



# Early Childhood Development in Flamingo Crescent

## **Cape Town Project Centre**

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## 1. Introduction

Despite coming to an end in 1994, the effects of the apartheid era are still felt today throughout South Africa. In the 1950's, the government created legislation such as the Group Areas Act, to designate city centers as white only and force nonwhites to relocate to nearby townships. However, the amount of housing available in these townships was unable to accommodate this magnitude of population influx. Informal settlements began to surface as people began to illegally construct places of residence in a patchwork fashion using whatever materials were available to them.

The first of several attempts to relieve housing needs was government provided public housing involving the removal of existing settlements. This, like most other attempts, proved ineffective in stopping further growth of informal settlements. As a whole, post-apartheid government efforts have provided 3.2 million low-cost homes in efforts to alleviate living hardships for South Africans. However, despite these efforts, housing demand has continued to exceed supply since 1994 (South Africa: Informal Settlements Status, 2013).

As of late, efforts have shifted from destroying current informal settlements to upgrading the preexisting establishments. Through a combination of reblocking and 'asset-based' development, this methodology eliminates the fear of eviction for residents while providing them the necessary developments for their homes. Although improvements have been made with the implementation of this approach, there is still much to be done. Currently there are approximately 2,700 informal settlements in South Africa, which accounts for 11% of all households (Upgrading of Informal Settlements in South Africa, 2013). In Cape Town alone, there are approximately 200,000 informal homes despite the thriving city core. "It is a country where quality of life has depended on skin colour"(Atmore, 1998).

The informal settlement of Flamingo Crescent was founded 13 years ago in Lansdowne housing approximately 215 residents, 58 of which are children (CTPC Flamingo, 2013). In order to address overcrowding and safety issues, the City of Cape Town Informal Settlement Department along with the Community Organisation Resource Centre (CORC) and Informal Settlement Network (ISN) intervened three years ago. Prior to this intervention, the concept of early childhood development was not incorporated into the design process of these communities. Through reblocking, areas for recreation and education are designated to best serve the community. By integrating this into informal settlements, community ties are strengthened while providing a safe environment for residents of all ages to interact and grow. Since then, with the help of the Cape Town Project Center, reblocking efforts have continued and the development of a crèche is underway.

Although these efforts have helped to alleviate some of the adversity the community of Flamingo Crescent has experienced in the past, there's still much to be done. This includes the development of a crèche management system, designation of uses for the community center space, a maintenance system, and trained workers and teachers. Through the reblocking efforts, a space was designated for a future community recreational area as well. This space is to serve as a play area for the children, but also a safe social space for residents of all ages in the hopes of fostering a stronger sense of community.

The goal of this project is to provide the physical aspects the community desires as well as enhance the opportunities for community development. In order to achieve these goals, healthy working relationships will be established between the team members, residents, and stakeholders upon arrival. Working hand in hand with the community will identify the top priorities of the project ensuring satisfaction upon completion. In addition to the physical construction of a recreational area and the facilitation of the crèche management system, the team strives to develop a model that is not only sustainable but can be used in the upgrading process of other informal settlements. Creating a system that will function long past the team's departure is crucial to the success of this project. To attain this, residents need to be involved throughout every step of the process so they gain the necessary knowledge and experience to further the growth of the community. In addition, it will be pertinent to establish solidified working relations between the involved stakeholders and the community members to provide reliable involvement through programmes and funding.



## 2. Thematic Context Analysis

### 2.1 Shared Action Learning

The concept of Shared Action Learning (SAL) offers a unique approach to projects that provides a procedure for problem solving as well as the opportunity to share ideas and knowledge with others allowing for growth and creativity throughout the process. SAL is most effective when dealing with complex projects that involve unstable environments and disadvantaged communities where it is pertinent to take an improvisational approach that can be adapted to meet community needs and desires that cannot necessarily be anticipated.

SAL stresses the importance of accounting for social and cultural contexts in addition to research. Since there is not necessarily going to be one correct answer for the project, it is vital to develop trusting relationships with community members so that through collaboration the correct path can be chosen to reflect the interests of all parties involved. This can be achieved by reaching out to sponsors and by preparing multiple plans and ideas on how to communicate with the locals. While in Cape Town, it is going to be important to reflect and observe how community members are responding to the team's ideas and actions to ensure overall satisfaction. In addition to understanding the community's response, it will be vital to observe reactions amongst our group to uphold dynamics, see how we are growing and changing, and ensure all ideas and views are being equally heard and considered.

Developing several plans for multiple outcomes will be critical. Part of these plans will be developing visual ways to communicate with the community members of the informal settlement and some of the project's partners. The community wants to be involved and the team needs to develop a plan that works hand in hand with them to get them interested in providing their input. As the team does this, it is important to keep an open-minded approach and look for disconfirming evidence. As opposed to conventional learning, disconfirming evidence is used to disprove personal assumptions about the environment. This approach will be used to avoid misguided preconceptions and allow the team to have several alternatives to tackle the real problem. Finally, to be successful at communicating, the team needs to spend adequate time trying to understand the context around this project and strive to become part of a healthy 'contextual exchange' - an environment where the team, stakeholders, and community members work collectively to achieve the same goal while appreciating this process as a learning opportunity. As the team attempts to master these skills, these will be integrated into the planning and execution of the project (CTPC SAL, 2014).

### 2.2 Asset-Based Community Development

Considering the previous projects that have experienced unexpected adjustments in their plans, it is important to begin the development process by planning alongside local leaders with the community assets in mind. As described by the Asset Based Community Development Institute, "local assets are the primary building blocks of sustainable community development" ("The Asset-Based Community Development Institute", 2009); with this in mind, the execution of the project will focus on community-driven work. This approach will provide the community members with the knowledge and tools necessary for upholding the project outcomes into the future.

Identifying Flamingo Crescent's assets before project execution begins is a fundamental step. This is demonstrated through previous Cape Town projects such as the 2011 Maitland Garden Village team. They applied the Asset Based Community Development (ABCD) approach to organize the Green Light Project for the community. Through this project, the residents learned its strengths and how to use them to encourage participation. This led to the creation of several committees that continued to emphasize the community's strengths. As a result, the team left behind a structure that fits the area's interests and promotes balanced community development. The ABCD method relies on contextual observation of positive qualities in a community. This realization is meant to inspire the community to get involved, to appreciate their progress, and to identify with the improvements.

Identifying these assets in the Flamingo Crescent community will be crucial to protect and facilitate the already established progress occurring. Setting up committees led by local leaders that address crèche management, playground initiatives, playground sustainability, and more would prove to be beneficial for the community.

Throughout the planning and development process of this project, emphasis will be placed on utilizing asset-based approaches as well as incorporating community input and involvement. The methodologies of Shack Dwellers International (SDI), a people centered development organization, can serve as a guide to achieving this goal. Instead of looking at the poor as the problem in informal settlements, SDI considers them the answer (Ellis, SDI). The founders of the SDI viewed informal settlements as the efforts of people taking initiative to tackle an issue the government was failing to successfully address. This mindset evolved into a programme that begins by gathering information directly from residents to identify issues, implements the Savings programme to gather funds, and then begins the housing upgrading process employing labor efforts of the community members themselves. This process allows informal settlements to take control of the redevelopment process

Drawing from these concepts, we can not only ensure community satisfaction but also aid in developing a sense of pride amongst the residents. It's important to remember that the poor are rich in knowledge and that we must "walk the path together (Ellis, SDI)."

### 2.3 Communication and Community Response

Communication is vital in understanding a community and successfully applying an ABCD approach. As seen with previous Cape Town projects, cultural barriers can slow down or completely change plans. A 2013 team had plans to improve infrastructure, organization, and social development in Strandfontein 7de Laan. After two weeks of arrival, the community decided that the team's plans would no longer be implemented. Differences in opinion and priorities from the community members shut down the project completely.

As a team, understanding the community's interests is key; however, identifying the sponsors plans and intentions is equally important. After the 7de Laan community decided not to implement the project plans, the team was relocated into the Flamingo Crescent community where communication with local leaders and sponsors was remarkably better. As a result, the teams plan proved to be successful and led to major improvements in the community. Currently, the reblocking efforts are underway as well as the construction of a two-story multipurpose building that includes a crèche. There is now physical evidence of the improvement in Flamingo Crescent where communication with

community leaders and sponsors remains substantial. Instances like this exemplify how communication and a community's response can facilitate the ABCD approach and result in continued community involvement and improvements.

The beauty of this process is that an end to a project in Cape Town is not a failure; instead, it becomes an opportunity to begin a new project and attempt to apply the gathered knowledge alongside a new community. Essentially, the willingness to understand and respect the locals' decision is a foundation for the planning and execution of the project.

## 2.4 Effects of Reblocking and Prioritizing Needs

Looking forward to future developments in Flamingo Crescent, it is important to understand the steps that have been taken throughout the past year in the community. The 2013 group, "Community Mobilisation through Reblocking in Flamingo Crescent," did extensive research on the most effective ways to upgrade an informal settlement and the steps that must be taken.

In the 1950's and 60's the primary approach for improving the housing situation of slum residents was through government-provided public housing. (CTPC Flamingo, 2013) In order to provide this housing, the government would demolish existing settlements which they believed would provide a better livelihood to the members of the settlement and remove any disorderly influences. Unfortunately the government's efforts could not slow the growth of informal settlements. By the 1970's a new approach had formed which focused on more independent development of settlements by their residents (Abbot, 2002b). A new push towards working within settlements rather than bulldozing them proved to be more successful and this community based approach is widely practiced today. The team plans to incorporate this concept into their work in Flamingo Crescent.

Over the past year, the community of Flamingo Crescent has been working to reblock the settlement. Reblocking is a process developed by Shack Dwellers International (SDI) based primarily on the spatial reconfiguration of shacks in informal settlements (CTPC Flamingo, 2013). This process is intended to maximize open public space within the settlement. In Flamingo there was a heavy push to use this newly opened space in the field of Early Childhood Development with a space for a crèche and recreational area. The reblocking also allows for wider roads allowing service, delivery, and emergency vehicles access to the settlement. It is a bottom up strategy that gives back to the community by creating jobs, upgrading residencies, and developing skills. The community is heavily involved throughout the entire process but they work to disrupt as little of people's lives as possible. All together the process upgrades the settlement and community members take a great sense of pride in their work.

The reblocking in Flamingo is almost completed and they are now moving into utilizing the open spaces that have opened up. They have developed designs for a two story multipurpose center as well as a recreational area accessible to the children. This advancement for Flamingo was not handed to them for free by the government. The community was asked to fund as much of the project as they could in order for it to be considered. This became feasible after months of saving.

The diagram below outlines the benefits of undergoing the reblocking process in a community. This includes mobilizing as a community to become organized and make critical decisions, creating roads for easier access for emergency vehicles, and upgrading the shacks. In turn, reblocking creates jobs for

many of the community members and will inspire a sense of pride throughout and after the process is completed.



Figure 1. Reblocking Process

## 2.5 Child Education and Development in South Africa and Related Projects

Underprivileged children living in South Africa experienced a history of neglect due to the political ideologies of the apartheid government. Apartheid was a system of racial separation that was enforced by legislation in South Africa. In the 1950s the Minister of Bantu (black) Affairs questioned the purpose of educating the 'Bantu' children because he believed that their opportunities and potential were limited to manual labor (Atmore, 1998). This belief resulted in a skewed education system that favored white children who were offered education at no cost, while black children attended voluntary, tuition-paid schooling.

