activities that support the needs of children with special needs and learning difficulties. Armed with the new skill, practitioners had to identify at least one child who showed signs of learning difficulties, draft an action plan of how they would support the child using his/her strength. Each child was a case study to enrich practitioners with the skill of identifying disabilities and delays. These case studies were used to increase practitioners' knowledge and skills in the identification of disabilities such as Autism, Foetal Alcohol Syndrome (FAS), Attention Deficit Hyperactive Disorder (ADHD), Attention Deficit Disorder (ADD), Physical Disability, Speech, Language and communication disorders, as well as with hearing impairments. From this exercise, 37 children were identified and presented as case studies to understand how to identify disabilities fully. Note that more children were identified as compared to the baseline research, which had identified only three children with disabilities.

Assessment is a powerful learning tool that can enhance learning and education. The process of children's assessment should align with curricular goals and educational objectives. Identifying the assessment strategies necessary for the proper evaluation of children's development within individual programmes is as important as establishing curricular content and delivery approaches. This brings us to the current report, which aims to assess the impact of the interventions, the challenges that still exist, and the gateway to further improvement strategies. Data is presented by the district. It should be noted that these interventions where carried out in the two centres (controlled) per district and the other two (uncontrolled) were received without any support intervention.

In the baseline research, only three children with disabilities had been identified. Post-intervention research found a slight change in that practitioners were now able to identify disabilities and delays, even if they are not documented. The table below shows the number of children identified per district.

Table 16: Identified children with disabilities

Children with disabilities (CWD) Vulnerable children (Vuln)						
District	Total enrolment	Number of		%	Number of Practitioner	Adult-child ratio
		CWD	Vuln			
Chris Hani	174	9		1.74	7	25:1
OR Tambo	140	2		1.4	4	35:1
Sarah Baartman	237	6		2.37	8	30:1
Buffalo City Municipality	199	6		2	8	25:1

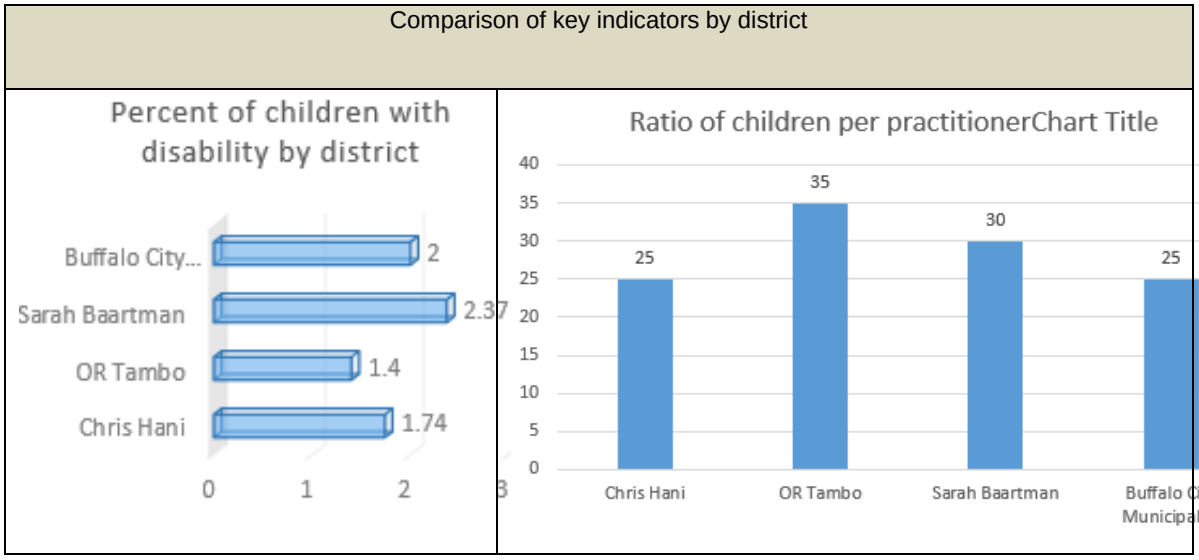

Figure 2: Comparison Indicators by District.

Chris Hani had the highest number (9) of children with disabilities while OR Tambo had the least (2). Sarah Baartman and the Buffalo City Municipality had an equal number (6), even though Sarah Baartman has a higher enrolment. Total number of identified children with disabilities in need for further professional assessment were as follows.

