Background

Informal Settlement Upgrading Strategies

Introduction to Informal Settlements

Nearly one billion people around the world do not have a permanent address and live in fear of losing their improvised homes every day (Whitehouse, 2005). The majority reside in some type of slum environment where there is usually a high population density, living conditions are poor and the people subsist on a low income. Slums around the world vary greatly in size, quality of housing, location in relation to a major city and the backgrounds of the residents. An informal settlement, or a group of improvised housing structures built illegally on private or government-owned land, is a specific type of slum where houses are untenured. These settlements form as a result of the overflow from urbanisation and migration to major cities combined with poverty and minimal government assistance in providing adequate housing. The quality of basic services, like water, sanitation, health and safety, severely diminishes as roads become blocked and informal shelters take over all available space (Human Settlements: Informal Settlements City of Cape Town,). In order to alleviate these issues, the informal settlements must be upgraded, meaning redeveloped and re-blocked to create more space, organisation and permanent housing solutions for all of the residents. However, the upgrading process poses its own set of challenges including community opposition, prevention of re-crowding and adequate funding, manpower and resources (Human Settlements: Informal Settlements City of Cape Town,). These challenges plague nearly all informal settlements struggling to develop an effective upgrading strategy.

History of Informal Settlements in South Africa

In South Africa, where informal settlements have become a huge problem and a major challenge, it was estimated in 2007 that more than 2 million families resided in informal housing (Del Mistro & Hensher, 2009). In that same year, the government vowed to clear up the backlog of people waiting for housing by 2014, though it was shown that the problem could only be resolved if they allotted 16 more years and doubled their budget (Del Mistro & Hensher, 2009). The government's obligation to provide everyone access to suitable housing is stated under section 26 of the South African Constitution, which also outlines that an informal structure cannot be removed after 48 hours of existence without the provision of a replacement shelter with all basic services available (Skuse & Cousins, 2007). It is through these promises and governmental obligations that upgrading strategies have developed and changed over time.

During the 1950s and 1960s, the predominant method for informal settlement upgrading was complete demolition and rebuilding of public housing options for the displaced residents (Abbott, 2002). It is generally agreed that the first person to propose an alternative way of thinking about upgrading was John F. C. Turner in the late 1960s. An architect and a scholar, Turner developed a theory of settlement upgrading which focused on the community's right to create their own plans and the government's role as provider of resources and services (Abbott, 2002). This shift in thinking caused the World Bank to broaden its loans for redevelopment projects, making the bank a major influence and consultant on

community improvement. This impacted developmental approaches by linking service schemes with upgrading as well as emphasizing physical infrastructure and hard issues like services, houses and money (Abbott, 2002).

According to Professor John Abbott, chair of urban engineering at the University of Cape Town, these ideas are considered unfavourable because service delivery and upgrading are two separate processes, and putting sole value on physical improvements neglects social and economic implications. It was not until 2004 that the housing policy in South Africa was revised to include the goals of faster housing delivery to ease poverty, job creation through upgrading, stimulation of economic growth, support for the housing market and improvement of safety and overall quality of life (Del Mistro & Hensher, 2009). These objectives are meant to be used in conjunction with an in situ upgrading strategy, meaning an incremental approach to avoid complete relocation of informal settlers to another temporary space in order to re-block their homes if done all at once. These objectives have helped shape the upgrading approaches and strategies that are still in development even today.

Upgrading: Keys to Success

The process of upgrading informal settlements has been studied and reviewed quite extensively, and several themes have emerged as to how to approach the situation. Lucius Botes and Dingie van Rensburg, professors in the Humanities Department at the University of the Free State in South Africa, created a summary of these findings in a list of "nine plagues and twelve commandments" for participatory development (Botes & van Rensburg, 2000). The notable approaches to avoid are focused on the role of the so-called "development experts", or the people from the lead organisation or government group that can come into an informal settlement with a patronising attitude (Botes & van Rensburg, 2000). They can abuse their role to seek social or political control as well as neglect community views and needs. It is also critical for the development leaders to evade bias of all sorts. Bias can generally be avoided by encouraging participation and communication from all groups within the settlement no matter age, race, economic status, social status or interest in the project. There is also inherent bias toward hard issues like money, technology and materials, which in the past have taken precedence over soft issues like social development and community involvement that underlie the success and sustainability of an upgrade project (Botes & van Rensburg, 2000). This will ensure the most fair and equal upgrade outcome for everyone in the community. The leading organisation should also adopt a mind-set that regards the process as equally important as the product by acknowledging past failures, learning from mistakes and ignoring pressures to produce immediate results (Botes & van Rensburg, 2000). All of these approaches contain the underlying themes of community participation in development and communication amongst stakeholders. The community members should have the major role in planning their own redevelopment and upgrade strategies while the lead organisation works as facilitator and financial supporter of the process. It is with these same strategies that we, as outsiders, can approach our work in aiding the development and improvement of informal settlements.

