

# Early Childhood Development Connection



*An Interactive Qualifying Project submitted to the faculty of Worcester Polytechnic Institute in partial fulfillment of the requirements for the Degree of Bachelor of Science.*

## Abstract

Our team has worked to create a foundation and network of Early Childhood Development (ECD) knowledge and partners to be used by the Cape Town Project Centre. To achieve this goal, we worked with a wide variety of communities and ECD organizations to gain a well-rounded knowledge of early childhood development in South Africa, as well as to make contributions along the way. During our time in Cape Town, working relationships were developed with Kiddies College Preschool, the informal settlement of Langrug, and the Centre for Early Childhood Development (CECD). Through our connections with these three groups we were able to improve the following: At Kiddies College, with our partners, we updated their record keeping system. In Langrug, with help from the community, we upgraded various aspects at the WaSH facility and connected local crèches with the facility to further hygiene and health in ECD. By connecting with the CECD we were able to secure a commitment from them to fund the building of a crèche in the informal settlement Flamingo Crescent as well as assist in planning a project with WPI's CTPC for next year.

*This project summary is part of an ongoing research programme by students and faculty of the WPI Cape Town Project Centre to explore and develop with local partners options for sustainable community development in South Africa.*

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For our full project report: <http://wp.wpi.edu/capetown/projects/p2013/early-childhood-development-connection/>

For more about the Cape Town Project Centre: <http://wp.wpi.edu/capetown/>

## Problem Statement:

### EFFECTS OF POST-APARTHEID INEQUALITY ON EDUCATION

Cape Town, South Africa has been ever evolving due to government changes over the past two decades. The apartheid era caused racial segregation under which blacks received inadequate education. The Bantu Education Act of 1953 specifically stated that blacks were to receive education that only provided the skills necessary to be a laborer and nothing more (Shapiro and Kahreen, 2011). This caused a generation of

poorly educated black and coloured people. Since the end of the apartheid era, the government has begun to recognize the issue of poor education, specifically focusing on early childhood development, “an umbrella term that applies to the processes by which children from birth to at least nine years grow and thrive, physically, mentally, emotionally, spiritually, morally and socially” (The Department of Education of the Republic of South Africa, 2001). However, there is still much room for improvement in this area, especially in the development and support of crèches and the spreading of



*Walkway near a local crèche in the informal settlement of Langrug*

awareness of this problem within the country.

Since WPI's Cape Town Project Centre's founding in 2007, WPI students have worked with partners in informal settlements to complete various projects. Opportunities for ECD are very limited in these informal settlements. There have been times in which the communities the CTPC has worked with have shown a desire to work with children to help improve ECD. However, without background knowledge or previous projects focused on ECD, the project centre was not prepared to work towards improvements with these partnerships.

### Background: WHY IS IT IMPORTANT TO PROMOTE ECD IN SOUTH AFRICA?

In the seven weeks prior to our team's arrival in Cape Town, we researched major themes of ECD with the hope of spreading our knowledge to future project teams of the CTPC.

We learned that children of South Africa face many ECD challenges. According to Atmore, Niekerk, and Ashley-Cooper (2012), 59.2%, approximately 3.8 million children, have been reported to live in dire poverty. In turn, since many children live beneath the poverty line, approximately 16% of children live in households where child hunger is present (ibid.). These researchers state that malnutrition has an effect on a child's



*Children in an informal settlement on the roadside playing with cardboard boxes*

cognitive and physical development, thereby decreasing a child's concentration and focus within ECD centres (when they are available) and at home. In addition to little support for good health, South Africa has a large population of HIV positive people. Approximately 438,000 children under the age of 15 are HIV positive and are unlikely to have access to anti-retroviral treatments (ibid.).

With these challenges, education often takes a back seat to families and communities even though the youth of South Africa will be the future decision makers of the country. According to the General Household Survey of 2011, 69% of children be-

tween the ages of 0-4 are exposed to ECD in the Western Cape, whether at home or in a centre. However, only a third of these children are exposed to formal, centre-based learning in this area, leaving nearly two-thirds of children, mostly in informal settlements, without structured ECD prior to enrollment in grade R (General Household Survey, 2011).

The lack of availability of structured ECD programmes and centres for children directly correlates to the poor conditions in which they live. Affected by these poor living conditions, many ECD programmes are lacking in learning materials, qualified teachers, a security system, and appropriate toilet and sanitation accommodations. The government has been making strides to address this problem and others involving ECD by implementing legislation to improve support for ECD programmes; however, there is much more room to grow. The government and children have many hardships to overcome in improving and pursuing schooling, respectively, in both formal and informal settlements.