This system resulted in minimal education opportunities for black children. Access to preschool provisions for children is currently less than 9% and for black children even lower at 6%. There are many reasons for the poor quality of primary education in South Africa. For instance, lack of financial resources, untrained staff, and lack of equipment and poor accommodations are challenges faced by many crèches (Atmore, 1998). In many areas in South Africa, equipment, food for the children, and teacher salaries are non-existent. Parent fees are needed to support the faculty and facility however parents are likely unemployed or earn very low wages. Therefore, there usually is an unacceptable number of children per teacher ratio in crèches. Staff salaries vary from R200-R500 per month. Consequently, there is high turnover for teachers. Lastly, most centres lack adequate equipment and structures for a safe and healthy learning environment. Out of the 52.98 million people currently living

in South Africa, about 6 million (15%) are under the age of 6 years old. Of these 6 million young children, 5.3 million are black South Africans, with about half living in rural areas and the other half living in urban areas. Only 9% of those children that are provided with private non-formal, non-governmental organisations and community-based organisations (Atmore, 1998).

Currently, South Africa addresses early childhood development in a productive manner. These include community-based approach, existing non-formal training, and support infrastructure. Since the previous government abandoned its responsibility for educare, most community members have come together to organize services for the community. As seen in a study conducted on support for crèches, 295 out of 575 crèches (51%) were started by the community. The graph below shows how some of the crèches in informal settlements originated, and how much the government has helped with this initiative (Ferrinho, 1988).

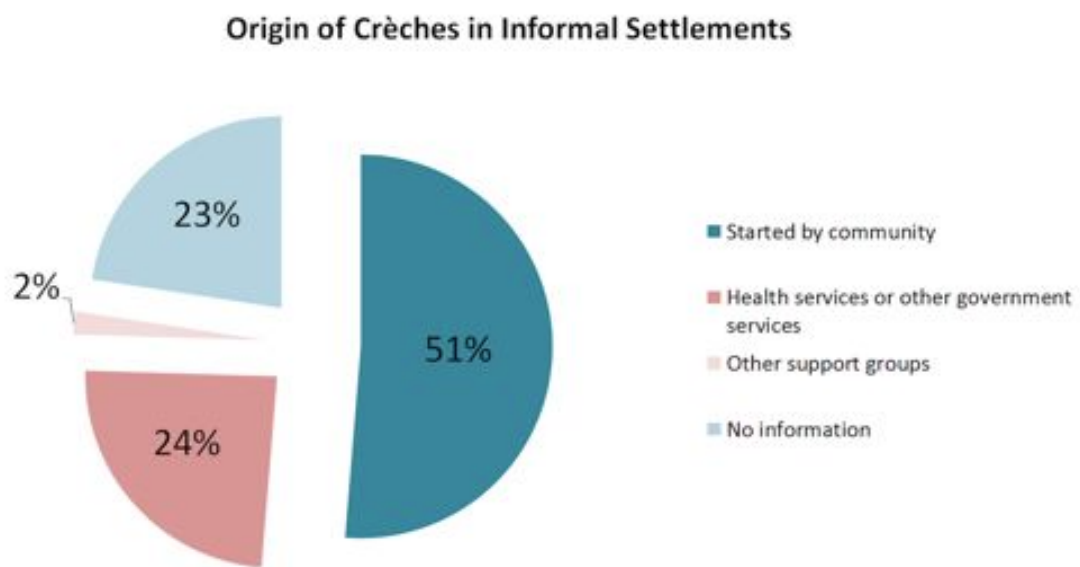


Figure 2. Origin of Crèches in Informal Settlements

Some programmes have included centre-based provision playgroups, nutrition, food aid, and parent education. "This community-based approach to educare provision has provided for maximum participation and responsiveness to local needs and conditions" (Atmore, 1998). Non-governmental Early Childhood Development (ECD) organisations have played a facilitating role in the process to crèche and educational development. These organisations provide communities with various training, guidance, support, and even financial inputs. The trainings they offer include organisations establishing a course of action that will enable crèche facilitators to fulfill requirements of the ECD curriculum to become fully accredited teachers. Public funding for ECD is mobilized from national, provincial, and local government. Funding ECD programmes can help protect the rights of children and women as well as promote human resource development and secure proficient performance by children in school to improve the effectiveness of the schooling system in South Africa.

### 2.5.1 Best Practices for Crèche Development

The Cape Town Project Centre has contributed to the success of multiple ECD projects in informal settlements in Cape Town. In 2013, Cape Town Project Center teams have contributed to formal elements of the Kiddies College Preschool crèche such as management, organization, and documentation. By working with the principal and teachers of the Kiddies College Preschool the team updated their documentation to streamline their emergency contact information and tuition fees. Additionally, they worked together with the children of the Langrug community to make facilities more child friendly. The ECD team developed an activity to get the children involved in making their wash space their own (Zhang, Hedan Mindy, et al, 2014).

In 2010, a CTPC team working in Monwabisi Park developed a site-based approach to supplement children who were not participating in crèches. Monwabisi is an informal settlement located in the township of Khayelitsha on the outskirts of Cape Town. The total number of people in Monwabisi Park is approximately 25,000 people, making it one of the fastest growing informal settlements in Khayelitsha ("Violence Prevention through Urban Upgrading"). There are approximately eight crèches, or preschools, located within the informal settlement in Monwabisi but only a small percentage of children attend these ECD centres. In a survey in 2010 by Violence Protection through Urban Upgrading (VPUU), it was determined there are currently 2,700 children between the ages of zero and six living in Monwabisi Park. Of these 2,700, only 43% receive any type of formal ECD, leaving a majority of children without formal ECD services.

The Emthonjeni outreach programme was developed for Monwabisi Park to create more opportunities for children in the informal settlement to participate in ECD activities. The project team researched available ECD centres in the settlement and led a forum to promote community awareness of the importance of ECD. To better understand why some children were not participating in the crèches at Monwabisi Park the 2010 team interviewed residents whose children were not enrolled in crèches. The Emthonjeni programme was then designed around giving access to activities not available in homes in the settlement while serving as local water access. Finally, before the team completed the design on the pilot programme they consulted neighboring residents surrounding the areas being blocked off for the Emthonjeni programme to incorporate their ideas as well (Sparrell, Courtney Lynne, et al, 2011).

The 2010 Early Childhood Development in Monwabisi Park Project and 2013 Early Childhood Development in Flamingo Crescent Project both worked to establish new ECD programmes. The 2010 Early Childhood Development Project in Monwabisi Park addressed the legality of opening a crèche. "According to the South African Constitution, it is the duty of the local government to provide ECD facilities for all children in the area" (Sparrell, Courtney Lynne, et al, 2011). This project also taught the team about the management and specifications of a crèche in South African Informal Settlements.

The most successful elements of both of these ECD projects was the level of community involvement and active iteration and planning between both the project teams and the community. Asking the settlement what they want out of a community center and play space instead of producing a design on our own will create a stronger partnership and design that will fit the community's needs. Involving the children of the community into the smaller build elements of the play area and community center will result in a space where they will feel comfortable. Developing a sense of ownership over the space will contribute to its sustainability in the long run.

After researching Monwabisi, the team investigated similarities to Flamingo Crescent. Approximately 215 people reside in Flamingo Crescent, however this is uncertain as many residents come and go when looking for work. Also, out of the 215 residents 58 children were recorded in 2012 with 27 of them being between 0-6 years old. The team has understood that it is difficult to keep a record of the number of residents in an informal settlement and therefore have taken this into consideration. In the 2013 Flamingo Crescent Project, the team learned that the nearest crèche to the Flamingo Crescent community is a 20-minute walk away. This school also requires tuition fees that are not attainable for the residents of Flamingo Crescent. A crèche within the community could increase educational opportunities for the children and provide valuable jobs for teachers and women in the community. For this reason, the 2013 Flamingo Project Team submitted a proposal for a crèche.

Using the research from the 2010 Monwabisi Project Group and continuing the progress of the 2013 Flamingo Project Group, the team plans to facilitate the crèche in the Flamingo Crescent community.

## 2.6 Early Childhood Development Regulations in Cape Town

To achieve a level of formality required by the Cape Town government to receive federal funding “partial care centres” or “child and youth care centres” must comply with regulations outlined in Early Childhood Development Policy 2013 (see appendix A). ECD facilities that operate along these parameters are eligible to be registered with the City of Cape Town. Registered facilities that have significant need are also eligible to receive a subsidy provided by the government. The provincial Department of Social Development determines an adequate subsidy for each registered crèche. Alternatively, crèches that meet most of the minimum standards can receive a conditional registration certificate and are able to receive a subsidy to meet minimum standards (Early Childhood Development Policy, 2013).

The Government of the Western Cape characterizes informal settlements as places of “vitality and opportunity” (A Quick Guide to Dealing with Common Informal Settlement Problems, 2005). According to the Government of the Western Cape’s *A Quick Guide to Dealing with Common Informal Settlement Problems* states that it is “unusually inappropriate to apply conventional standards in the provision of facilities within informal settlements.” The Early Childhood Development Policy from 2013 from the City of Cape Town states that regulations are “project specific and more flexible than the regulations that are conventionally applied by the local authority.” These policy exceptions represent a deviation between local policy and regional policy. There may be additional circumstances in play once the team reaches Cape Town. The city officials who will be partnering with the team in Cape Town will provide their own input and regulations that seem set in stone will be perceived and interpreted differently. Standards and procedure for registration will change in Cape Town and it is important to adapt to new circumstances once there.

See Appendix A for the city of Cape Town’s procedure on how to apply to register a crèche. See Appendix A for policy and regulations on ECD Centres.

## 2.7 Public Space Inequality in South Africa

Uneven distribution of public space for play areas and parks is a global plight that is present in abundance in South Africa. Due to the lasting effects of the apartheid era, areas of wealth have higher access to public parks in comparison to township townships and informal settlements where land was not set aside and designated for public service in their haphazard design process. In an analysis of nine townships in the western half of Cape Town, the inequality of public space distribution was significant. The study showed that areas of high densities resulted in inadequate access to green play spaces, with 15 times less public green space area per household than in the suburbs of South Africa. Townships throughout South Africa average 4.1 people per household with 18.9 m<sup>2</sup> of public space per person, which is below both international standards and those Johannesburg has set. (Matthew McConnachie and Shackleton 2010). Informal settlements, in comparison with their associated townships, suffer even greater deficits of public space inequality. According to this study, the public green space available per person averages to 3.5 m<sup>2</sup>, which is significantly lower than the national guideline of 40m<sup>2</sup> per person (Matthew McConnachie and Shackleton 2010).

High density areas oftentimes allow for little to no private green space for residents around their homes, making public areas even more imperative. The benefits public parks pose for high- risk communities are unique in their independence from social class or economic standings. By providing a free area for social activities, residents of all socioeconomic standings can participate and interact with one another. In comparison, public areas of shopping and entertainment tend to exclude community members with lower incomes. Providing free public spaces for social interaction creates a greater sense of community and belonging for a wider range of residents making it imperative for community development.