Upgrading Strategies

While keeping in mind the key approaches outlined above, informal settlement upgrading also requires a thoughtful, carefully planned methodology. Though there isn't one right answer to upgrading, there are general tactics that have been utilised and combined in certain instances. The three thematic

approaches as defined by John Abbott include physical infrastructure provision, community action planning and the holistic plan (Abbott, 2002). The physical infrastructure approach involves progressive improvement through three tiers of basic services. It is based on the physical, tangible evidence of upgrading infrastructure while the social implications are not a factor. Community action planning, which arose from a programme in Sri Lanka, emphasizes the planning stage as the most important for the community and government or lead organisation to collaborate equally (Abbott, 2002). The third holistic plan approach was developed in Brazil (Abbott, 2002). It utilizes geographical tools to create maps of the settlements and link them to economic and social data about the residents. Geographic information technology tended to alienate non-experts, like the majority of community members. However, when displayed visually in geographic mosaics, compilations of small format aerial photographs that make up a large aerial photographic map, there was a higher level of understanding, stimulation of community discussion and a fostering of greater participation in community development as opposed to regular maps (Sliuzas, 2003). Abbott concluded that the holistic plan theme is the most effective out of the three because it takes into account a wider range of intangible factors, though he also argues that a combination of the three approaches would be ideal (Abbott, 2002). It is critical to communicate the strategy being used for upgrading to the community as well as other stakeholders. These ideas for progressive, community-driven upgrading are similar to the approach taken by the organisation Shack Dwellers International, which will be detailed later in this section.

Communication in Settlement Upgrading

In trying to most effectively implement an upgrading strategy, communication is the most crucial aspect of the plan. The initial approach must be communicated to the settlement members in a way that they can understand. The plan for upgrading must then be negotiated and jointly developed by the lead organisation or government and the community, a process where opposition may arise and communication becomes more crucial than ever. One particular case-study in Nkanini, an informal settlement located in the township Khayelitsha in Cape Town that formed before the 2004 election, highlights typical methods of communication in informal settlements as well as the importance of proper communication in upgrading (Skuse & Cousins, 2007). The residents of Nkanini held an initial community meeting where money was collected from attendees to purchase a megaphone to call future meetings or organise crowds of people. The rest of the donated money was used to transport a newly-formed committee of community leaders to the mayor's office in Cape Town on a regular basis to fight for their community's right to keep their informal homes (Skuse & Cousins, 2007). News spread via the local radio station Radio Zibonele's chats, broadcasts and phone-in debates held on the air. Local newspapers also played a small role in communicating issues surrounding the informal settlement's stability. However, the predominant mode of communication was still word of mouth.

The traditional methods of communication range from face-to-face conversations to toyi-toying, a form of dance protesting that originated during apartheid (Skuse & Cousins, 2008). Verbal communication, which is the primary method of sharing information in informal settlements, is both helpful and necessary since many people cannot read or write. These methods of sharing and spreading ideas that are deep-rooted in South African culture are beginning to be replaced, however, by the growing availability of technology, like phones or internet, within informal settlements (Skuse & Cousins, 2007).