## Mission Statement and Objectives

The goal of this project is to develop the Cape Town Project Centre's ability to seize opportunities in promoting and improving Early Childhood Development with future projects. We achieved the following objectives by working with a variety of stakehold-

ers associated with ECD in the Cape Town area:

1. Connect with a variety of stakeholders such as, formal and informal crèches, and ECD related NGO's to develop the CTPC's ability to incorporate ECD in future project work in informal settlements.
2. Learn about Kiddies College Preschool, a formal ECD centre, and develop relationships with the main stakeholders.
3. Explore ways to improve record keeping operations with Kiddies College Preschool.
4. Explore ECD related NGO's, within the Cape Town area.
5. Assess the record keeping system of Kiddies College and implement improvements.
6. Assist in the teaching of the children of Kiddies College Preschool when requested.
7. Explore further knowledge of ECD by working with a crèche in an informal settlement.

## Methodology:

### AN INFORMED APPROACH

To reach our goal of laying a foundation of ECD knowledge for the CTPC, we reached out to a number of different local stakeholders associated with ECD. In order to learn and grow throughout the process we utilized a Shared Action Learning (SAL) approach. According to the CTPC Website, SAL

involves connecting, planning, acting, observing and reporting while continuously reflecting, sharing, and learning from each other and the stakeholders. With SAL at the forefront of our methodology, we moved forward with each aspect of our project.

## Kiddies College Preschool

During our first week at Kiddies, our liaison, Ms. May, discussed the need to upgrade their current record keeping system. To begin, we observed how the system was utilized, and we discussed with them where they felt opportunities for improvement were present in their existing method. Then we worked directly with their principal to develop strategies to best fit their needs. In order to address these needs it was neces-



*Observatory Community Centre, home to Kiddies College Preschool*

sary to purchase Microsoft Office. Utilizing SAL allowed us to implement solutions that were developed by Kiddies College in collaboration with our team, ultimately ensuring that these solutions would be utilized long after we leave.

## The Langrug Community

To expand our understanding of ECD in the informal community setting, we travelled to Langrug, an informal settlement in Franschoek. We began by visiting five informal local crèches and observed the limited availability of Water, Sanitation and Hygiene (WaSH) within these crèches. We met with a crèche owner and community leader named Nobathembu as well as caretakers of the WaSH facility. We discussed



Homes in Langrug

with them the importance of promoting the integration of WaSH ideas with ECD teaching methods. When talking to the caretakers, we discovered that the facility is a magnet for mothers and children which provided a wonderful opportunity to promote WaSH practices to children. Working together with Nobathembu and the caretakers, we upgraded the WaSH facility to create a space for children and encouraged their use of the facility.

## The Centre for Early Childhood Development

In order to expand our knowledge on the NGOs available for ECD in Cape Town we researched a range of organizations and discovered one prominent option. We met with the Centre for Early Childhood Development and discussed the services they offer and the possibility of connecting them with communities in need of assistance.

## Outcomes:

### CREATIVE SOLUTIONS IMPLEMENTED TOGETHER

Below is a list of the major outcomes we implemented with our partners:

**KIDDIES COLLEGE PRESCHOOL**

- Excel spreadsheet to record school fees
- New filing system to facilitate record keeping
- Emergency contact sheet updates to improve accessibility
- Templates in Microsoft Word for efficient editing of frequently used documents

**LANGRUG WaSH FACILITY UPGRADES TO PROMOTE USE BY CHILDREN**

- Handprint painted plywood for children's toilets
- Mobile hand washing station
- Children's stool for sink
- Children's table and chalk boards for outside
- Watering can for children to wash themselves outside

**CENTRE FOR EARLY CHILDHOOD DEVELOPMENT**

- Connected CECD with the informal settlement of Flamingo Crescent to plan the development of a new creche
- Connecting of CECD and CTPC for future project work