## 2.8 Structural Designs and Programmes for Multipurpose Centre

Currently Flamingo Crescent is developing a Multipurpose Centre (MPC) on the second floor of the crèche. An MPC is a facility designed to provide the community with space for a variety of activities and services. The team plans to provide ideas for programmes that can be implemented to benefit the entire community. To learn about the potential programmes for the MPC the team researched the 2012 project, "Laying the Foundation for a Resilient Partnership: Innovative Upgrading in the Informal Settlement of Langrug." This project did extensive research on programme ideas, engaging the community, and gathering resources from local NGOs. After connecting with the community it was determined that four major concerns would be addressed: health, education, safety, and socioeconomic development (CTPC Langrug, 2012). To address health, a section of the space was designated to host mobile clinics, HIV/AIDS support groups, and soup kitchens. For education the MPC would be used as a crèche as well as office space for the community leaders. Through collaboration with CORC, safety was ensured by examining several design options. Finally to improve socioeconomic development in the community, the team decided to utilize the space to provide small shops as a temporary storefront. The team developed strong working relationships with organizations such as CORC (Community Organisation Resource Centre) and CUFF (Community Upgrading Finance Facility), which provided funds and resources. Due to the community being unable to develop the necessary funds, the project remains unfinished. Regardless, this project can be used as an example to determine programmes and procedures for future multipurpose centres.



Continuing on the theme of utilizing the MPC space the team researched the 2012 Project “Supporting Reblocking and Community Development in Mtshini Wam.” This project offers examples of different programmes that can enhance the community and its members. Gardening was identified as a top priority for providing the community with an aesthetically appealing area and an additional source of food. To maximize available space, the gardens were built vertically against the building while still providing access to sunlight for the plants. The communities were then supplied a manual “Worm Farm How-To” along with a “Plant Care” schedule to assist them in the future. The Mtshini Wam group created a community carpentry team that could continue to build and maintain the project long after the students had left. To do so they provided the communities with instructional pamphlets, tool tracking documents, and hands-on training sessions. One of these training sessions was a worker certificates recognition programme supported by the City of Cape Town, the Informal Settlement Network, and the Community Organisation Resource Center. This provided community members who participated in the process with registered work experience and references for future job applications. These certificates worked to stimulate work interest within the community while continuing the project efforts. (CTPC Mtshini Wam, 2012). By studying past projects, the team gained insight into possible programmes and community dynamics. To implement what is learned from past projects, the team will utilize successful skills and objectives.

## 2.9 Research Questions

In order to guide research throughout the project process, the team developed several research questions. The figure below breaks the questions into three categories: before Cape Town, both, and in Cape Town. These categories help prioritize the order of research as well as establishing what needs to be completed before arrival.



Figure 3. Prioritization of Research Questions

## 3. Connections and Sponsors

### 3.1 Sponsors

The Centre for Early Childhood Development (CECD) is a non-profit organization, based in Cape Town, dedicated to ensuring quality early childhood development to the country's children. They aim to enhance individual and organisational capacity, develop and disperse resources to communities nationwide, and conduct research on African specific topics. They are able to sustain themselves through income generated by project management, consultancy work, publications, and research. They also provide support for specific early childhood development programmes and projects through grants from Foundations and Trusts, Government Departments and from Corporate Social Investment Programmes (Atmore, Niekerk, & Ashely-Cooper, 2012).

The mission of the Centre for Early Childhood Development is, "To increase the capacity of individuals, organisations, and communities in delivering early childhood development services." (CECD, 2014) To fulfill this mission the CECD works with a variety of stakeholders. They work with individuals to develop their skills and ability to help larger numbers, with communities to provide technical assistance, and organisations to enhance their efficiency and effectiveness. They also work with parents to provide information on the development of children.

The CECD strives to advocate policies and practices that create improved conditions for children. They are dedicated to providing training opportunities for workers in the field of Early Childhood Development and assist communities to establish centers and programmes strictly for early childhood development. It is their goal to promote effective, affordable, and replicable models for early childhood development.

The CECD runs several programmes for the younger generation of South Africa. The programmes cover a wide range of activities including equipment provision and training, skills enrichment workshops, family outreach work, literacy and numeracy workshops, and HIV/AIDS training. They also offer other programmes such as Staff Development and Training, Strategic Planning, Evaluation, Curriculum Development, Conferences, and Knowledge Sharing through the ECD Helpline.

In relation to our project, we will be working closely with them as we develop a management plan for the crèche as well as the multipurpose space. The CECD has had success implementing sustainability plans for crèche's in other communities. Part of the reason the CECD has been so successful implementing this plan is because they work hand in hand with the community the plan will be affecting. The organization has found that tailoring projects to the needs of the specific community to be the most effective methodology. It will be difficult to get the whole community's input but by interviewing important stakeholders and incorporating their wants and needs into a visual plan, the team believes a more sustainable plan can be created.

The team decided the most effective way to portray the links between the sponsors, the community, and our team is to create a visual representation. See below.

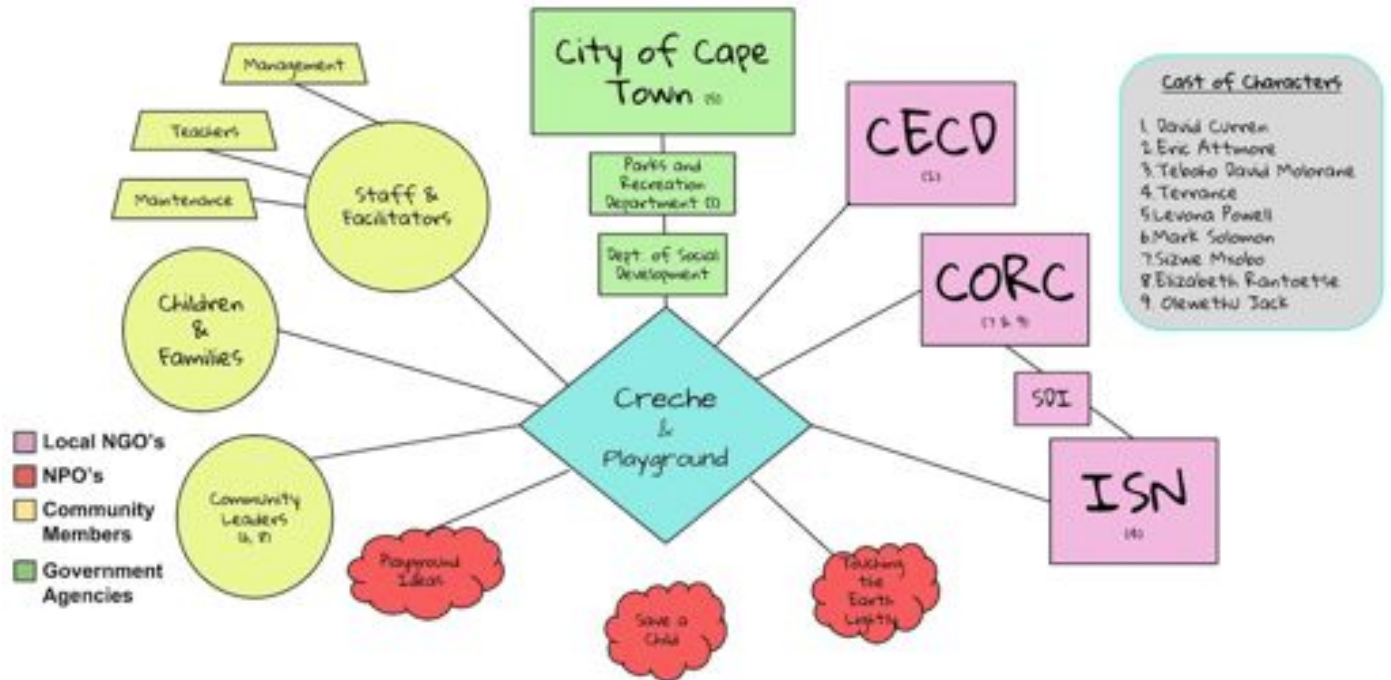


Figure 4. Cast of Characters

## 3.2 Cast of Characters

### 3.2.1 Community Organisation Resource Centre (CORC)

#### *Overview:*

Community Organisation Resource Centre (CORC) is a nongovernment organization that partners professionals with grassroots activists to address the needs of impoverished communities. Its main field of work is in the community networks that are mobilized around their own resources and capacities. CORC provides support for informal settlements for issues regarding land, evictions, informal settlement upgrading, basic services, and citizenship. When CORC intervenes in a community its purpose is to “enable these communities to learn from one another and to create solidarity and unity” within the community.

#### *Role in The Project:*

CORC will help the team to connect with the Community Leaders in Flamingo Crescent as well as local organizations that will play a critical role in the community’s development. The team plans to work collaboratively with them to create a plan with the community and to fulfill the community’s initiatives (Jack, 2010).

### 3.2.2 Olwethu Jack

#### *Role in The project:*

Olwethu is the design consultant for the crèche being built in Flamingo Crescent. Olwethu works for CORC as a technical supporter where he provides technical support in community driven projects for informal settlement upgrading. He spends time with the community leaders and works hand in hand

with the community to draw up their development plan. He is a critical partner to the team as he will be engaging with City officials regarding service delivery and coordinating with consultants.

### 3.2.3 Informal Settlement Network (ISN)

#### *Overview:*

The Informal Settlement Network (ISN) is made up of community leaders of informal settlements across all of South Africa. They strive to create unified self-sufficient communities that are equipped with skills and knowledge to make positive change. In an attempt to establish an opportunity for learning, the ISN lobbies the city government to consult communities in development plans. This makes it possible for an ordinary person to get involved in the development of their community. ISN is guided by “the core principles of learning by doing, working with organized communities, building self-reliance, and building on assets.”

#### *Role in The Project:*

The ISN will help to facilitate the meetings between the community and the team, as well as translate from Xhosa to English. ISN will mainly work on-site with the team and the community. Their main focus will be communication with residents, run impromptu meetings, and determine the upgrading process based on the needs of the community.

### 3.2.4 City of Cape Town

#### *Overview:*

The City of Cape Town is the municipality that governs the region of South Africa. The mayor is Patricia de Lille whose vision is to "address poverty through economic growth and jobs, because only through a strategy of sustained poverty reduction through economic development will we ensure that we give every resident the means for a better life and create a truly inclusive city." Under the City Manager, Achmat Ebrahim, there are a number of departments that can be of potential assistance. For instance, the Community Services, Social and Early Childhood Development, and Human Settlements. The Informal Settlement Department focuses on providing basic services to informal settlements, permanent services to settlements, and progressive housing to settlements when possible ("City management," 2014).

#### *Role in The Project:*

The City of Cape Town's role in the project is to provide the legal side of constructing a crèche. See attached Crèche Application in Appendix A. The different sectors of the departments can provide the team with insight into their specialties.

#### 3.2.4.1 Department of Social Development (DoSD)

##### *Overview:*

The department of Social Development is a government agency in the city of Cape Town dedicated to social transformation. Led by the principle of social justice, they endeavor to create a better life for the poor, vulnerable and excluded people in society. They are working toward reducing poverty and promoting social integration throughout all of South Africa. In order to do this, they monitor the implementation of social policy, ensure social protection, and provide social welfare services. To fulfill all of their goals, they partner with NGO's, faith-based communities, businesses, and organized labor. Overall, they strive to create conditions for sustainable livelihoods and empower communities to become self-sustaining (DoSD, 2014).

#### *Role in The project:*

The DSD provides funding and assistance with setting up ECD sites. In order to obtain this funding the crèche must be registered. The DSD and the steps are outlined below. The DSD also offers the Child Support Grant which provides children under 15 years of age the opportunity to receive R 240 per month.