In Khayelitsha, public phone access is dominated by container phones, or telephones fashioned from shipping containers that are stationed throughout informal settlements as well as in local businesses and spaza shops (Skuse & Cousins, 2008). The containers not only serve as ways to connect to family members that are located far away, but they represent key points of interaction as social hubs for community members. Many container phone stations, however, have been left in disrepair, vandalised or have been replaced by mobile phones (Skuse & Cousins, 2008). Mobile phones have become more common in informal settlements but have many limitations, such as the lack of access to electricity for recharging and the high charges for making calls. Cell phones are primarily used for receiving calls, which is less expensive than making them, and are seen as symbols of power, wealth and connections (Skuse & Cousins, 2008). These new technological means of communication are still solely verbal methods and tend to dominate informal settlements.

In the case of Nkanini, the sole use of verbal communication techniques showed its downside. When the police arrived to demolish some of the homes in the informal settlement, another committee that had formed on the other side of the settlement, opposite the committee previously mentioned, emerged and began fighting against the police as well as with the other committee (Skuse & Cousins, 2007). The community leader, Robert, was notified via cell phone that the police had tear gassed the crowd in order to break up the riot that had ensued. This lack of communication and resultant disturbance between the committees was almost entirely the consequence of only verbal communication being utilized.

Nkanini's process had difficulties for several reasons. One of them was the importance it placed on a single leader. Robert, the chairman of the settlement gave voice to the community and had a positive impact on negotiations with the government. This however, also proved to be dangerous because, without Robert, the community's organisation broke down. Additionally, personal advancement and power struggles proved a key point in the Nkanini struggle. Government negotiations occurred separately with each committee and thus political affiliation and personal benefits of the committee leadership were the main basis for Nkanini's progress (Skuse & Cousins, 2007).

Word of mouth and telephones had failed to keep the community united, highlighting the need for a different, more concrete and reliable way of communicating ideas, gatherings and news within informal settlements. It is our project team's belief that visual media strategies are the next step to improving communication in informal settlements. The achievements made in Nkanini highlight many of the communication methods we will encounter in Langrug. Word of mouth is likely to be an important channel of communication, and also a barrier to effectively spreading information across the community. Presently however, it is not clear who is the main source of communication within Langrug. It is also unclear what kind of difficulties we might find within the communication networks of the community. As preparation for this, we interviewed past CTPC IQP teams to hear their views on Langrug and Monwabisi Park's communication networks.

Communication In Langrug and Monwabisi Park

By interviewing a member of one of Monwabisi Park's 2010 project teams, we learned about many interesting aspects of communication flow within the settlement. One important concept was the importance of word of mouth communication. The crucial thing we must consider during our work is to

emphasize the clear understanding of messages that are given to the community. If this does not occur, the intended meaning of news and communications might be lost when other people's opinions are put into the mix of the message. As far as specific groups of communication groups go, experience in Monwabisi Park highlighted the relevance of church groups. Despite usually lacking a formal church structure, religious meetings are a common way of spreading news and discussing issues. Within Langrug, it is not clear how many church groups exist, but this is an important asset to be aware of. One other group found within Monwabisi Park that might play an important role in Langrug is spaza shops. Many people of the community greatly depend on these shops to obtain food and other daily needs, so these shops have the great potential of being communication hubs. Yet, their power also entails the possibility of affecting messages to further their own agendas. This past experience of the CTPC shows the deeper complexity of communications beyond the simple relaying of messages.

Direct experience in Langrug also highlights other key actors in communication flow within the settlement. The source of this information is primarily based on interviews with the Greywater Management and WaSHup teams that were on-site last year. From their experience, the key role of Trevor, a co-researcher and leader within Langrug, was evident. Trevor managed to organize work teams from the community and gather people for meetings. This can resemble Robert's role in Nkanini's development, as Trevor seems to be one of the strongest leadership figures in the community. Videos and news articles that mention Langrug, with Trevor as one of the main representatives of the settlement, reinforced this idea. See the videos in this website: http://sasdialliance.org.za/video/ The interviews also pointed out the potential that spaza shops have as information hubs for the community. The Greywater Team pointed out that spaza shops were regularly visited by many residents of the community. Therefore, learning about them can provide insight on communication flow within Langrug.