4 suspected FAS, 4 suspected Autism, 6 Speech defects, 5 Physically challenged, 1 partially blind, and 1 developmental delay = 21Children

We say they are suspected cases because there is need for further assessment from professionally qualified personnel.

OVERVIEW OBSERVATION

In its endeavour to strengthen the foundation of education, the government declared ECD a public good. Through the White Paper 5 (2001) it committed itself to address the inequitable provisioning of ECD programmes and remediation of the fragmentary early childhood development legislative and policy framework by ensuring child well-being, school achievement, cognitive and other developmental domains. In the same year, through White Paper 6 (2001) on Inclusive Education, it envisaged establishing procedures for early identification and interventions for children with disabilities, as well as for addressing barriers to learning. However, going through the White papers, plans of action and declarations, there is no mention of the caretaker ministry appointed to be responsible for the overall welfare of ECD. While the White Paper on Social Welfare, 1997 called for inter-sectoral collaboration with other Government departments, civil society and the private sector, there is no clear indication as to who does the supervision and monitoring of the care and education in the ECD centres (Lombard, 2008).

Running the ECD centres is at the hands of the guardian angels, the women who saw the need and filled the gap by opening spaces to look after children. Most of them are without any form of training but are rich in motherly experience on caring for babies, toddlers and children. They are not compelled to keep updated records in terms of disabilities, developmental delays and cognitive development of children. Without any supervision and monitoring, practitioners are not accountable to any authority who ensures education (cognitive), socialisation and development of children is effective and efficiently documented. The only documents kept up to date are those that have financial implication to them, mainly concerning the feeding of children.

The study found a high number of children in ECD centres with some centres that are overcrowded. This is a clear indication that parents need the service and yet show very little, if any value, to the state of the centres enough to provide solutions desperately needed in the centres. It is expected that parents have a wealth of information and know their child in a far more intimate way than practitioners; hence they need to support the practitioner in the assessment of identified disability or learning delays. Consequently, there is a need for shifting the role of parents/ caregivers from being passive recipients of information to active

participants in the critical planning process for children with special needs. With education being a basic right that should be enjoyed by all children, assessment should be geared towards offering equal learning opportunities to all children with varied abilities and disabilities. Confirming this notion, Sperotto (2014) found that assessing children with special needs in education can be challenging, if not correctly administered, and the child's actual academic capability can be misrepresented. It emerged in this research that practitioners were not using the Assessment tools introduced to them; instead, they relied on recording their observation in the observation book, which is more simplified, yet it does not bring out the developmental delays, the special needs and the various disabilities. This indicated the need for continuous training due to high practitioner turnover. It could also be due to the low educational level among the practitioners.

Findings present in the study:

Teaching and learning

- Practitioners that had been trained reported to have benefitted in a wide range of areas, however, they still needed more capacitation in observation of children according to ELDAs, ways to communicate with children, planning for the daily, monthly and weekly programmes and how to handle children as practitioners not as caregivers.
- Practitioners had challenges in putting the theory into practice, assessment of children or use of assessment tools, aligning NCF to the school programme, recording of all the documents and in planning age-appropriate activities.
- Although practitioners showed a good understanding of the programmes, they require more exposure to more training on implementation of NCF guidelines, designing activities according to age, designing specific age-appropriate materials, grouping children, planning the toy as well as block and book areas as well as how to assist learners with disabilities.
- Effective running of age-appropriate activities is still a challenge due to lack of space to have separate groups and lack of personnel to attend to different age groups.
- As a result of the training during the intervention phase, there was an improvement in the documentation of observations, developmental milestones and the identification of gaps.
- Challenges were expressed on the use of the UFH template. These include (a) specifications on how to input observations into the template, (b) complicated language of the form and (c) the intensity of documentation requirements. The loudest concerns came from those that were not part of the intervention. They could benefit

from exposure to training on the assessment of young children as well as children with disabilities.