#### 3.2.4.2 City of Cape Town's Parks Department

##### *Overview:*

The City of Cape Town's Parks Department managed the city's parks, cemeteries, greenbelts, road amenities, street trees and many other public open spaces. They strive to conserve and enhance greenery all while developing the present for future generations. Their goal is to be recognized as a leading provider of quality parks and cemeteries for a better life for all.

##### *Role in The Project:*

The Parks Department of Cape Town can provide the team with necessary resources and guidance for the project. Specifically, the Parks Department can assist in the play area construction that will consist of playground structures and a garden space.

#### 3.2.6 ELRU

##### *Overview:*

ELRU - "Improving the lives of young children" located on 19 Flamingo Crescent, Landsdowne Cape Town. ELRU is a non-profit development and research organisation whose mission is to be a respected advocate and capacity building partner in ensuring the right to development for all young children especially the vulnerable. It is a national organisation working across all provinces in under-resourced urban and rural areas to increase access to and improve quality in Early Childhood Development (ECD) services and programming. ELRU is a helpful resource for crèches. Their outlook focuses on learning through play and understanding how children develop and learn. They also value language so the books they sell are multilingual and they make their books easy to understand so that teachers can learn alongside children as they teach.

##### *Role in The project:*

The resources they have available include training programmes for crèche teachers, materials for teachers such as posters, ideas books, children's books, school books, and HIV/AIDS training. "The women we met with also explained that if Flamingo did start up a crèche, ELRU would most likely be willing to donate some of the above materials like books to Flamingo's Crèche" from CT13.

#### 3.2.7 Touching the Earth Lightly

##### *Overview:*

Touching the Earth Lightly is an action-focused group that design innovative and sustainable construction. They build relationships between people and conservation while maintaining a working relationship with CORC. Their slogan is "design is a dialogue between equals". Their objectives focus on building communities in conjunction with structures, employing women, simplifying construction methods, and use of natural materials. TLEL's main goals are pairing skilled workers with unskilled community members to train and develop skills and creating jobs with low technology and eco-friendly principles. In informal settlement design, their three main focuses are seasonal flood prevention, fire

safety, and food security. They build raised structures with innovative fire panels and food walls to address these concerns. The founder and CEO of Touching the Earth Lightly is Stephan Lamb.

*Role in The project:*

TLEL can assist in funding, teaching skills to community members, and help in the construction of innovative green ideas for the crèche and playground. They aim to enhance individual and organisational capacity, develop and disperse resources to communities nationwide, and conduct research on African specific topics. They are able to sustain themselves through income generated by project management, consultancy work, publications, and research. They also provide support for specific early childhood development programmes and projects through grants from foundations, trusts, government departments, and from corporate social investment programmes.

From the Flamingo 2013 Resource Binder: This section is to aid the process of building and registering a crèche. There is a list of different resources that can help with many different things from construction to facilitation (CTPC Flamingo, 2013).

**Table 1. Potential Programmes Offered By NGO's**

	CEDC	ELRU	EL Child	Lansdowne Library	The Share Mission Foundation of South Africa	Touching the Earth Lightly
Teacher Training Programs	X	X	X			
School Books		X		X		
Children's Books		X		X		
Teacher Idea Books		X		X		
Field Trip Learning Excursions		X				
Donations/Equipment Provision	X			X	X	
Funding Prospects/Opportunities	X		X			X
Construction	X				X	X
Organisational Support	X		X	X		
Parent Empowerment Sessions	X		X			
Life Skills Workshop			X			
Special Needs Programs			X			
AIDS/HIV Training	X	X			X	
Artistic Therapy			X			

## 4. Evolving and Contextual Planning

This project is a continuation of the reblocking efforts of the 2013 Cape Town Project Center Team. The intent of reblocking the community of Flamingo Crescent was to open up space to be designated to early childhood development. The two spaces this project will focus on are a playground and community center. For the playground design, a catalog of possible structures made out of recyclable material will be shown to the community to get their input. The community center consists of a first floor crèche and a multipurpose center above. Due to financial and logistical restraints, the community center efforts for this project will focus primarily on future plans. Programmes as well as spatial designs will need to be considered for the crèche. The overall process will involve community input, management, sustainability, and documentation with the intent of creating a model to be implemented into other informal settlements. This process is illustrated in the figure below.

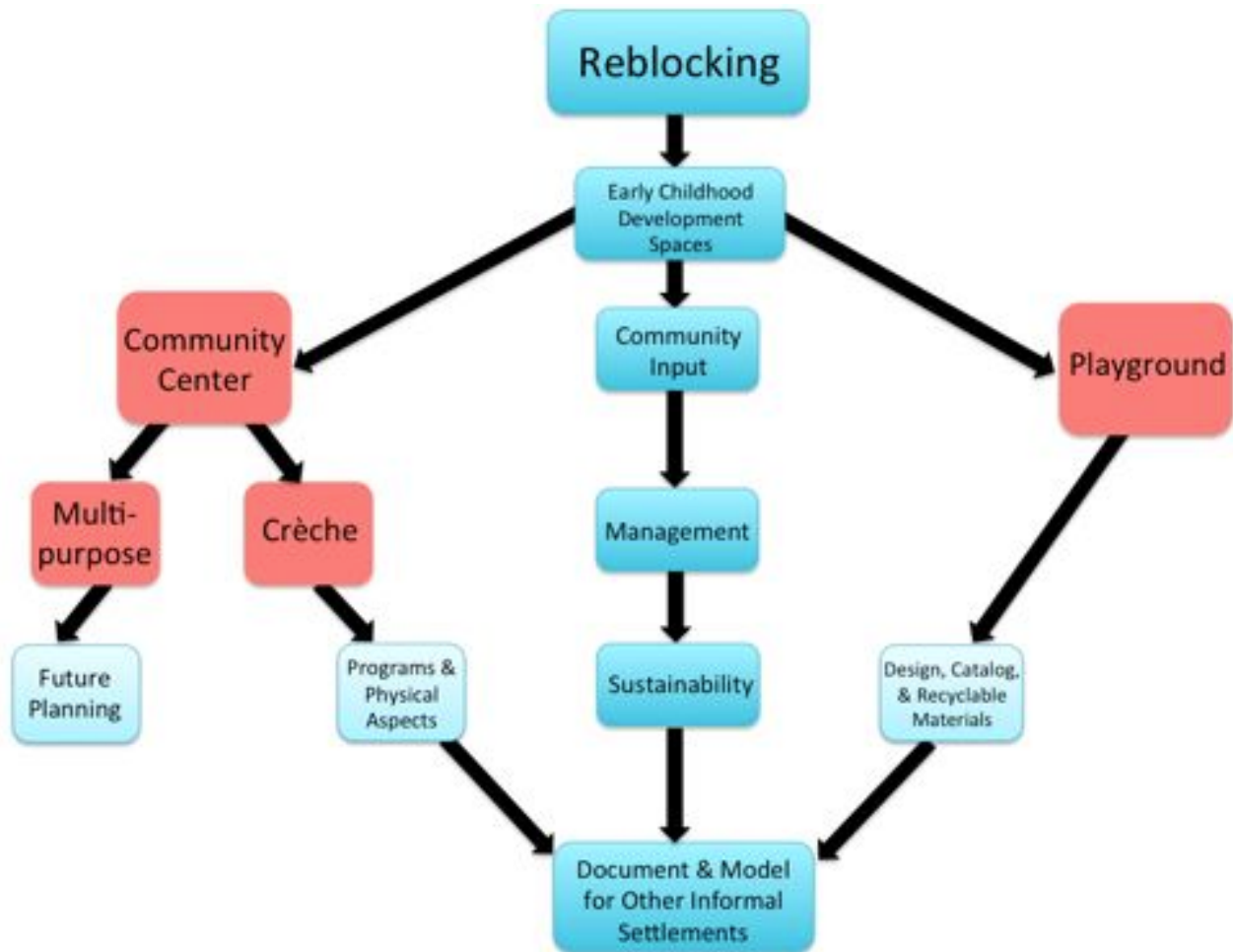


Figure 5. Project Approach

## 4.1 Mission Statement

This project is intended to enhance the opportunities for community development in Flamingo Crescent, South Africa by facilitating the management of the crèche, constructing a community recreational area, and otherwise collaborate with the community to achieve their priorities along with our partners and relevant stakeholders.

## 4.2 Objectives

1. Explore and understand the social context and history of Flamingo Crescent.
2. Foster a healthy working relationship and gather first-hand insight from community members and stakeholders to implement into plans and designs.
3. Develop crèche programmes to create opportunities for Early Childhood Development.
4. Design and assess small scale playground structures to complement Early Childhood Development efforts.
5. Construct play and recreational areas as well as assist in crèche improvements within the time permitted.
6. Prepare a plan to continue building efforts as necessary and facility management guidebook to ensure success of crèche and community center for long term sustainability.

## 4.3 Playgrounds

### 4.3.1 Developmental Benefits of a Recreational Space

Playgrounds provide children with an environment of self-discovery, creativity, connection with nature, social skills, along with other benefits. Ensuring that the construction of this playground revolves around the concept of facilitating all of these benefits will ultimately create a valuable space for Flamingo Crescent.

Developmental psychology continually shows that playgrounds have the potential to advance children's life skills, "Humans play most vigorously at precisely the time when brain cells are frenetically forming synaptic connections (Angier, 1992). The early games and frivolity of animals and humans equip them for skills needed as adults, including language, motor, and negotiation skills" (Frost, p. 7). These new brain connections and social skills are often underestimated; however, establishing this recreational space for the Flamingo Crescent community will create a bigger impact not only for the present but future of children.

Understanding which traits the Flamingo Crescent considers to be valuable will be the first step to secure the success of this space. Several interviewing processes will be the main method to acquire data. Interviews with parents and children will give the team a better sense of the design priorities.

### 4.3.2 The Effect of Playground Design on Communities

The developmental process of implementing a playground in a community requires consideration of both the physical and conceptual facets. Playgrounds offer more than simply a play space for children; they hold the potential to positively influence all members of a community. By fostering a sense of community and facilitating impromptu encounters between neighbors, residents



gain a sense of belonging improving their sense of safety and increasing their motivation to participate in civic responsibilities. Studies have shown the average sense of community to be higher amongst those living within 5 minutes of a public park or playground (Francis, Giles-Corti et al. 2012). Successful public spaces offer a balance between accessibility, range of activity and uses, comfort, aesthetics, and sociability in order to accommodate a wide variety of users.

Employing play areas in developing communities with widespread poverty like Flamingo Crescent is especially beneficial due to the free activities it provides residents. Involving the community in the planning and constructing process ensures public satisfaction as well as establishes a sense of pride throughout.

#### 4.3.3 The Effect of Playground Design on Child Development

A common misconception regarding playgrounds is that their sole purpose is to provide children a break from learning. However, the outdoor environment playgrounds provide is simply an extension of indoor educational programmes. Through play structures, interactions with themselves, and interactions with others, children cultivate cognitive and social skills imperative to proper development.

Studies have been performed in attempts to determine the most effective designs of play environments in relation to child development. According to Moor and Cohen, activities should allow for a flow of movement through multiple branches and options at decision points (Brown and Burger 1984). In the design, space needs to be designated for a range of social scales. At a young age, children face emotional anxiety, so it is pertinent areas for role-play are set aside. During play, children can experience the need to remove themselves from areas of high social stimulation. By providing solitude areas directly off of an activity, children can experience alone time while still observing others. Fostering a clear sense of accomplishment throughout the areas of play is critical in motivating children to challenge themselves as well. Similar to setting play structures, having loose parts such as puzzles and wood allow for dynamic and manipulative play encouraging creativity.