SDI/CORC/ISN Strategies

SDI Success Stories

To develop a project that can be sustainable and effective in helping Langrug address its needs, it is important to understand the current work being done there. The Community Organisation Resource Centre (CORC), is an important actor in the community, so working in union with its strategies and beliefs is key for a succesful project. We researched CORC's mother organization, Shack Dwellers International (SDI). Ever since its inception, SDI has focused on community-driven solutions for problems of land tenure, sanitation and shelter in informal settlements. Its most important asset is the knowledge generated by the members of the community, as it is often more accurate and relevant than the one obtained by the government or professional agencies (Patel, Baptist, & D'Cruz, 2012). . The community empowerment SDI facilitates in informal settlements all across the globe offers a unique solution to the housing problem affecting nearly all regions of the world (Gasparre, 2011).

As all organizations currently working in Langrug are somehow connected to SDI in their work, it is important to understand the essence of its philosophies and the strategy it has used in the past to develop sustainable solutions in informal settlements. For this, we found case studies to be a good tool to assess the impact SDI strategies had on communities. They provide before and after perspectives of the location and show concrete developments in each community. One of the key events that helped in

SDI's formation was the enumeration of Janata Colony, Mumbai and of the pavement dwellers of that same city during the 1970's.

Like most informal settlements, Janata Colony was constantly under the threat of eviction. In 1973 however, the threat became very palpable. The community attempted to fight eviction in court to remain in their homes. Jockim Arputham and other tenants in the community decided that the best method to do this was to prove that Janata Colony was a legal settlement. They initiated the process of profiling the settlement to show the court that the settlement was very established (Arputham, 2012). Electricity poles, telephone lines, shops and other businesses were all profiled. Tenants who had ration cards and other government aids were also tallied and detailed. This generated a report that was used to successfully fight the evictions in Janata Colony and set a precedent for future settlement profiling, or enumeration. Another effect this had was to stir the community into action, as no education besides basic counting skills were needed to help the enumeration by counting assets like electricity poles and telephone lines within the community (Arputham, 2012).

Fighting evictions and negotiating government support proved more fruitful by having concrete data to refer to, and so enumeration began in other parts of Mumbai to help the shack dweller movement grow (Patel, Baptist, & D'Cruz, 2012). . In 1986, pavement dwellers in Mumbai also began an enumeration movement. Their situation was even more precarious than Janata Colony, as their home was literally built in the sidewalks of certain parts of Mumbai. But, by organizing and profiling each hut, resident and physical asset found within the community, clear results were achieved. By mapping each home of the settlement and taking it to the ration card department in Mumbai, many tenants received government aid and with it, recognition (Arputham, 2012). This also had the end effect of initiating dialogue between the local government and the community, a key aspect in the improvement of informal settlements. From these events in India, Arputham helped establish organizations that would lead to the eventual creation of SDI in 1996. With its creation, international dialogue between informal communities began and community-driven processes were now seen all over the world.

Within the African context, Namibia serves as an example of how SDI strategies can help shape the interactions between communities and their governments in a beneficial way. For 19 years, the Namibian Housing Action Group (NHAG) has attempted to improve lives of its members by following SDI strategies. One of its main focuses is women-led savings schemes. These currently involve over 15,000 households in Namibia, and their daily interactions put them at the core of the informal settlement movement in the country (Muller & Mitlin, 2007). . The main purpose of these savings is to approach government agencies not with demands but with plans for cooperation. The NHAG does not fight for free houses but asks for government cooperation in solving the housing problem in feasible ways. They have negotiated with the government to purchase land as communities, covering development costs through savings or community loans. These loans are managed by the shack dweller federation in Namibia and thus far have allowed over 5% of the informal population to organise in improved living conditions (Muller & Mitlin, 2007). The most important aspect of the Namibian case is the strong relationship that has developed between the government and the communities. By organizing saving schemes both at the local, city and national level, the Namibian people have become an important ally

for political parties and the government itself. This has developed into a mutually beneficial relationship that is currently progressing to be one of shared responsibility in the settlement upgrading process. .

