

Expanding Health, Education, and Wellbeing Services and Analyzing the Effects of Social Complexities on WaSH-UP



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

ABSTRACT

This project focused on promoting improved health, education, and wellbeing in Langrug informal settlement by working with the community to expand services at an innovative WaSH-UP (Water, Sanitation and Hygiene Upgrading Programme) Facility. To realise this goal, we established personal connections with our co-researchers, community members who share our goal, to collaboratively recognise programmes urgently needed in the community. Given a distinct need for a safe, educational place for children to play after school and with suitable social space available within the WaSH-UP Facility, we created an aftercare programme and community library. The project resulted in successful aftercare and library models implemented in the Langrug community that can also be adapted for use in other informal settlement WaSH-UP Facilities. Furthermore, we developed a deeper understanding of inter- and intra-community relationship complexities in an attempt to innovate solutions to such challenges that are common in many informal settlements and affect the long-term realisation of the WaSH-UP vision.

This is an executive summary of a WPI Cape Town Project Centre project that is fully reported at <http://wp.wpi.edu/capetown/projects/p2014/wash-up-services/>

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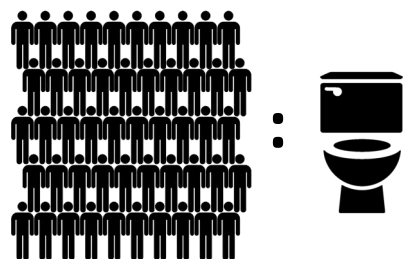
Community Organisation
Resource Centre
Langrug Community

OPPORTUNITY STATEMENT: CAN WASH-UP

SOCIAL SPACES

ADDRESS HEALTH ISSUES?

Langrug has been the experimental site of WaSH-UP for the past three years. In 2011, there was only one toilet to every 50 people in the com-



Ratio of People to Toilets in Langrug

munity, making it an appropriate informal settlement to start the pilot programme. WPI students, along with the community, the Community Organisation Resource Centre (CORC), and the Stellenbosch Municipality, began collaboratively building a new fully-equipped WaSH-UP Facility in 2012 (Butler, et al., 2012). This year, we strove to address health, education, and well-being (HEW) challenges in the

Langrug community by further developing the social space within the WaSH-UP facility to create an environment for individuals to expand their health knowledge and develop healthy habits. We also tried to make the facility a model centre for WaSH, health, and educational support in informal settlements.

Due to a lack of safe, educational places for children to play and learn during the day and after school, our team, including our co-researchers from the community, saw the opportunity to create an aftercare programme and community library. Our vision of the aftercare was an inviting environment that provides children the opportunity to play and grow under proper supervision, while simultaneously receiving valuable health and well-being education. Additionally, we saw an opportunity for a small library to encourage a love of reading and education for all ages in the community. Furthermore, because so many community members suffer from a range of health afflictions without easy access to educational health resources, many individuals want to learn more about and share relevant knowledge

with their families, friends, and neighbors. We therefore collaborated with local organisations to provide such health education to caretakers and other community members.

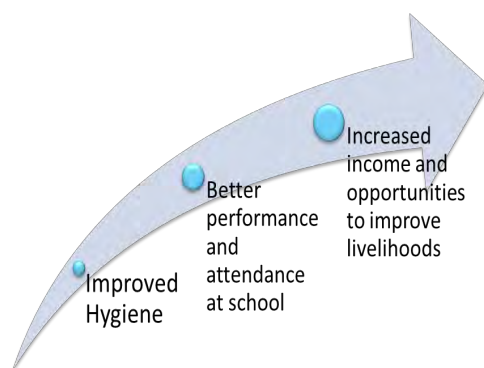
BACKGROUND RESEARCH: WHY WASH-UP?

Due to long lasting effects from the apartheid era, a time of political, social, and economic segregation in South Africa, many non-white citizens currently face challenges of poverty, inferior education systems, and inadequate sanitation and hygiene facilities. Informal settlements in South Africa are usually communities characterised by poverty and

homemade shacks typically built on illegal land. These settlements tend to be characterised by unacceptable toilet to person ratios, poorly maintained and unsafe toilet facilities, and exposed grey water channels, streams of water where people dump waste and trash generated. These sanitation practices lead to disease and sickness, preventing many children from attending school and leading to higher dropout rates in primary and secondary schools. The combined crises in education and WaSH infrastructure undermine health and make it hard to encourage healthy practices within a poor informal settlement (Adukia, 2014, Sinanovic, 2005).