In addition to what elements need to be included in a play area, the flow of activity is important to take into consideration. A study performed by Hill, as reported in Brown and Burger 1984, identified four categories of play including physical and social sections should be placed in close proximity while creative and cognitive sections are best placed separate to avoid interruption from areas of higher activity.

Playgrounds advance a wide range of basic social skills necessary for the developmental process of children. Areas of role-play, loose parts, and obstacles allow children to relate to themselves as well as others, maturing their interpersonal skills. Being exposed to living things as well as the ambient environment provides opportunities for children to understand proper non-human interactions. This can be achieved by including garden areas, swings, water play structures, and slides. Lastly, playgrounds aid in evolving a child's understanding of their relation to the physical environment spatially. The inclusion of elevated structures, containers such as tunnels, boundary settings like fences, and circulation systems such as bridges and pathways all promote this behavioral development.

In a study by Thomas R. Garth and Electa Penina Porter in the American Journal of Psychology, the team learned how different colors can physically and mentally affect children at a young age. The experiment consisted of 1032 children ranging from 1-7 years old. Each student chose the color they liked the best and so on. In the figure below we can see that out of the 62 children age 1-2.9 years old

the majority were drawn to Orange, Green, and Red, while the 124 children aged 3-3.9 years selected Red and Blue to be their favorites, and the 128 children aged 4-4.9 years old ranked Red, Blue, and Green as the top three (Garth and Porter 1934). This study from the American Journal of Psychology focused on American children. The team has decided that they will keep this study in mind when designing the physical appearance of the playground. The team will create a playground that is aesthetically appealing as well as intriguing and challenging for the children. The team has also decided to create a Playground Catalog that will visually show community members different options for play construction. This can be found in the Appendix.

SHOWING RANKS, SCALES, AND COEFFICIENT OF VARIABILITY  
(Numbers in parentheses give the number in the group)

Colors	Pre-school					
	Rank	C 1-2.9 Yr. (54)	Rank	D 3-3.9 Yr. (124)	Rank	E 4-4.9 Yr. (128)
Red	1	208	1	138	1	208
Blue	6	135	1	138	2	204
Green	2	309	3	131	3	197
Orange	1	315	3	131	4	181
Violet	4	272	6	120	5	178
Yellow	5	147	5	124	6	121
White	7	0	7	0	7	0
C.V.				-.03		-.01

Figure 6. Color Preferences of Youth

#### 4.3.4 Recyclable Playground Example

In 2003, Malaysia developed a learning through play programme as an aspect of their National Preschool Curriculum. The town of Sabah initiated the “Make Local Project,” which was a construction plan centered on the three R’s: reduce, reuse, and recycle. By designing structures with the focus of using recyclable materials that were in abundance in their community, the members of Sabah decreased construction costs as well as their environmental impacts. One of the most successful structures was a large tractor tire filled with cement (Figure 2) to provide the children with a platform to teach the concept of height differences. Other innovative structures included cutting fallen tree trunks into different lengths to create a balancing course, sand pits edged with bricks, and wooden easels constructed out of plywood scraps. A unique component to this project was the incorporation of children input. Once the structures were built, the children got to choose what colors would be used for painting. The structures and child participation of this project will be incorporated into our own.



Figure 7. Recycled Tire and Wood Play Structures

#### 4.3.5 Playground Risks and Regulations

The creation of playgrounds involves respecting regulations and the standards imposed by the city of Cape Town. However, it is important to design a space where considerable risk is still present. According to developmental psychology, providing risk is a critical component in the playground design process, “Learning to handle risks is essential for children’s cognitive and physical skill development, which allows them to protect themselves in challenging environments. Helping children handle risk is an essential feature of adult conduct for guiding children in being responsible for themselves and for the consequences of their activity” (Frost, p. 8). The team will have to implement creative techniques to design a safe place that encourages children to take on challenges and make decisions.

#### 4.4 Crèche Management and Resources

Crèches in South Africa tend to fall under one of two different models depending on their focus and curriculum development. These models help to better understand the status of the crèches and what resources they have available.

The first one is the Centre-based model which runs under a structured curriculum and is typically located in a formal community. One example for this model is the CT13 Kiddies preschool and their emphasis on preparing children for their future formal education. In comparison, the non-Centre based model closely follows a child care center. At Flamingo Crescent, the newly built crèche will qualify under the non-Centre based model. Being in an informal settlement, this crèche will spark up “bottom up initiatives” which will increase employment opportunities, get the parents involved in the education process, and provide a space that is accessible for every children in the community (CT13, Early Childhood Development Connection).

As this crèche keeps developing, the community will have the opportunity to adjust the crèche to follow whichever model best fits the needs of Flamingo Crescent. The interest and particular strengths of the locals will serve as the motivation for future growth. To stimulate the community’s assets, the team will provide the following resources and programmes that will serve as a guide to facilitate the continuous improvement of the community center.

#### 4.4.1 Determinants of Crèche Quality

To provide Flamingo Crescent with a crèche fit for their circumstances, the team must supply the crèche with attributes which contribute to site quality. These should include facilitators to make the most of their educational opportunities, clean facilities, initiating programmes, and a healthy learning environment.

The pyramid below can represent crèches across South Africa. About 5% of crèches are the top caliber of organisations, with facilities that are capable of accommodating the student base, playground, kitchen, WaSH facilities, access to technologies, trained teachers, and the funding necessary to function. The next 20% are in the high class crèche section with trained teachers, reasonable facilities and educational materials. However, they do not have solid funding and their facilities may not be in the best condition but are still considered functional. The next 30-40% of crèches are in working condition. They meet the minimum standards required by law for crèche facilities and have a teacher with minimal or no training. The majority of crèches lie in the bottom 40-50%. These crèches are often in informal settlements or rural environments with limited access to educational resources. These crèches have impoverished facilities, lack of qualified teachers, and unstructured curriculum. There are presently about 24,000 of these facilities in the bottom 50% that support 1.5 million children (Flamingo Resource Binder, 2014).



Figure 8. Standards of Crèche

The Western Cape Department of Social Development (DoSD) conducted an audit of 233 ECD sites in 2009. Sites ranged from registered and unsubsidized, to registered and subsidized, and unregistered. The goal of the DoSD was to determine indicators of site quality and provide the Western Cape Government with an overall assessment of how ECD sites are conforming to governmental regulations. The Government of the Western Cape considers ECD to be one of their apex concerns.

According to literature the DoSD has written and reviewed, investments in ECD programmes pay for themselves within seventeen years by reducing the need for the government to invest in remedial programmes that combat social disengagement. Additionally, children growing up in disadvantaged backgrounds have the most to gain from ECD programmes, which focus on language, cognition, and social skills (Makoae 2010).

Quantitative data in the form of weighted scales was collected. Each site received a score based on how well they addressed the needs of infants and children. According to the statistical scales, most centres did not have many physical resources, but scored highly on quality interaction. In regards to physical aspects, hygiene practices were inconsistent, there was a lack of soap and shared towels, physical play areas were often unsafe, and there usually was poor ventilation in the classroom. Even with the lack of physical resources the average score for all 233 ECD sites was found to meet the minimum standards of care in Cape Town (Makoae 2010). It appears that crèches do not need to conform to the ideal standards of literature to achieve minimum standards of care for children.

Statistic scores predict that higher scores in site management, higher fees that compensate the teachers, and training including professional competence, planning, teamwork, and staff evaluation, contributed to site quality more than any other category of evaluation. The DoSD found that there is statistical link between the higher the management quality, fees, and practitioner ECD training and experience and the space and furnishings, consistency of personal care routines, extent of listening and talking, quality of activities and interaction, and programme structure (Makoae 2010).

There was little difference between the classroom quality of sites charging less than R50 a week that were registered and subsidized versus unregistered. Either the subsidy is not being spent on aspects which do not contribute to site quality (meals for children), or there could possibly be inadequate bookkeeping were the subsidy is lost without a paper trail. Qualitative data from on-site interviews of the supervisors, a forum on ECD, and site assessor's notes were also collected. According to supervisors, inadequate facilities and a lack of constant financial resources were their biggest concerns for maintaining quality. Insufficiently trained staff and lack of teaching equipment closely followed these (Makoae 2010).

Assessor's noted that the personal leadership quality of the management team was the most important indicator of site quality. For sites charging less than R50 a week, the management team's ability to garner the parent's support, utilize local networks (NGOs, DoSD, ECD forum), and set high standards for their staff had the biggest impact on site quality. For example, in one ECD site the managing supervisor had parents volunteer to improve the crèche's physical spaces and in times of extreme need parents would pay an extra R10 a week. At another site, the management team asked for donations from local NGOs and applied for grants (Makoae 2010). These findings can translate to Flamingo Crescent. It may not be necessary to register the crèche and receive the subsidy, instead the team should focus their efforts on finding community members interested in management and establishing leadership quality within the management team of the crèche.

Management training was considered important however there was no guarantee of quality service due to training. A marginal ECD site could be improved greatly by a motivated leader. Similarly, supervisors noted that having trained teachers was helpful, but they are hard to find. Alternatively, supervisors also noted that a person could be qualified but not good. They preferred to hire a good caregiver first, and then the teaching qualification could be achieved. In fact, teachers with the least ECD

training had better quality infant and toddler classes (Makoae 2010). However, this is most likely attributed to burn out.

Overall, supervisors described their ideal ECD site would have an attractive, solid, well-maintained building with sufficient space outdoors and indoors. There would be a separate kitchen in the building to maintain good cleanliness and hygiene, outdoor space would be fenced off with a gate for security, and there would be outdoor play equipment and structured daily plans where children would both learn and play (Makoae 2010).

The two main contributors to the crèche quality project in Flamingo Crescent would be ELRU and CECD. These organisations can offer accredited teacher programmes.

**Table 2. ELRU Training Programmes**

<b>Level</b>	<b>Purpose</b>	<b>Explanation</b>	<b>Specifics</b>
<i>ELRU Level 4</i>	ECD Basic Skills Training	Free course for adults with no previous experience or knowledge in teaching. It teaches the basics on Early Childhood Development and aims to prepare the enrolled for working in crèches	The training course lasts 4 months and the enrolled go in to the ELRU center just down the road from Flamingo Crescent 3 days a week. Breakfast and lunch is provided. Some communities choose to send two groups of teachers to the ELRU Programme on alternating days so that every facilitator gets the chance to take the course and the crèche can be run at the same time.
<i>ELRU Level 5</i>	College Course	This is an 18 month course offered at ELRU through False Bay College to receive certification	To enroll in this course, a person is required to have completed up to Grade 12 and must work or be a volunteer at a crèche. A stipend of about 1500 Rand per month for travelling expenses is available.

To get enrolled in either of the training programmes, fill out the provided form (more can be found at the ELRU building) and hand in the completed form to ELRU (must provide an ID number and cell phone number). CECD work closely with community and teachers. 95% of the work CECD does

focuses on crèches in the bottom 50%, in the worst environments that don't currently meet the minimum requirements.