Within a South African context, SDI has a strong presence and a lot of paradigm shifts are currently occurring. Major stakeholders in housing policy have initiated a new type of dialogue with informal settlements. Through the Informal Settlements Network (ISN) and the Community Organization Resource Centre (CORC), the city of Cape Town initiated a partnership with surrounding informal settlements to assess and discuss the upgrading process (Fieuw, 2012b). The difficulty of addressing both local issues and major policy changes slowed this initiative down, but the success achieved in an informal settlement called Sheffield Road has given new vigor to the community-government relationship. The community implemented a reblocking initiative to improve organization within the settlement, and this showed how the community could help the government in its work. Reblocking allows new access routes to be made for easier construction, and it also generates the community organization to successfully implement communal facilities such as bathrooms and other sanitation areas (Bradlow, 2011). This cuts costs for the government by sharing the financial burden through community-led saving schemes and communal facilities. The community benefits from being empowered to negotiate and cooperate with the government as equals pursuing the same goal. This sets an important precedent for WPI's work in Langrug, as the Municipality of Stellenbosch has taken this cooperation to the next level and has signed a Memorandum of Understanding with CORC to cooperate in the development of the community.

Traditional Housing Policy vs. *In Situ* Settlement Upgrading

These examples of SDI work in distinct communities reveal important information about working with informal settlements. For instance, each settlement is unique in its established social organization. This makes a generalized approach to settlement upgrading a really difficult tool to successfully implement in all cases. SDI has succeeded in many different settlements. What allows it to produce these results? Community participation seems to be the key in this respect, as it makes any upgrading initiative "custom-made" to the particular community that creates it. In South Africa, this community-driven approach greatly differs from traditional housing policy.

The Reconstruction and Development Programme (RDP) is the South African government's plan for upgrading the poorest settlements in the country and improving people's quality of life. The RDP subsidizes the development of large-scale social housing projects intended to replace shacks in informal settlements. One problem of this approach is the government's view of shack dwellings . A proper home is seen only as a titled, standardized house with a full set of services. This is ideal, but the means to get to that point at a large-scale have made South Africa's waitlist for RDP homes rise continuously. The RDP's creation of formal settlements usually consists of relocating shack dwellers to newly made townships in different areas, usually away from the main cities. Many difficulties arise from this as new RDP housing locations make travelling to jobs a long and expensive ordeal for former shack dwellers. Additionally, communities are broken up, making the overall community dynamic in RDP projects different from the ones in informal settlements. It becomes apparent, then, that simply getting a better house is not necessarily the most needed improvement in an informal settlement. The government approach to housing, however, does not allow for an active community in the upgrading process. By

simply providing housing, the informal communities become passive entities without power to change their settlements.

Since RDP-like housing projects have shown to be slow and costly, SDI focuses on community driven *in situ* settlement upgrading. The success of this initiative, as described previously has pushed local and national governments to support community efforts, slowly eliminating the idea that the only solution to housing is formal, standardized settlements. The work being done in the Langrug community epitomizes this paradigm shift.How has SDI effectively connected the government with the communities in this ordeal? How does this organisation help a community create an upgrade plan instead of simply giving it one?

"Nothing for us, without us", (South African SDI Alliance, 2011) is the philosophy behind SDI's support to communities. It requires participation of shack dwellers in every step of the upgrading process, from initial data collection, to policy creation, and even in construction work. The nature of shack dweller communities, however, makes this process a difficult one. Lack of funds, lack of trust and transparency among the community and other stakeholders are some of the key issues that slow this process down. Due to this, SDI attempts to work with the community at the very foundation of the organization process and work towards a specific goal relevant to the people in the settlement. It is important to note that SDI's work is of a facilitator of the process, not as a primary actor within it (Gasparre, 2011). The organization works to improve and help community organisations to develop their full potential; it does not assign them objectives or tasks to fulfill its own vision of the future of the settlement.

SDI "Rituals"

Figure 1: SDI Rituals

To achieve a community vision, communities affiliated with SDI follow certain "rituals" that have been successful in the past. One of the first of these rituals to take place is the enumeration of a community. As explained in the Mumbai case, enumeration gives the community a new sense of identity and collective force. This first ritual gives the community concrete data that describes its needs and assets. It explains what its economic power is like and in general serves as an initial tool to unite and organise the community. The leadership experience that is gained from this process is very valuable, as enumeration

is just the start of a long upgrading process. Besides the connection created within the community, the end report also changes the relationship between the community and the outside world. As the Nambian Housing Action Group showed, enumeration done by the communities is more accurate than government or professional reports, and this puts the involved parties in a more level field for negotiations.