The Water, Sanitation, and Hygiene Upgrading Programme, or WaSH-UP, is designed to be a centrepiece of informal settlement upgrading and an innovative solution to health and hygiene challenges (Jiusto, 2014). The programme begins by designing and creating a WaSH facility, complete with toilets, sinks, showers, and laundry basins, that is operated and maintained by community members. Once the managerial infrastructure of the facility has been established, the next step is to implement health, education, and well-being services that can be run by community members through the WaSH facility. This is all done in a unique collaborative partnership with the community, CORC, the Stellenbosch Municipality, and WPI.



Possible Outcomes of WaSH-UP

METHODOLOGY: COLLABORATING THROUGH SHARED ACTION LEARNING

Although we used many different methods to engage and work with the community, an overarching theme among them was Shared Action Learning (SAL). SAL is a process designed specifically for educational programmes engaged in community development and focuses on sharing valuable knowledge and experiences to collaboratively implement responses to community need and priority (Jiusto, Hersh, Taylor, 2013). In our experience with Langrug, SAL played a vitally important role in connecting with the community, planning and implementing project ideas, and reflecting on outcomes. In order to gain the maximum benefit from Shared Action Learning, the working group participated in a variety of exercises to promote collaborative work.

By connecting with the community from the beginning of our engagement, we established personal relationships that helped us throughout the rest of our project. We started

with fun, exciting activities to break the ice and allow everyone to get to know one another.



Using Shared Action Learning to Connect and Share Ideas



Much of the planning and design work was done through the use of what we called “big paper” activities. The poster-sized writing paper allowed everyone to work together around a table with the paper laid out or posted on the wall, giving space and visibility for everyone to express

their ideas. Gaining everyone’s input on the planning stages was a key aspect of SAL we strove to include.

Lastly, in order to gain more information about the urgent needs of the community, we utilised interviews and discussions with the ladies. We talked about a variety of topics including disease, sexual health, job responsibilities, and general operations of the WaSH-UP facility. Sharing our different experiences and community norms was eye opening and helped us gain more momentum with our project outcomes.

As a team we used many other tactics to collaborate and accomplish our project goals, all leading back to Shared Action Learning, a potentially useful aspect for any project requiring people from different cultures to work together and learn from one another.

GOALS, OBJECTIVES, AND PROCESSES: DEVELOPING A VIBRANT HEW SOCIAL SPACE

Our project focused on promoting improved health, education, and wellbeing in Langrug by working

with the community to expand the vibrant social space in the WaSH-UP Facility. In the process, we explored and worked amid the complexities of unpredictable working relationships in informal settlement communities. To accomplish this goal, we pursued five objectives.



Connect with community

Identify programmes to implement (aftercare and library)



Develop the aftercare and library operations

Implement the programmes



Reflect on SAL

1. Connected with the community and stakeholders to develop personal relationships and

learn about urgent social and health issues in the community.

To connect with the community we used get-to-know-you activities such as making and decorating name tags, playing rugby, and sharing photos of family and friends. Once we felt comfortable with each other, we interviewed our co-researchers about health, education, and wellbeing (HEW) needs in the community and they identified HIV/AIDS, STIs, alcoholism, illnesses from grey water, and children not having a safe place to play as the most important HEW problems in their community and several other less urgent problems including obesity, domestic violence, and heart problems.

2. Identified programmes and community projects to address urgent health, education, and well-being problems. Working with our co-researchers we decided to address the problem of children not having a safe place to play after school by creating an aftercare programme in the WaSH facility. Additionally, a

community library created a safe and inviting social space in the facility, opening the door to addressing HEW needs. We collaborated with the local organisation Health Promoters that provided training to members of the community, including our co-researchers and the Mandela Park facility caretakers, on important health topics like HIV/AIDS, obesity, and nutrition.