#### 4.4.2 Investigating Early Childhood Development Programmes

As the team works towards finding NGO's and government organisations to help educate the facilitators of the crèche it is important to understand the types of programmes that these organisations will be working to put in place. These programmes will be give the facilitators and managers a better understanding of ECD, internal operations of the crèche, using equipment, and running programmes. Utilizing all of the knowledge from NGO's and partners will result in a successful and sustainable crèche.

##### 4.4.2.1 Teacher Development:

In order to effectively care for the youth of the community the teachers must be well trained. There are two possible qualifications that a teacher in the crèche can obtain. The first is *Further Education and Training Certificate: Early Childhood Development (NQF Level 4)*. This is an entry-level qualification for those interested in the field of education. This qualification enables the teacher to facilitate the all-round development of young children in a manner that is sensitive to culture and individual needs. The second more advanced is *Higher Certificate: Early Childhood Development (NQF Level 5)*. This qualification focuses more on knowledge of child growth and development as well as a broad understanding of the national policies (ECD Training, 2014).

##### 4.4.2.2 ECD Skills Training Programme:

ECD Skills training programmes will educate and build the capacity of ECD teachers. It will give them experience working with young children effectively and will build up their understanding of a child's needs. Children who are ready for school are socially and emotional healthy, confident, and friendly. Providing them ECD can positively change their development trajectory. (World Bank, 2011) Positive ECD programmes include creative play, going outdoors, storytelling, and music. All of these enhance a child's creativity. Similarly discipline, safety, and health education develop positive habits and a general understand of how to behave. These programme make a lasting effect on children and are relatively simple subjects.

##### 4.4.2.3 Governing Body Training:

This training enhances the leadership, management and administrative skills of Governing Bodies enabling them to lead and manage their ECD centres more efficiently. It establishes a vision and mission for the ECD center and delves into the roles and responsibilities of the facilitators and managers of the crèche (Shaik, 2013). It also addresses finances and potential ways to keep track of the money including a savings group and record keeping system. These programmes can often be overlooked but are critical to the success of the ECD Center.

##### 4.4.2.4 Education Equipment Provision:

When given the opportunity to work with education equipment children acquire developmental skills, fine motor skills, observational skills, hand-eye coordination, problem solving skills as well as the recognition of colours and shapes. This equipment serves as a means for growth of children's physical, social, cognitive, emotional development. An example of a piece of educational equipment includes puzzles, balls, bean bags, blocks, ropes, and beads. All of these give children the opportunity to be creative and interactive. It also supports teachers in the practical implementation of lessons learnt

during ECD training. Providing equipment to a crèche is a productive way to create an interactive atmosphere and to get children engaged (Shaik, 2013).

#### 4.4.2.5 Literacy, Numeracy and Life Skills Programmes

Part of the mission of most ECD Centres is to inspire an understanding of literacy, numeracy and life skills among children. This can be done through a variety of ways but the most common includes through interactive activities which present these skills and concepts in a stimulating way. An important aspect to this is to include parents in the process of teaching their children these fundamental concepts. This gives children more exposure to these concepts and in turn continually develops their skills on the subject. This motivates both the children to continue learning and the parents and caregivers to continue to educate their children and watch them develop.

#### 4.4.3 Equipping the Crèche

Materials chosen to equip the crèche should be dependent on a curriculum established by the community members through a public forum or other open community event. Activities and services offered, and goods provided should be combined synergistically to create a programme that addresses the community's goals for the crèche (Evans et al, 2000). The figure below shows how equipment for the crèche programme/curriculum is dependent on the activities, services, and goods the community wants the crèche to offer.

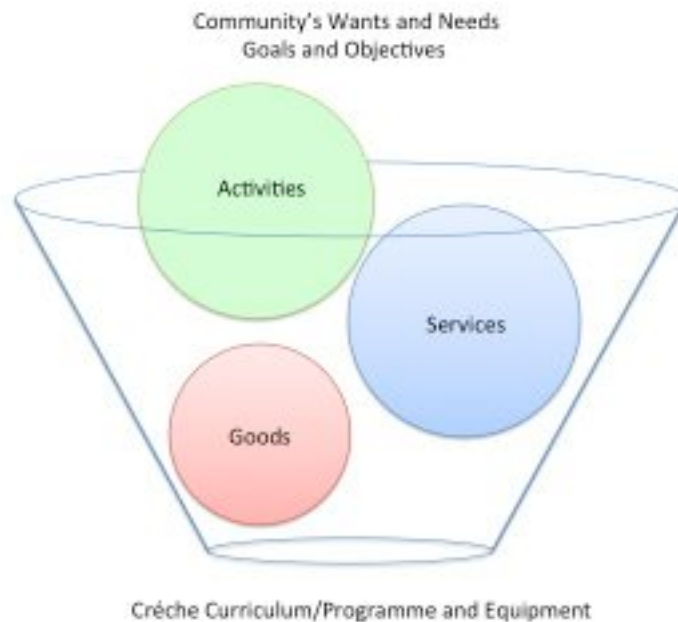


Figure 9. Crèche Equipment Dependent on Services and Activities Offered, and Goods Provided

Potential equipment necessary for the crèche can be provided by local resources (CECD, DoSD, CORC, etc.). See Table 1 for resources accessible to the crèche.



#### 4.4.4 Crèche Finances

Finances are one of the main challenges that informal settlements face. Several families face a daily struggle of choosing where to spend their money. In an informal settlement in the Vaal Region, unemployment rates were as high as 91%, which directly correlates to the mean monthly income, R612.50 (Oldewage-Theron & Slabbert, 2010). Having such limitations due to unemployment, budgeting is very selective. Food and shelter are people's primary expenses, so education seems to fall far back into the list of priorities. As seen in the Vaal Region, "the results indicated that the community was a poverty-stricken community, suffering from chronic food insecurity" (Oldewage-Theron & Slabbert, 2010). Due to this extreme case of poverty, financing a crèche poses a challenge for the Flamingo Crescent community.

Crèches can have several incomes coming from the government, community members, and NGO's. The government funds various crèches located in informal settlements; however, these have to be officially registered (refer to Section 2.8). For some of these crèches, portions of their income is not strictly regulated and is very situational – this meaning that parents will pay a monthly fee that is subject to change based on how much money they earned and saved. To control this fee and income, a savings group can be established.

In order for the crèche to be operational and sustainable it must have a source of income. One approach to accomplish this is to set up a community-based savings programme. If run successfully this programme has a lot of benefits. For example the community generates valuable social capital through building networks of trust, accountability, and transparency (Ellis, SDI) by utilizing this savings group the community can become more resilient against poverty.

One organisation that has had success in working with communities to set up savings schemes is the Federation of the Urban and Rural Poor (FEDUP). FEDUP empowers poor people to help themselves, teach themselves, and develop themselves (Ellis, SDI). They advise communities to save small amounts of money, research their assets, and then to negotiate with the government. FEDUP believes that by taking these steps the communities will capacitate and strengthen themselves. They also believe that by doing this their ability to earn the full rights of citizenship and own the developmental outcomes will rise drastically.

Communities throughout South Africa have established Savings Groups to build crèches. In December 2011 the Zakheleni informal settlement, in South Africa, set up a savings scheme to oversee the collection of contributions towards the creation of a crèche. The community was able to contribute R3,250 to the project. In 2014, the Kuku Town informal settlement set up a successful savings group to reblock their community. Savings were recorded in personal savings books and were deposited in a community savings account. The community members were open with one another and regular bank reconciliations were communicated to the group. In both communities it was necessary for the members to put money towards the project, a concept that will remain true for Flamingo. In order for the crèche to be operational, a Savings Group or equivalent programme can be set up to ensure the success of the crèche (Ellis, SDI).

## 5. Methodology

The team's main priority in Cape Town is to build a strong connection with the community members of Flamingo Crescent. The driving force behind this project is the needs of the community. When first meeting the community members and sponsors, the team will share personal tidbits about themselves to connect with the residence on a deeper level. For example, the team will use icebreakers. The team has decided to bring pictures from home that symbolizes importance in their lives. To connect with the people, the team will talk to the community and learn what unifies them as a settlement and the experiences and backgrounds that have shaped their lives. After forming a strong bond between the team and the community, the team can move forward with their plans with Flamingo Crescent.

### 5.1 Project Priorities and Goals

Although all plans are subject to change throughout the progression of the project, it's important to have a generalized concept of the overall outcome. Below is a diagram illustrating the goals and intended outcomes of the project, as well as the tools and resources that will be used to achieve them. Achieving satisfaction amongst the community requires the development of multiple options and ideas to present them with. Once priorities have been identified by the community and other stakeholders have been consulted, all of the previously collected data and plans need to be synthesized into a clear and realistic outcome. This outcome must include both immediate tangible results as well as guidelines outlining how to continue these plans into the future. It's the teams goal to not only provide the community of Flamingo Crescent with these upgrades, but to create a model other informal settlements can implement as well.

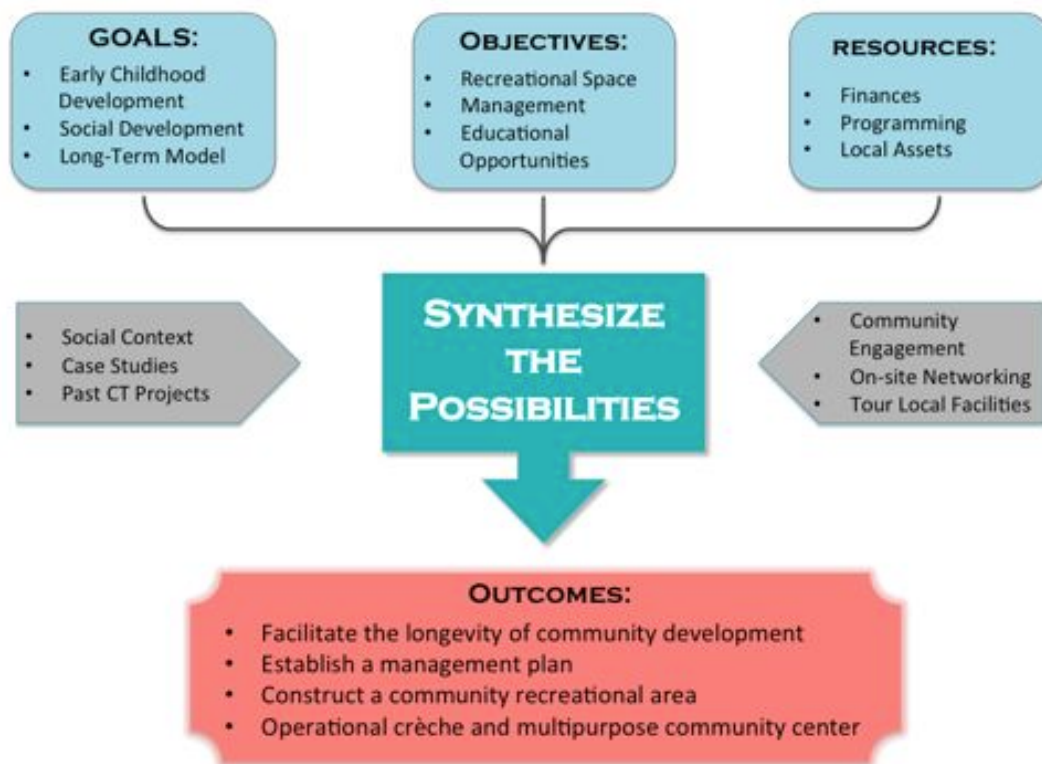


Figure 10. Priorities, Goals, and Project Outcomes

## 5.2 Significance of Ice Breaking Activities

Developing a relationship of trust and understanding with community members of all ages the first days in Cape Town is vital. Ensuring common ground will set the stage for later collaboration between team members and community residents. Despite cross cultural interactions often being viewed as barriers, this range of backgrounds and experiences will only enhance the overall outcome of the project. Collaboration between a variety of parties will result in ideas that reflect a large scope of experiences and beliefs. By synthesizing these thoughts, the resulting outcome will represent the priorities of all involved ensuring long-term success.