Once knowledge and power is gained by the settlement, it can begin to organise and develop a plan to address issues that it finds most vital to upgrade. For this, another SDI ritual has proven effective: community saving schemes (South African SDI Alliance, 2011). Pooling funds provides a financial structure that individuals can rarely hope to obtain in informal settlements. By creating savings groups, the financial burden of upgrading is spread across the benefitted group and the government. This makes cooperative negotiations between the two groups more feasible, as governments are usually willing to share costs. Besides the financial legitimacy that the groups give, SDI's main objective when helping develop savings schemes is to unite the community as much as possible. By collecting and managing the resources themselves, informal settlements are forced to develop trust and accountability from within (Gasparre, 2011). Every member becomes a stakeholder in their own upgrading future, so savings schemes are effective in creating a proactive, involved group. These new internal connections can drastically alter the external connections the community makes, particularly with the government.

Referred to as "deep democracy", the community approach to interaction with local and national governments attempts to completely eliminate the paternalistic idea of social policies (Gasparre, 2011). Rather than being approached, lectured on their needs and given a solution by the government, SDI communities proactively contact the government. Once the community has organised enough to produce clear information regarding their needs and strengths, they can approach municipalities with a clear notion of what they want out of the relationship (Gasparre, 2011). The settlement can provide accurate, up-to-date information about their situation. It can also provide strategies to combine government and local resources to achieve particular goals. The government can provide resources, technological capacities, and recognition, a key in this endeavour.Being squatters in empty land, shack dwellers seek legitimacy and land security. By showing organization and willingness to cooperate rather than protest, they hope to be shown the same rights as all citizens. This gives way to a politics of negotiation in the long-term with the government and a sense of legitimacy that they previously did not posses.

Shortcomings of SDI Strategy

The SDI rituals however, are not without their flaws, and it is important to understand them before working within this framework in Langrug. The long-term nature of community driven settlement upgrading can also lead to its undoing. For communities sacrificing a significant portion of their daily incomes into community savings schemes and not seeing quick results can be demoralizing and frustrating. Though it is true that traditional housing policies are also long term solutions, in South Africa they do not involve as much personal money from the community as the *in situ* method. This can lead to is members leaving the saving schemes program and slowing down the momentum previously built up by the community (Gasparre, 2011). SDI rituals, by their nature, are prone to errors by the settlement. As a learning process, wrong decisions will be made and disputes will arise. In the long run however, the

community process may benefit from this, as connections between key actors in the process could be developed and fine-tuned, while connections that might not be vital to the process could be loosened to ensure proper focus in the upgrading process. These shortcomings have to be considered when working in Langrug. The process is a community-driven one, and it is important to maintain that idea. Rather than giving the community plans to execute, our team must work with their strategies and plans.

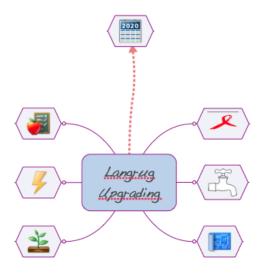### Present State in Langrug

Figure 2: Possible Langrug Upgrading Projects

Where is Langrug with respect to the SDI rituals? In the two years of its SDI program, what has it achieved? A great milestone in its process has been its successful enumeration report. It catalogued each house, numbered it and organised the community (Informal Settlement Network, Stellenbosch Municipality, Langrug Community Leadership, & Community Organisation Resource Centre, June 2011) It developed concrete data with which Langug was able to negotiate with the Municipality of Stellenbosch. From this, a Memorandum of Understanding was achieved between the community and the local government. This is a historic achievement for informal settlements in South Africa, as it is the first formal agreement between a government and an informal settlement (Fieuw, 2012a). A better perspective of Langrug, however, will be seen only when we start working on-site in October 2012.

Communication Techniques

One of the strongest ways that our team will be able to help support the co-researchers with effectively communicating settlement upgrading projects is through the use of different communication strategies. These various strategies can be broken up into two broad categories: verbal communication techniques and visual communication techniques.