## Record Keeping:

### KIDDIES SEIZES AN OPPORTUNITY FOR IMPROVEMENT

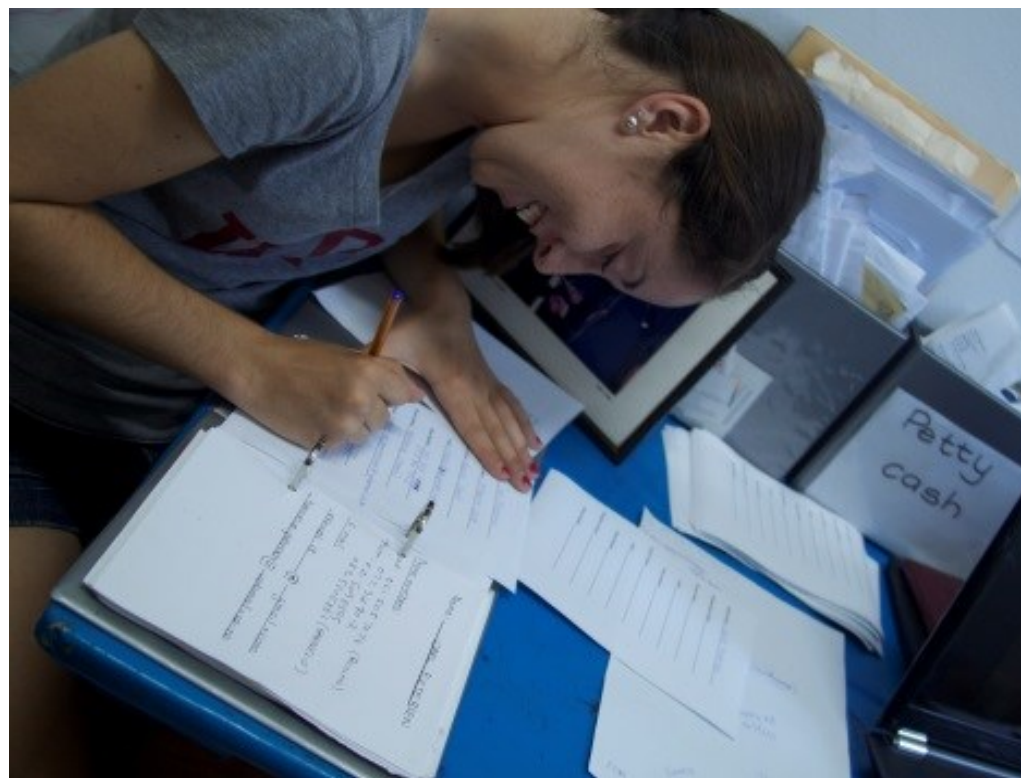
#### Templates for Frequently Used Documents: Kiddies Ups Efficiency

A majority of the documents on Kiddies computer systems were saved in PDF's without back up files. Our team created these templates to help Tasneem and other Kiddies' employees save time, as they would not have to create the same documents again every year. The documents that our

group streamlined for Kiddies include: application, general policies, graduation diploma for each class, requirement sheet for each class, and the emergency contact sheet. These are now all Microsoft Word documents that can be reused every year.

#### Filing System Updates: Let's Get Organized

To decrease the amount of time spent locating a child's file, our team brainstormed ideas with the help of Tasneem. Our simple solution was to place a sticker in the upper left hand corner on each folder where the



Katelyn using our new emergency contact template to add a new student to the emergency contact book.



*Before Kiddies updated filing folders.*



*After Kiddies Updated filing folders.*

child's name, date of birth and class for the year can be written and updated every year. This reduced the excessive writing on the folders, which made searching for specific students difficult. Kiddies then replaced or updated the 2014 student files.

### **School Fees: Moving Away From the Paper System**

With the principal, Tasneem, our team created a new generic, computerized method for documenting school fees. The financial record-keeping programme is based in Microsoft Excel and is highly usable for the principal's level of technological capabilities. The programme allows users to input each child's name, group name, date paid, amount paid, and payment method. To easily determine which families have past-due payments, the amount owed column, both

monthly and YTD, will turn red for any outstanding payments.