In order to cultivate strong relationships between the community and the team, icebreakers and group building activities will be performed upon initial interaction. Utilization of these techniques fosters trust between the parties involved as well as development of commonalities (Boatman 1991). Despite being from different cultures and socioeconomic standings, it's important to establish a level ground and awareness that all involved are working hand in hand towards a common goal.

When planning which techniques to use, it's important to consider the composition of the group in terms of gender and age as well as the nature of the programme. The activities have been carefully chosen to avoid exercises that are culture specific or involve lots of physical contact since different levels of physical interaction are acceptable in every culture. The ultimate purpose of these initial activities will be to eliminate any preconceived notions either party has of the other in order to foster healthy relationships.

### 5.2.1 The First Days of Arrival

Pulling from ideas from past Cape Town projects, the team has created a plan for their first days in Flamingo Crescent. One of the main goals of this initial contact is developing an understanding of one another's cultures, backgrounds, and experiences. In order to initiate this conversation, the team plans on bringing photographs of their families, friends, and homes to illustrate their experiences with the hopes this will spark the community members to open up and share their stories. Due to language barriers, the use of visuals throughout will enhance overall understanding and personalization.

Learning each other's names will be another tactic for promoting successful relationships. Knowing a person's name shows them a level of investment and respect for them allowing for the development of trust. Since there will be numerous names to learn by both parties, nametags will be a useful tool. The team plans on crafting nametags with the community members that display their names and other images or colors that represent them as a person. In order to expand simple nametags to be more impactful, upon completion the group can explain the meaning behind their names. Oftentimes names open up stories that can lead into family history, culture, and other symbolic importance. Sharing these stories and meanings will allow for further understanding of one another as well as open up further discussion.

Another idea the group has developed to learn about the community as individuals and their goals for this project is four squares. For this activity everyone gets a piece of paper that has been split into four sections. Each section will represent a theme the participant has to write an answer for. For the purpose of this project, the themes will be: what is a value you live by, who is important in your life, what is a goal you have for this project, how do you feel about the overall upgrading process. These questions create a balance for learning about the community on a personal level as well as gauge their

perspectives on the project as a whole. It will be important for the team to share their answers first in order to promote a welcoming environment for the residents participating.

### 5.3 Methodology for Equipping a Crèche



Figure 11. Process Diagram for Designing and Implementing a Curriculum Programme for the Crèche

1. Lead community forum to develop community's wants and needs for the crèche.
2. Create list of community wants and needs from the crèche.
3. Establish activities, services, and goods that crèche will offer that address the community's wants and needs.
4. Produce a methodology for implementing services and activities, and acquiring goods based on communities' resources and abilities.
5. Implement activities and services, and provide goods to community.

See Table 1 for a summary of local organisations who provide resources for underprivileged ECD facilities. See appendix C for potential crèche programmes.

### 5.4 Methods and Designs from PlaygroundIdeas.org

Playground Ideas is a non-profit organisation funded by From The Ground Up Ltd based out of Australia that focuses on improving opportunities for at risk youth. Recognizing the importance of play in childhood growth, they organize the development of playgrounds by working hand in hand with the community members. This organisation has broken the playground construction process into five steps

centered on Asset Based Childhood Development: listen, plan, design, build, and maintain. Although often overlooked, the listening process is the most crucial step. Without learning about the culture of the community, homogeneous play spaces are built that fail to reflect local methods of play. By incorporating local play structure into the design, the space can enrich the children and preserve cultural diversity. Since collaboration is key to a successful project, gathering the right people and resources is crucial for the planning and design processes. The design requires a balance between aesthetics and functionality. It's important to provide play structures for varying social scales, areas for community members of all ages, and an attention to small details. Another significant factor in the design process is the choice of materials, which is based on money, maintenance, labor costs, and wear and tear. Once designs are finalized and materials gathered, building can begin. Build efforts are likely to come from a collection of volunteers and workers, making communication vital in the overall construction success. To ensure the longevity of the playground it's important to develop a maintenance checklist and guidelines for workers.

The programme has compiled three free manuals to outline the remaining four steps, present safety guidelines, and create an interactive layout for the design process. Drawing from these manuals, we can ensure community insight is incorporated into the design and construction of a sustainable community recreational area.

## 5.5 Ethical Considerations

Evaluating ethics is perplexing specifically when dealing with social development and the education of children in an impoverished community. Exploring ethics in an international setting becomes an added difficulty since different cultures come with an extraneous set of values. Consequently, identifying Flamingo Crescent's morals and ideals will become a team priority. This contact with locals will create an ethical margin in which the methodology of the project will be enclosed. Imposing a personal set of values in a society would not only be unethical but could have the potential to slow down progress or bring it to a complete stop. With this in mind, getting a clear understanding of Flamingo Crescent's values will play an important role in the decision-making process of the project.

The team will submit the Institutional Review Board application (IRB) in order to protect the privacy of the residents of Flamingo Crescent and other necessary stakeholders. This application includes the project mission, objectives, interview questions, and a plan for our first weeks in Cape Town. This process serves as a beneficial way for the team to learn and understand the confidentiality of potential participants. The team will consider the privacy of participant's information and the procedure of confidentiality in every aspect of the project.

### 5.5.1 Ethics in Child and Youth Care

The constant debate in childhood development ethics revolves around intervention versus non-intervention – giving children explicit authoritative instructions versus passive guidelines that inspire self-reflection. However, according to Gharabaghi, “there is no evidence that would specifically support either of these approaches” (Gharabaghi, 2009); after all, child and youth care ethics is very subjective. In the case of Flamingo Crescent, a moderate non-intervention approach will be appropriate. This approach can easily be mistaken for that of no influence and lack of involvement. Nevertheless, this

approach places the researchers in a stance where community autonomy and early self-determination are encouraged. This is an approach that “reflects a deeply held value about individual responsibility and accountability” (Gharabaghi, 2009).

Working with children is directly linked to cooperating and collaborating with the parents. The autonomy in this process is ultimately controlled by the children’s parents. An ethical path of action will be in large part developed alongside the community parents. Even though self-exploration and autonomy will be encouraged, protecting the children holds precedence. “There is a need to ensure children’s welfare is promoted and maintained, hence the requirement for those caring for children, be the family members or health professionals, to act in their best interests” (Hagger, 2009). The team must employ a careful balance between empowering children through exploration, including parents through communication, and maintaining the children’s best interests.

Very often the complexity behind ethics leads to a loss of objectivity. It is common for parents to be overprotective and anxious in regards to their child's welfare, “Parents of young children are especially vulnerable to being anxious about their child's welfare and can be easily frightened into participating in services or research by unscrupulous and/or pressured practitioners or researchers” (Gharabaghi, 2009). They can be persuaded into participating in services, research, or interviews. Expecting these reactions from parents will place the team in a better ethical standpoint. Furthermore, objectivity in youth care can still be achieved through a level system where children can learn to respond independently to rewards and consequences. In this process, the researcher can be slightly removed from the learning process and simply become an “accountant or operator with respect to the child” (Gharabaghi, 2009).

In conclusion, the ethics behind all Cape Town Project Centre Projects relies closely on working with community members. It is important to describe the nature of the project and intentions to the residents of the informal settlements. They have the right to know where and how the team will use the information they provide. Also, it is important that all participants know whom to contact if they change their mind about participating in the project. In regards to photos and videos, especially of children, the team will require written/oral consent for any media coverage that is involved. Understanding the legality behind interviews and focus groups, the team will incorporate the community’s ideas into the project.

## 5.6 Interviews and Correspondence

Interviewing and correspondence with the community, organisations, and sponsors is crucial to the success of any project.

*“The research interview is based on the conversations of daily life and is a professional conversation; it is an inter-view, where knowledge is constructed in the inter-action between the interviewer and the interviewee. An interview is literally an inter view, an inter-change of views between two persons conversing about a theme of mutual interest” (Kvale, 2009).*

Kvale’s description of the interviewing process serves as an ideal model and will prepare the team to conduct successful interviews. Making an emphasis on the following three points will lead to the completion of a well-rounded method to collect qualitative data. The team needs to be professional

while also having an easy conversational communication. It's also important to interchange their views of the community while also accepting the view of the community members. Lastly, the team needs to understand the purpose of the interview and have a mutual engagement between the two parties. A sturdy interview plan has been developed where each member has a specified plan of action.

In the words of Steve Jobs "It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them." The team will implement this theme into their plans by creating designs to show the community whether in regards to crèche management, playground construction, garden ideas. The team will provide Flamingo Crescent with various options that all benefit the community in more ways than one.

### 5.6.1 Interview Questions

#### *Liaison*

Eric Atmore, Director of the Early Childhood Development Centre, is the first connection for this project and will assist in working with the community. He will be the first person spoken to upon arrival in Cape Town. We are interested to know how involved he will be in our project and in the community. Working closely with ECDC will define and achieve the project goals.

#### Initial Interview:

- Do you have any insights from your previous work that shapes your thinking about this project?
- Have you learned any lessons from past projects that our project could benefit from knowing?
- Do you have any resources we could use such as past documents or local contacts?

#### Follow Up Interviews:

- What has your work been successful in achieving in the past?
- Do you have an idea of how far along the crèche development is?
- Do you know if there is currently a management programme established for the community center?
  - **If yes:** Who is in charge?
  - **If no:** What do you think the most effective form of management would be for the community center?
- Do you have a sense of where the community currently stands on this upgrading process?
- Is there currently any data on an estimated population of Flamingo Crescent that you know of?
- How far along is the reblocking process of the community?
- Do you have any past conflict history with the community?
- What are your expectations for the outcomes of this project? Do you have any specific priorities for it?
- What are some of the community assets that could apply specifically to our project?
- In your opinion, what is the most pressing issue in the community currently?
- How do you feel about the progression of the upgrading process thus far?

### *Community Leaders*

Connecting with and developing working relationships with the preexisting community leaders will play an important role throughout the project. Due to their strong understanding of the community's desires, these leaders will be the first people interviewed to establish the best approach to facilitating these goals.

#### Questions for Community Leaders:

- What is your favorite thing to do?
- What is your role in the community?
- How did you become a community leader, do you like it?
- How has the reblocking affected the settlement?
- What are your expectations for the crèche and multipurpose area?
- What do you think could get accomplished in the short and long term?
- What are some assets and strengths present in the community?
- What do you think is our role and in which ways can we assist you?

### *Community Members*

Once a better understanding of the area and the community leaders priorities have been established, community input will be gathered to identify their expectations. Interviewing through various modes of interaction and a collaborative design process will open up new ideas and opportunities for improvement that may have been overlooked previously. Showing the residents ideas through of possible playground structures through a playground catalog developed by the team will further their involvement.

#### Questions for parents:

- What would you like to see in a community recreational area?
- Do you think you would utilize a space like this to allow your children to play as well as an area for you to socialize with neighbors and friends?
- What types of programmes would you like to see in the multipurpose community center?