3. Worked with the community to develop models for running the programmes and to create a dynamic social space at the facility. We worked with the community to develop the operations of the aftercare programme and the community library and recorded the information in the manuals. For planning out the operations of the aftercare, we used big paper to write parts of the manual for everyone to see and talk about before deciding what to put in the actual manual. Additionally, we made some renovations to the facility to help create a more inviting and vibrant social space, suitable for an aftercare and com-

munity library. We further utilised the big paper for designing the space, by taking turns drawing out different ideas for decorations.

4. Cooperatively implemented programmes in the community and noted the success and challenges of the programme. The programme was implemented in the community and struggled to run for a few days due to a variety of factors, the most significant of which was complex inter- and intra-community dynamics. However, by working to address these challenges, we established a system of working with one another that led to a functional aftercare and library the following week.

5. Reflected on the SAL approach to WaSH-UP and reported new insights into community relationships. After identifying team dynamics as an issue, we had many difficult conversations with community members and tried to work through some of the problems we were having. Additionally, we contemplated the success

of SAL in informal settlement communities and the important elements of making the process and WaSH-UP successful. We recommended ideas for future project sites and helped advance the role of SAL when working with communities.

PROJECT OUTCOMES: NOT JUST TOILETS ANYMORE!

During two months in Langrug, our team worked with local community members to develop the social space in the WaSH-UP facility by creating HEW services. After assessing the urgent needs of the community, our team (WPI students and community co-researchers) decided to create an aftercare programme and community library. Additionally, we networked with the local organisation, Health Promoters, which presents important health education to informal settle-

ment communities in an understandable and relevant way. Although we created successful models for both the aftercare programme and the library, near the end of our project, we faced challenges in implementing them due to underlying social complexities in the working relationships with community members. By contending with some of these issues, we gained valuable insight into the application of SAL in informal settlement communities and shared new ideas on complex community collaborations. We chose to spend a few days away from the community and on the last day we were happy to return to Langrug and see the aftercare and library running.

SIZABANTU AFTERCARE PROGRAMME

Sizabantu, meaning “We help people” in Xhosa, was the driving motivation for the creation of this programme. With our co-researchers,





-  **Aftercare programme** with full Operations Manual launched
-  **Interior renovations** to WaSH-UP facility accomplished to increase aesthetic appeal while making it more educational and suitable for an aftercare and library
-  **Community Library** programme with check out system and general Operations Manual implemented
-  **Collaboration for community health education** between the Langrug community and Health Promoters established
-  **Dialogue begun** among community members about trust, communication, and working together in terms of sustainability of these projects
-  **Website** carefully crafted to include background research, process narrative, planning steps, and project outcomes

we identified the need for a programme that would provide a safe and educational place for children to play when not in school or crèche (an equivalent of preschool). On our first day in the community, we noticed children playing in contaminated grey water channels and with razorblades, rocks, and used condoms. While we viewed this as a problem, the gravity of the situation became more apparent when we discussed the idea of childcare with the women. They informed us that many children already played at the WaSH-UP facility after school, but that they

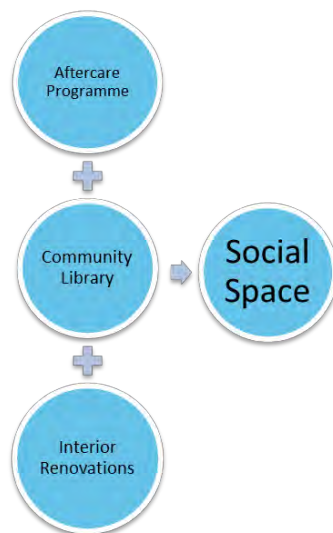
would like a more formalised programme to keep them safe, educated, and healthy.

To advance this programme and make it sustainable past our involvement, our team created an Operations Manual explaining aspects of the aftercare such as hours of operation, rules and regulations, registrations, and caretaker responsibilities, among other things. The women even typed up part of the manual themselves. As children began to play at the facility as part of the aftercare programme, healthy habits became quickly established, such as

washing hands before eating snacks or after playing outside. On our last day in Langrug, we could see the aftercare fully operational with the caretakers who run it providing a meal for kids, naptime, paper and pencils for drawing, and songs and games led by our co-researchers.