Infrastructure

- An improvement was noted on the use of indoor and outdoor spaces where structures and grounds permit. This could be attributed to exposure to training by reputable organisations, and it narrowed the gap identified at baseline.
- Challenges such as lack of space for partitioning as existing classrooms were already too small to allow adequate spaces for all learning areas. This corroborates with findings at baseline that some classrooms were too small for the number of learners.
- Inadequate resources, such as toys, outdoor play materials and theft of centre resources, were also identified as significant challenges.
- Although practitioners cannot do any structural renovations, through training, improvement in the ventilation of classrooms as practitioners no longer used windows for displaying learning materials. However, the lack of ablution facilities remains a health hazard in the majority of the centres.
- Although practitioners were capacitated in the maintenance of clean surroundings, it was observed that in many centres, swings and slides were broken and hazardous for children.
- Through the interventions, practitioners were made aware of the importance of ventilation; hence the reduction of charts pasted on windows as was previously evident.

Management of ECD centres

- There is an insufficiency of merely recognising the importance of the records.
- The practitioners still lack the knowledge of record-keeping concerning programmes and the progress children make.
- Understanding of both the daily programme and developmentally age-appropriate programmes is still a challenge partly because classes are too small for children to be divided into separate classes and lack of human resources as most centres have one practitioner who also doubles as the principal.

Health, Safety & Nutrition

- Children in all the centres were made to wash their hands at least three times, that is, before meals, after using the toilet and after any outdoor activity using soap and running water. However, hygienic handwashing standards are compromised due to lack of running water in the majority of centres.
- Inadequate provision of ablution facilities in ECD centres was still a challenge in all the districts with Chris Hani being the worst.
- Generally, it was noted that nutrition in some centres was grossly compromised due to inconsistent food provision which is dependent on full registration of the centres and when food runs out, centres experience a low turnout of children, further crippling financial stability of the centre.

Children with disabilities

- There is no proper structure for follow up on identified disabilities for children to receive adequate rehabilitation.
- There is laxity in the identification of developmental delays which go on undetected, or, if detected, there is lack of remediation throughout the education of the child, only to perform dismally at the matric exit point.
- There is no follow up made on identified vulnerable children. It means that very young children continue to suffer without help from those meant to protect them.
- Practitioners are not obligated to use the screening tools strictly because they are not accountable to any authority.
- Practitioners are semi-skilled and semi-literate; hence they have a limited understanding of the documents, and completing them is a challenge.
- Practitioners lack the understanding of the consequences of not correctly assessing children, as their future learning depends on the solid foundation.
- There is a need for a change of mindset in parents from using ECD centres as a dropoff or place of safety only. Many parents treat ECD centres as only places of nurturing and care where their children are “looked after”. They need to understand the importance and value of the early education opportunities offered at ECD centres as the foundation to formal schooling.

- Departments such as the DSD, Health, Education and other NGOs offer piecemeal interest and services to early childhood services without proper coordination that ensures no gaps are left uncovered. In their research Britto, Yoshikawa and Boller (2011) found that generally, national-level institutions such as Ministries of Education, Health and Finance, Local and international NGOs, or for-profit companies may have control with a particular interest in some aspects of ECD programmes. This kind of transdisciplinary stance creates gaps in services, and a lack of alignment within and across programmes and sectors have direct implications for children's outcomes (UNESCO, 2007). Inclusive education, where children with disabilities gainfully enjoy educational benefits, requires a paradigm shift where strong multidisciplinary teams collaborate and with families; basically, there is a need for a new mindset and strong communication skills.

RECOMMENDATIONS

Teachng and learning

- The state of ECD centres presently requires structured teaching, structured curriculum, and structured relevant content to specific age groups to improve the quality of teaching and learning in all ECD centres regardless of their location, rural, urban or township. Thre must a standardised and structured monitoring and surevision to ensure cognitive, social and emotional development of children. The government should ensure it provide supportive structures and qualified personnel for specialised supervision and monitoring of ECD centres in the country.

- There is a need for inter-sectoral coordination for the provision of ECD between all government departments who have responsibilitities in the provision of holistic developmental needs of children at ECD centres. Many government departments have vrious role in early childhood development, these includes Department of Social Development, Department of Basoc Education, Department of Health, Department of Public Works and Municipalities, all these government insitutions have a impactful contribution in ensuring quality and holistic developmental needs of all children attending these centres.

- There is need for Department of Basic Education and Department of Higher Education and trainin to develop a structured curriculum and a standardised framework for training ECD practitioners for uniformity. The higher education insitutions should develop standards for course content, training materials and

qualifications that ensure there are skilled, well trained, and competent ECD Practitioners in the country.