#### Questions for children:

- What are your favorite playground structures?
- What are your favorite colors?

### *Non-Governmental Organisations (NGOs)*

Several NGO's will be assisting in the development of a successful playground and guidelines for the crèche and multipurpose space. NGO's that have already been identified as playing a role are: Community Organisation Resource Centre (CORC), Informal Settlement Network (ISN), ELRU, and Touching the Earth Lightly. Through these interviews, an understanding of the potential involvement in the community and the resources these NGO's can provide to the community will be gathered. Through a collaborative effort, ways to empower the community members to partake in the project can be identified and implemented.

#### Questions for NGOs:

- What is the role of your organisation in the community?



- Where does your funding come from?
- How did you get involved in this community?
- What are your short term and long term goals for the community?
- What advice or resources could you share with us?
- What do you think is our role and in which ways could we assist you?
- Do you have any previous experience with brand new crèches?

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## Appendix A

### Relevant PDF's

Cape Town Project Centre, Flamingo Crescent 2013: Resource Binder

<http://wp.wpi.edu/capetown/files/2013/12/Resource-Binder.pdf>

Policy for ECD Centres

<http://www.capetown.gov.za/en/PublicParticipation/Documents/ECD%20POLICY%20updated%20on%2002%20April%202013.pdf>

Procedure Guideline: Application to Operate a Crèche or After Care Centre

<https://www.capetown.gov.za/en/CityHealth/Documents/Guidelines,%20Specifications/Creches%20-%20Application%20Procedure%20and%20Standards.pdf>

Cape Town Handbook: A Quick Guide to Dealing with Common Informal Settlement Problems

[http://www.westerncape.gov.za/text/2005/1/informal\\_settlements\\_handbook\\_compressed.pdf](http://www.westerncape.gov.za/text/2005/1/informal_settlements_handbook_compressed.pdf)

Cape Town Project Centre, Flamingo Crescent 2013: Interview Worksheet for Community

<http://wp.wpi.edu/capetown/files/2013/12/Interview-Worksheet-for-Community.pdf>

Cape Town Project Centre, Flamingo Crescent 2013: Interview Prompts

<http://wp.wpi.edu/capetown/files/2013/12/InterviewPrompts.pdf>

Cape Town Project Centre, Flamingo Crescent 2013: Interview Worksheet for City Officials

<http://wp.wpi.edu/capetown/files/2013/12/Interview-Worksheet-for-City-Officials.pdf>

Tire Playground Structure Manual

<http://wp.wpi.edu/capetown/files/2013/12/Entyrely-Fun-Playgrounds.pdf>

Playground Catalog

[https://www.capetown.gov.za/en/CityHealth/Documentation/Documents/Act\\_Childrens\\_Act\\_38\\_of\\_2005\\_\(as\\_amended\\_march\\_2010\).pdf](https://www.capetown.gov.za/en/CityHealth/Documentation/Documents/Act_Childrens_Act_38_of_2005_(as_amended_march_2010).pdf)

PlaygroundIdeas.org Design and Safety Manuals

<http://www.playgroundideas.org/How-do-i-do-it>

## Appendix B

### Liaison Interview Summaries

#### Olwethu Jack Interview Summary

On Friday October 3<sup>rd</sup> the team interviewed Olwethu Jack a contract designer for the CECD, whom is currently working on designing the Flamingo Crescent crèche and community center. Olwethu's reported on his progress with the crèche. Currently, the design is almost finalized. Building permanent structures is not allowed in informal settlements; so building codes do not apply. However, Olwethu was looking into the local codes to ensure feasibility of the design. Olwethu is looking to embrace the informality of the community by using recycled materials and working towards the community's needs and goals. His main goal is to be able to replicate the crèche design and implementation into other informal settlements.

Currently, Olwethu's main concern with the design is choosing a suitable material that will minimize sound pollution to neighboring shacks. The community wants a two-story building, but Olwethu does not think that there will be sufficient funds to build a two-story structure immediately. The team asked how they could contribute to the design process in Worcester, but Olwethu wanted the team to share their knowledge with the community and bring questions when they arrived in Cape Town. Olwethu's vision of a success in Flamingo Crescent for the crèche is to create a space that engaged the community inside and outside. He hopes that the crèche will have broken ground by the time leaves Cape Town in December 2014.

#### Eric Atmore Interview Summary

On Monday October 6<sup>th</sup> the team interviewed their contact at CECD, Eric Atmore who's past work has been focused on spreading Early Childhood Development efforts throughout South Africa. Working with the CECD, a non-profit organization, Eric works with communities providing programs such as teacher training and the construction of ECD centres to achieve these goals. Throughout the interview, Eric expressed the community's excitement and the feasibility of this project despite concerns. He also stressed the importance of entering this highly impoverished community with respect. It was also established that the CECD would not only be providing infrastructure and guidance on regulations, but funding for as much of the project possible as well.

The total space designated for the crèche is 90 square meters and 200 square meters is available for the outdoor recreation area with the teachers only 3 miles from the CECD. The expectation is to have the crèche up and running for the new academic year beginning the second week of January with child enrollment beginning next year. In terms of a management system, the preschool needs one principal with 1-2 assistants. Based on the number and age of the children, equipment and space layout will be determined. The main concern Eric had was the logistics of the second story Olwethu originally planned to construct over the crèche since it would increase cost significantly. Plans were made between the team and Eric to visit local crèches of varying levels the first few days after arrival in Cape Town.



## Appendix C

### CECD Programmes

#### ECD Skills Training Programmes

##### *Creative Play with Story-telling and Music*

- **Outdoor Play** – Training the staff on how to properly care for children outside of the classroom is just as important as inside. For children, recreational play extends their education. Having staff members that are able to facilitate this learning process while ensuring safety is crucial.
- **Art** -- Providing children with the tools and guidance to express themselves through art furthers their maturing process. Although it's important for children to develop their physical and emotional skills at a young age, many places don't have the resources or funds to do so. By establishing this program in the multipurpose community center, the Flamingo Crescent community will be able to do so.
- **Discipline** -- It's important for teachers to establish a control over the classroom through discipline in order to foster a healthy learning environment. Discipline teaches children self-control, which allows them to become responsible and confident. However, the type of discipline used strongly impacts the child mentally. This program will provide the teachers with the guidance to find the right balance and mechanisms to discipline effectively.
- **First Aid** – Health is a major concern in the informal settlement. It is critical that a teacher would know how to deal with an injury, an open wound, or a potential infection as it has the ability to get others sick.
- **Road Safety** – Flamingo Crescent is located right off of Flamingo Street. Due to the proximity many children play in the street because it is the most space around. With the new recreational area in place it will be important to get the children to utilize the new space. Nevertheless it will be imperative that the children are taught the basic rules of safety when they are in the road. This program would give teachers the resources and skills to pass this knowledge onto her students
- **ECD Centre Policies and Children's Records** – One of the main goals of the project is to get the crèche registered and to run effective programs for the kids and the community. In order to do so the teachers need to be able to enforce the policies of the centre and keep an organized station of all of the children under her care. This is something that the team is interested in helping out with but is imperative that the teacher have a proper understanding on the best possible way to go about this. (Expand on this)

#### Governing Body Training Programmes

- **The vision and mission of the ECD Centre** – Establishing a vision and mission for the ECD centre is an important first step to understanding and communicating its goals. The community needs to know the purpose of the ECD Centre and by making it visible to everyone it is much easier for them to be willing to understand and willing to take part.
- **The roles and responsibilities of Governing Body Members** – It is important that everyone involved in the crèche has a clear understanding of their roles. It is difficult for us to determine what the hierarchy for management in the crèche will be but we spelled out a few potential positions and their importance.

- Crèche Leader(s) – Makes sure the constitution is being followed, that the crèche is following its mission. That it is operating effectively and efficiently, and that it is organized and looked after. Also makes sure everyone employed is doing their job and that they have enough funding.
- Teacher(s) – To look after the kids, provide them with engaging and active programs, encourage them to be healthy, etc.
- Maintenance Worker(s) – Ensures the crèche is not getting overly dirty or disorganized. Gets rid of garbage, cleans up, and makes sure the overall quality is being maintained
- **Financial management** – It is important that the crèche has a steady flow of income from the parents of children. A savings group would be an effective way to keep track of the finances coming in and making sure people are held accountable.

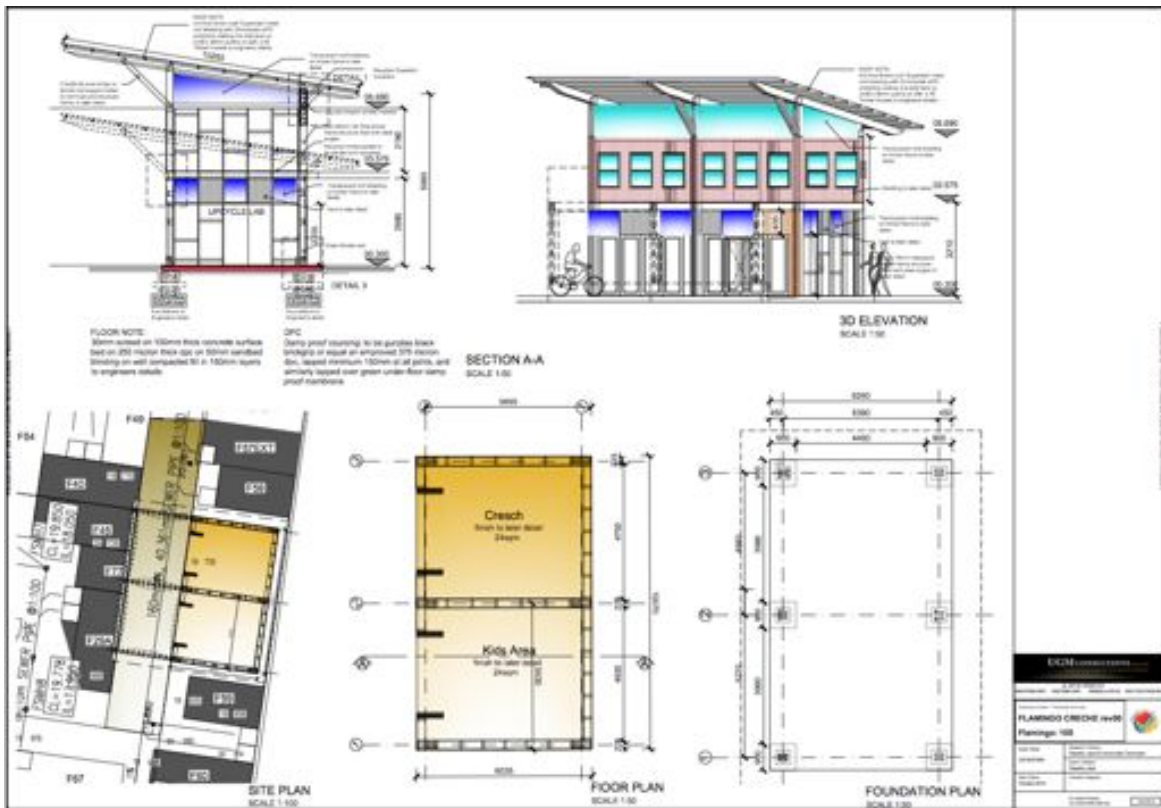
# Appendix D

## Crèche CAD Schematics

### Sequence of Construction



## Outdoor Views



## Cladding Options