Verbal Communication Techniques

Verbal communication tends to be the most common form of communication used in many different types of communities. From talking with pervious WPI Cape Town Project Centre groups that worked in Langrug we learned that the primary way for messages to be spread throughout the community is

verbally (Siemian, Shooshan, Sheppard, & Kenney, 2012). One thing that may help our group with working to support the co-researchers is to understand different verbal communication skills such as active listening and committed speaking.While these skills will not transfer over directly to the co-researchers, if the members of our group are able to utilize these skills it may help our communication with the co-researchers.

Active listening and committed speaking are terms that are more often used in a business setting to help employees better listen to others in the office and communicate an idea or issue that they may be having. For these skills, it is important for the person communicating to have an understanding of the message they are trying to get across (Emerald Insight Staff, 2003). It is just as important for the person listening to have an understanding of what is being told to them. From this it is important for the listener to be asking questions to make sure they are on the same page as the speaker and vice versa. Other skills that get stressed often for communication and presenting are having self-confidence and self-motivation (Tucker, 2001).Having these self-confidence allows a communicator to be aware of their strengths and use them more effectively.

Visual Communication Techniques

There are many different ways that a person can go about using visual communication.It can be as simple as making a poster or as involved as participatory photography.Through talking to previous teams that worked in Langrug, we learned that one of the best ways they found to communicate ideas with the co-researchers is through drawing pictures as a group and talking about them.During their first couple of weeks in Langrug they were having trouble getting the co-researchers to express their ideas.One day when they wanted to get some input from the co-researchers on their ideas for a playground they decided to have them draw out what they were thinking.This strategy worked very well for them as they all drew their pictures together and then talked about what each picture was showing them (Siemian, Shooshan, Sheppard, & Kenney, 2012).This has led our group to believe that further research into different types of visual communication would be beneficial to our project.

Participatory Photography

One form of visual communication that has been used in informal settlements in the past is participatory photography.This is a method that has been used both by the non-profit organization PhotoVoice and by other project teams with the Cape Town Project Centre.Through this process photography is used to help different members of a community express their views or concerns that they may have.Participatory photography allows these groups of people to express their views of varous topics that are important to them through the use of photographs rather than just verbally expressing them.

While the activity of taking the photograph is an important and enjoyable aspect of the process it is not the main focus of participatory photography.Rather, the process of developing the message that is wanted to come from the photograph and what type of image would best display that message is emphiased (Daw). From this, the participants learn what the message of the project is and how their images are going to be used.

One reason why participatory photography has been successful with other informal settlements in the past is because going through this process different topics can more easily be talked about.This is because by figuring out what message you want to get across and how to go about doing it allows people to think about more serious and sometime embarrassing topics (Daw).Once they then have these pictures that they have put real thought into, bring up these harder topics can become easier.

One example of participatory photography in action is the a project titled *Through the Eyes of the Children* which was preformed in Canada by the University of Victoria. The purpose of this project was to show the community of Victoria how large of a presence there really was of homeless families in their own backyard.The way that this project was carried out was through using the voice of the children in their community.These 10 children (ages 8 to 10 who were culturally diverse) were taught how to use different cameras, digital or manual, and then were allowed to take pictures of different things in their life.Once the children had selected their photos and the directors had selected a few more they were displayed in a public setting for the community to see. This allowed the children to not only show others about the homelessness problem that was present but also put them in a situation where they were able to talk about it amongst themselves (Clover, 2006).

Participatory Videography
Photography is not the only visual media that has a participatory application. Participatory videography has also been used in informal settlements in the past. While the actual media is different than participatory photography there are many similarities in the process. These similarities can be seen with the process of identifying the desired message to communicate either within a community or with organizations outside of the community. These two processes are also very similar in the fact that there is time devoted to teaching the different participants how to use the equipment until they feel comfortable with their abilities. These two processes then differ in their use of technology with the end product and how this final product can be perceived by the public. With participatory photography the pictures taken can be printed and then posted either online or on a display board along with a quick description or message from the photographer. Other than the small written blurb by the photographer, the message that comes from the photography is to be interpreted by the person looking at it. Participatory videography on the other hand still requires the use of technology after the product is finished to show the video to others. This video also has far less interpretation that is needed from the viewer than with the photographs. While each one has their own advantages they also both have their own disadvantages.