- There must be structured in-service training and developmental programs for ECD Practitioners and Managers to form part of continuing education for this important sector in South Africa. These continuing education programmes must be broadly cover all areas that contribute in the care, development and running of centres. This prgrammes will also protect practitiners who may have started the profession without qualifications and or training in this profession who may be lost once the entire sector is fully professionalised.

Infrastructure

- ECD centres, especially in rural areas, have poor infrastructure and unsafe playing areas, thus requires investment on improving this area. There is a need to standardise infruscture for ECD in South Africa. Resources have to raised, including from the private to invest on infrastructure development for ECD centres. Municipalities must play a pivotal role in the development and management of these infrastructure especially mantainance and compliance to bylaws of municipalities.

- Mobilisation of funding to improve and provide equipment for playing for children need to be undertaken or form part of the basic requirement for operating a ECD centres. Iependent run ECD centres need to be supported in terms of the provision of playng equipment ans creating of safe playing grounds for children.

- The Dapartment of Social Development and Basic Education must develop regulations to control the number and structures for ECD centres that can be allowed to operate in a spefic radius to avoind clustering and proliferation of ECD centres in a specif geographical location. The gudelines needs to be based on population needs assessment planning tools. This will enable to improve the quality and resourcing ECD centre, especially in rural areas and townships where there may be over supply or undersupply of these centres. Equitable access access is important for early childhood development.

- Water and sanitation is critical for children as they are prone to contracting diseases. Most of these ECD centres had poor water and sanitation conditions, some of them did not have running portable piped water in the premises, they did not have acceptable ambulation facilitities and preparation of food was not in acceptable conditions. There is a need to ensure that all infrastructure development for these

rural ECD and those in less resourced areas, such as townships, are provided with safe water supply, ambulation facilitities and approptiate food preparation and storage areas. This will prevent children getting infected or contracting preventable diseases whilst in these centres.

Management of ECD Centres

- The ECD centres that participated in the study are registered NPOs and governed through the prescripts of the NPOs Act. Although they are required to comply with and register with other relevant Acts, which ensure that children are safe, the registration regime for ECD centres as learning and development centres may need to be reviewed. For example the European Union, on its early childhood development policy, states early childhood development is the foundations for lifelong learning and development and there declared that children have the right to affordable early childhood education and care of good quality, they then adopted a system of High Quality Early Childhood Education and Care Systems. To achieve this there would be a need to review a set of registration regime for ECD centres outside the NPOs registration Act but, within the basic education system. This will provide a better management systems of these centres and the quality of management skills required for efficient management of these centres.

- A comprehensive framework has to be developed and agreed upon for the early childhood development programme in South Africa. This framework has to be anchored on ensuring quality dimensions of ECD centres which should include governance, access, staff, educational guidelines as well as evaluation and monitoring. The Departments of Basic Education and Social Development must play acritical role in designing and framing the requirements of the framework, children needs especially those below 5 years, have needs that are social in nature to ensure that the system is producing responsible, adaptable and productive citizens of the future South Africa.
- The early childhood development function in South Africa has been shifted from the Department of Social Development to the Department of Basic Education, however, the Department of Social Development will still have some significant role to play in the provision of early childhood development. This shift of the function may be beneficial for strengthening the governance and management of ECD centres. Kaga, Bennett, and Moss, 2010, suggested, the responsibility for the entire –early childhood development - to a single ministry or top-level authority may help promote

coherent policies and ensure better quality services. They further state, the single authority model has been, unsurprisingly, all the countries that have unitary settings also benefit from this integrated system of governance. The transfer of this function to the Department of Basic Education must also go with the full responsibility of managing the quality of managing and running ECD centres in South Africa.

Health, Safety and Nutrition

- Health and safety extends into nearly all aspects of a child care facility and its day to day operations. Health and safety in the ECD centres who formed part of the study, viewed health and safety from the health belief model. ECE centres, require standard regulations that ensure that children are kept in an environment that comply to all standards of health and safety regulations. Although the health and safety aspect may appear to be a Department of Health competency, however, with the function of ECD being shifted to basic education, the responsibility of setting standardized regulations, monitoring of health and safety practice, enforcement, including providing resources must be the responsibility of basic education. This will allow effective coordination, assessment of standards, and enforcement of those standards in all ECD centres.