CONSTRUCTING A DYNAMIC SOCIAL SPACE: RENOVATIONS TO THE FACILITY

To further transform the space from a sanitation area to a dynamic HEW environment for the aftercare programme, we made the facility more inviting and educational for children by painting the interior with many bright colors and adding educational elements like painting the alphabet and numbers on the sinks. The aftercare and the library also needed storage space, so a small bookshelf was constructed to hold books and equipment. We added a clock and educational posters, some of which even had healthy tips and pictures of fruits. Additionally, we began a “wash your hands” mural on the wall above the sink. Furthermore, the renovations gave the facility a more polished look and the physical changes also increased the enthusi-



asm of the caretakers. Our report gives full details of the renovations we made with the community.

ENCOURAGING READING ACROSS LANGRUG: A COMMUNITY LIBRARY

To further develop the social space and encourage a love of reading and support for education, the community members and our team established a small community library. The library is a great starting point for children to expand their literacy, education, and English comprehension. It also encourages other members of the community to enjoy quiet reading time. The library books are available both for reading in the facility and to check out to bring home. A

checkout system was created by our co-researchers and can be found in the operations manual. Though the library is currently quite small, it has a lot of room for expansion, particularly in the second WaSH-UP facility being constructed in Zwelitsha, the neighboring section of Langrug. Our team networked with local book donation organisations and libraries to expand the collection of books. Future projects could work to secure a large donation of books to the library and a continued donation of magazines.

EXPLORING THE SOCIAL COMPLEXITIES AFFECTING WASH-UP

The success and sustainability of our project were hindered near the end of our working time in Langrug due to



underlying community dynamic challenges that we were unable to effectively navigate. Although the aftercare was fully functional on the last day, it is not clear how the intra-community challenges we confronted will affect the sustainability of the programme. The intense team dynamics conversations we facilitated, although frustrating, provided us a unique opportunity to attempt to work through those issues with the community members and gain valuable insight into the internal conflicts of communities, specifically in informal settlements. We explored this experience and analysed the important challenges we faced, contemplated possible causes of those challenges, suggested some solutions for them, and proposed ideas for the future of WaSH-UP. We have carefully recorded our experiences and the insights we gained from them and shared them on our project website.

COLLABORATION FOR CARETAKER HEALTH TRAINING

We aided in the establishment of a professional collaboration between Health Promoters and our co-researchers in Langrug. Health Pro-

motors is an organisation that offers healthcare workshops, which incorporate presentations and participatory exercises. In the end, participants can receive a certificate based on their participation, which can lead to more promising job opportunities. This new collaboration was well received by the community, demonstrated through consistent participation in the trainings. One co-researcher was elected Health Promoters Coordinator by our co-researchers, with assistance from two other co-researchers. Her role is to coordinate trainings with Health Promoters and interested community members. We, alongside our co-researchers, saw great potential in utilising the new health knowledge when creating educational aftercare programmes for children.

CONCLUSION: A BRIGHT BEGINNING

To conclude, although some project goals were not realised due the challenges of community dynamics, we were able to develop successful models for functional aftercare and library programmes. The Langrug women are now primarily responsible for sustaining them. Although community dynamics need improvement for the sustained success of the programmes, we are optimistic the community can come together to address their complex interpersonal challenges and create something beautiful! We were also given the opportunity to learn more about what it takes to work effectively in a community that struggles with trust and communication and still develop a strategy for the future of WaSH despite these inherent challenges.



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REFERENCES

- Adukia, A. (2014). Sanitation and Education: Harvard University. Retrieved 28 September, 2014
- Butler, O., Elwell, M., LeFevre, R., McMenemy, K. "Laying the Foundation for a Resilient Partnership: Innovative Upgrading in the Informal Settlement of Langrug. December 2012. Web. Retrieved 17 December 2014.
- Justo, Scott (2014). Gates Foundation Proposal. Water, Sanitation, Hygiene Upgrading Programme.
- Justo, Scott, Hersh, Bob, Taylor, Steve (2013). "What is Shared Action Learning?". Cape Town Project Centre. Web. Retrieved 17 December 2014.
- Sinanovic, E., Mbatsha, S., Gundry, S., Wright, J., & Rehnberg, C.. (2005). Water and Sanitation policies for improving health in South Africa: overcoming the institutional legacy of apartheid. *Water Policy*, 7(6), 627-642.