Participatory videography has been used in informal settlements multiple times. The Cape Town Project Centre has first-hand experience with this technique as it has been used in a previous project in Monwabisi Park which was previously mentioned. A participatory video project has also been done by the University of Stellenbosch in the Kayamandi settlement located in Stellenbosch (Cain, 2009). This project was completed by Julia Cane for a thesis as a part of a doctoral degree in 2009.

Cain started her project by talking to the Municipality of Stellenbosch to determine what issues they saw that needed to be addressed in the settlement. Once these issues had been identified Cain then proceeded to talk to different members of the community of Kayamandi to determine their views on the

same issue. She found that there was poor communication between the Municipality and the members of the community. It was then decided that the use of participatory videography could be help bridge this gap between the community and the municipality (Cain, 2009).

In a previous project, Cain used participatory videography to help an informal settlement make training videos for water supply projects. Through this project, community chairpersons were used to help educate others on these processes. This started by filming a group discussion with these different participants on what needed to be done for these projects. The videos were then completed with lesson plans and discussion points for new water supply projects. Cain found that there were many good outcomes that came from participatory videography. The first was that the participants became "empowered" by being able to see themselves on screen. The second was that it helped the people of the community not only learn the information they needed for water supply projects but to see what these different community-based participants were really doing. The drawback to this project was that as soon as the process for these projects changed the video was no longer valid (Cain, 2009).

By using participatory videography in Kayamandi, Cain had hoped to show the goals of the general community voice not only back to the community but also to the Municipality of Stellenbosch. This was done by talking to a wide variety of people in the community about their views of different problems in the community. She then took video of these people to showcase the collective community problems to the Municipality. This video was then edited and shown to both the community and the Municipality (Cain, 2009).

One aspect of this project that was very different than many other participatory projects was that Cain made the decision to shoot the footage herself rather than teaching different people in the community of how to do it themselves. This decision was made based on the opinion that footage taken by people who were unfamiliar with the equipment would not necessarily better the project (Cain, 2009). While there are many things that can be learned from Cain's work, the fact that this project was not completely participatory would be something that the current project at hand would differ from.

Digital Storytelling
A third form of participatory media that has also been widely used, especially in North America, is digital storytelling. The process in many ways combines different aspects of both participatory photography and participatory videography. Digital storytelling is where different participants take photos that can both be recent and from their past and combine them with audio that is then displayed as a video. This process allows for the same planning of both the visuals and the audio, the same interpretations of photos from the viewer that you get with participatory photography along with the audio and vocal opinions that you get with participatory videography. Daniel Meadows , author and Lecturer at Cardiff University, states that one of the unique attributes of digital storytelling is that since most of these stories are based on people's lives; it is possible for everyone to make a video as everyone has their own story (Meadows, 2003).

Like participatory photography and participatory videography, digital storytelling has also been used in informal settlements in the past. One example of this is a project done at the University of Pretoria.

There are many things that can be learned about the use of digital storytelling in informal settlements through this project. The first is that the training and workshops are just as beneficial for community growth as well as the final products. With the training and workshops, the participants are not only able to learn about the different technologies that are used for these projects but that there are other people in their community that share some of the same problems as them. These workshops also help people voice their problems and stories and teach them how to refine them to only a few minutes (de Tolly, 2007). The most important lesson to come out of these workshops for other digital storytelling projects is that when it comes to participatory media, interpersonal communication and trust among the participants are important. If the participants do not trust who they are working with it is very likely that they will not be as willing to tell their stories (de Tolly, 2007). Interpersonal communication helps with this as the participants can feel more like they are really being listened to. The actual videos that come from these projects also help community growth as they allow people to see that others are facing similar difficulties as they are, and they allow people to see different problems in their community that they may not have been aware of in the past (de Tolly, 2007).

The other lesson that can be learned through this project is that when using digital storytelling for community development, it is important to make sure that the individual stories are connected (de Tolly, 2007). If all of the stories that are made are completely independent, then they will not necessarily help bring a community together. However, when these digital stories have a common theme, they are able to greatly help with both community development and communication.

Examples of Digital Storytelling can be found at:
http://www.bbc.co.uk/wales/audiovideo/sites/galleries/pages/capturewales.shtml.