## **Connecting ECD with the Langrug WaSH Facility**

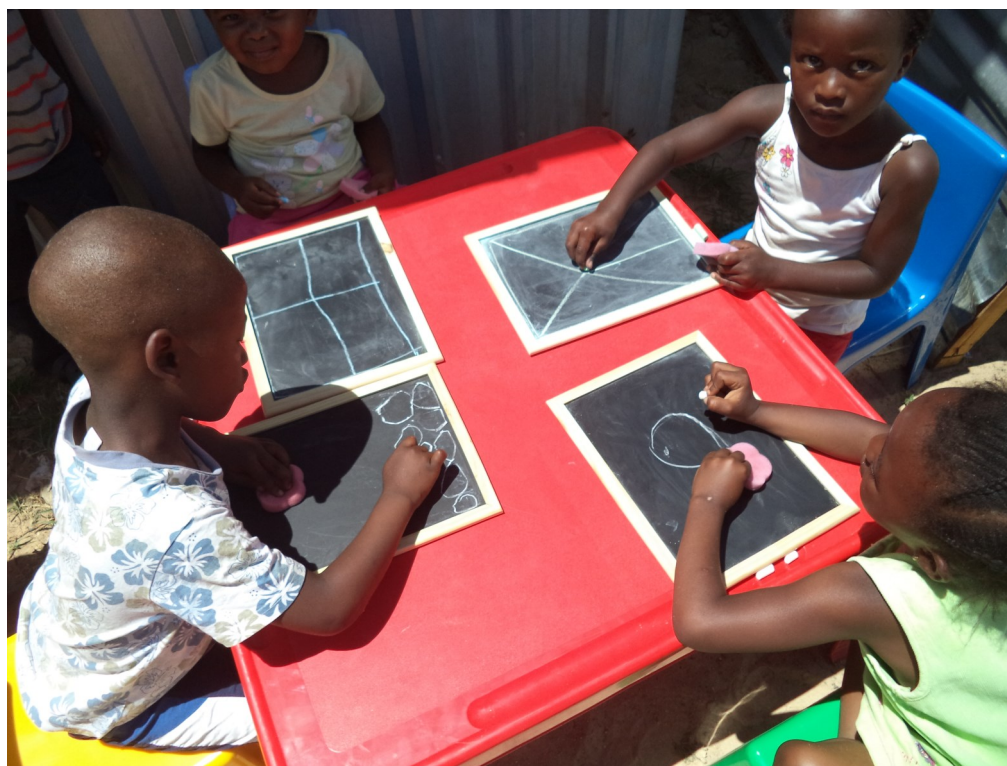
### **Handprints to Health**

We developed an ECD activity to teach and promote health and hygiene. During this activity the children from the crèches of Langrug painted their handprints to be left behind in the children's toilet stalls in the WaSH facility. The end result of this project created a more inviting environment for children. The children were also very proud

of their handprints and we believe this will drive them to come back to use the facilities to "visit" the mark they left behind.

### **Making the WaSH Facility a Place for Children**

In order to allow for children to be able to reach the sink to independently wash their hands, a blue, plastic stool was purchased and implemented at the WaSH facility. The children used this stool during the hand-printing activity, which showed this implementation will be helpful after our departure. Chairs, a table, and chalkboards were



*Children using the table, chairs, and chalkboards at the Langrug WaSH facility*



*Children trying out the mobile hand washing station at the Langrug WaSH facility*

placed at the facility to provide an opportunity for the children to enjoy drawing and developing fine motor skills while their parents use the WaSH facility.

### **Mobile Hand Washing Station Moves to Langrug**

To solve the challenge of limited staff attempting to escort children to the WaSH facility, we created a mobile hand washing station. Using a document from the Department of Social Development's registration packet for crèches, we made the hand washing station out of a two litre soda bottle and a length of tubing. This device creates the ability to have an uncontaminated tap in facilities without a faucet.



Taken after learning that the CECD would commit to working with WPI and the Cape Town Project Centre. From Left to Right: Sarah Antilock (Flamingo Crescent team), Mindy Zhang, Nicholas Deraney, Julie Waddell, Eric Atmore (Director of the CECD), and Katelyn Nicosia.

## Connecting with the CECD:

### A NEW CRECHE GETS FUNDED!

In our final weeks in Cape Town, our group sat down with the director of the Centre for Early Childhood Development. Eric Atmore, director of the CECD, is extremely passionate about the work he has done in ECD over the past 19 years and could relate to our

own excitement about using our academic background to further the development of ECD opportunities in South Africa. He established that the CECD would commit to working with the CTPC and the community of Flamingo Crescent (where a WPI team worked this year) to build a crèche in this informal settlement, which currently has no

crèche and is in the process of reblocking. Additionally, our group connected the CECD with CTPC advisors to discuss the possibility of collaborating on a similar project next year. This connection will be a positive legacy within the CTPC and one, if not multiple, informal settlements in the future.

## Conclusions:

### BUILDING TOWARD A BRIGHTER FUTURE!

After seven weeks of working in Cape Town, we were able to build and share a foundation of knowledge of ECD in the Cape Town area, as well as secure future work for the CTPC in ECD realm. This was accomplished by working on the immediate needs of stakeholders involved with ECD in both formal and informal settings. By networking with NGOs we were also able to secure a sponsor for a current ECD project in an informal settlement, as well as the potential for construction of a crèche in a second informal settlement to be determined next year.



The leftover paint from the handprint activity that will hopefully be used for future crèche or WaSH upgrades.

## References

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## Acknowledgements

Nabuweyah May, Tasneem Robinson and "Mama": Kiddies College Preschool

Nobathembu Fata and Langrug WaSH Facility Caretakers: Langrug

Eric Atmore: Centre of Early Childhood Development

Lorraine Higgins and Scott Justo: CTPC Advisors