- The Department of Basic Education must set guidelines and frameworks for health and safety at national level for all ECD centres regardless where they operate. Te ensuree that children are in a safe environment, regardless of where these centres are situated, basic requirements must be adhered to covering the following areas: background checks for all workers in these centres, trainings for child care providers on to keep children health and safe in these centres, and maintaining certain teacher-child ratios to ensure that at all times children are monitored and checked for any signs that need attention. Failure to regulate the child care system would be a step in the wrong direction for families and providers alike, and millions of children's lives would be put at risk as a result.

- The health and safety on ECD is usually focused on the children, however, the Practitioners and managers health and safety is extremely critical. W. Steven Barnett, Karen Schulman, and Rima Shore,(2004) states that early childhood development providers in settings with lower ratios tend to be less stressed, engage in more dialogues with children, provide them with more individualized attention, spend less time managing children, and spend more time educating them. Further more Sara R. Jaffee (2007) emphasizes that these kinds of quality interactions

contribute to important outcomes for children, including enhanced cognitive, linguistic, and academic development.

Children with disability

- The current South African ECD policy states that children with disabilities have a right to equal enjoyment of services and benefits, but many lack access to a number of programmes, including health, early learning, information, and play and recreation facilities. Moreover, many disabilities are preventable or could have their severity limited if pregnant women, infants and young children received access to early quality screening, preventative and rehabilitative care. The study has shown that children with disabilities in the ECD centres were disadvantaged because these centres were not designed or supported to fulfil the expectations of this policy. It is important for the Department of Basic Education, as they will be custodian of this policy, to design standard guidelines and procedures to implement the requirements of this across all ECD centres in the country.

- The ECD policy recognizes that children with disabilities remain on the margins of service delivery and benefits compared to other children without disabilities. The study has also confirmed that children with disabilities are disadvantage by how ECD centres are being run and operated due to a number of reasons, including resources allocated to the centres to respond to disabilities needs. The currently policy requires commitments from the state to support inclusive interventions to create equal opportunities that are necessary to unlock the potential of children with disabilities. The benefits of inclusion of children with disabilities in ECD as outlined in the Policy need to be defined in national guidelines to ensure the greatest impact on children attending ECD centres regardless of the centre being designated as a disability centre. The guidelines must assert that children with disabilities will be treated in manner that promotes achieve the same outcomes achieved by other children without disabilities. The guidelines for ECD services for children with disabilities must be seen not only as a means to contribute to enabling children with disabilities to fulfil their individual potential, but also as a way of realising children's rights during early childhood and strengthening the social and economic foundation of society

- There is the requirement that children with disabilities have equitable access to all ECD programmes and facilities. This required the state to develop guidelines and standards to ensure that facilities are made accessible for them. These guidelines must define the infrastructure, attitudes, equipment and activities that is needed to prevent hindrance

for children with disabilities in participation and benefiting from these programmes, It is important, therefore, that building plans, playgrounds, equipment, toys and ECD practitioner training must comply with universal design norms and standards2. Accessibility is aimed at enabling children and ECD staff with disabilities to live independently and participate in all aspects of life. Protocols to guide application of the policy requirements need to be developed by the Department of Basic Education as they are custodian of this programme. They must ensure that all relevant government departments participate and contribute in the design and development of these protocols.

RECOMMENDATIONS FOR FURTHER RESEARCH

- There is a need for follow up longitudinal research studies tracking children over time who have been part of the sample in this study. This kind of study would provide better measurements of outcomes and impact of children who have been exposed to better learning and teaching environment as they grow up to be adults. This type of studies require investments on research and keeping accurate data on each of the children that are part of these studies.

- There is a need to conduct research of quality and standards of teaching and learning for children below the ages of 5 years, especially the influence on their social and emotional intelligence. There is lack of accurate information that would siuggest the effect and benefits that can be accrued by having structured learning sessions, learning and teaching materials and standards set for children under 5 years learning social and emotional skills to assist them to grow up to be better and productive citizens.

- There is a need to conduct indepth studies on the role of families and communities in moulding children who are at Pre-schools, for reinforcement of behaviours and skills learned from ECD centres. This sudy has shown that there is no conuntinuation of what children learn at ECD centres and what happens at home. To build a solid foundation at this stage of development, there must be a link between home environment and ECD environment for children to have contnous education and learning, this will ensure that young children do not see these two environment and mutual exclusive for their learning and skills development. We however, require accurate information and data from research studies on how the ECD centres and parents support each other on building a better peforming child.

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