NetCorps South Africa

Final Report
For the Internship from February 21st 1998 to August 21st 1998

IDRC Report/Acacia Initiative
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Introduction

The following report is a product of my internship with Soweto Technology Project (STP) working specifically with School Internet Connectivity in Soweto, South Africa. This internship was organised by a coalition of non-governmental volunteer sending agencies, known as NetCorps, with funding from the Canadian International Development Agency (CIDA). NetCorps was established in response to the growing demand for volunteers with computer skills in developing regions of the world. Specifically, my position in South Africa was organised by Voluntary Services Overseas Canada (VSO). VSO arranged this placement with the facilitating and assistance of the International Development Research Centre (IDRC). The work with the STP falls under the greater capacity of the IDRC's Acacia Project. "The Acacia program approved by the IDRC Board of Governors (the Board) in March 1997 aimed at establishing the potential of ICTs to empower poor African communities." (http://www.idrc.ca/acacia/year1rpt/exec_sum.html). IDRC provided funding for my accommodation for the six-month stay in Johannesburg.

Project Overview

Soweto SchoolNet began approximately one year ago with a grant from IDRC for the Gauteng Schools Network for a national project which included connecting schools in Soweto. Implementation was achieved together with the Soweto Technology Project. This resulted in a Soweto Chapter of the provincial Gauteng Schools Network, known as Soweto SchoolNet (SSN). Originally, the Soweto Technology Project (STP) was designed to give gifted students around Soweto access to supplemental technological education. As computers and specifically the Internet have grown to shape the world around us (very evident in Johannesburg) STP's project focus has shifted to school-based Internet Connectivity. The goal of the initial project was to connect 15 schools, selected because they already possessed computers, to the Internet and e-mail. The project encountered a number of obstacles, such as poor telecommunications infrastructure, a lack of training, and poor general understanding of computers, and the majority of schools hardly used their connections. These outcomes informed the next phase of the project, shifting the emphasis of the project to training. At the Teachers' Centre in Pimville, Soweto, a computer lab has now been developed as the central point of training for Teachers and Students (also presently being supported by IDRC).

I. Activities since Arrival in South Africa

1.1 Computer Laboratory

My main focus for the first month after arriving in Soweto was setting up a Computer Training Facility at the Teachers' Centre. My main roles in establishing the centre were:

- Consultant during the purchasing phase.
- Setting up hardware and installing software.
- Network planning and installation.
- Network maintenance.

The lab consists of 25 Pentium 166 MMX's with 2.1 Gigabyte drives, all running Windows 95. The computers are rented from a Rental Company based in Pretoria, and after three years they will be property of the Soweto Technology Project. Through Gauteng Schools Network, we were able to organise a hub to network the computer lab. The cabling was done manually with a cabling kit provided by NetDay SA (www.netday.org.za), a local organisation focused on providing schools with networking materials.

Once the network was configured for TCP/IP, WinGate was used to share the Internet across all the computers. The lab also uses a multiple e-mail program called "Taxis Mail", developed by Stephen Marquard (see Appendix A) of the Western Cape School Network to provide e-mail to any user wishing an account. The e-mail services are provided through the Gauteng Schools' Network from a server at the local Rand Afrikaans University (soon to be migrated to a national server). An application for Microsoft Office software has been granted and the centre has received 40 licenses. The IDRC has organised a dedicated 64kbps line into the computer lab in Soweto which means better Internet access for the teachers and students.

1.2 School Connectivity and Support

A role that took up a large portion of my time was supporting schools that had dial-up Internet connections or wished to get connected. Using a vehicle supplied to me by the Soweto Technology Project, I was able to visit schools to help them with Internet Connectivity in terms of:

- Modem installations.
- Software configuration.
- Computer Networking.
- Hardware Troubleshooting (see 2.2 for common technical problems).
- Purchase consultation.

1.3 Classes for Teachers and Students

Centralised Training for schools is now available at the computer lab in Pimville, Soweto. I taught a course for teachers on Tuesdays and Thursdays after school that dealt with the Internet mainly but started out with basic computer literacy. Throughout the week during school hours there was time available for school classes to book and have a 2-hour computer training session. I also taught these courses which started with a basic introduction to computers and as the children become more advanced led them into the Internet and e-mail.

1.4 Organization of International Projects

Another role of Soweto SchoolNet is to organize projects for students to participate in. Children from Musi High School have come to the centre to enter a Junior Summit Competition. We have connected two schools with a project in the USA which will have students in Soweto and Chicago exchanging electronic books about their communities. Finally, I supervised a group of students that are involved in an International Student Project. The project combines web-based research and collaborating with another school via e-mail.

1.5 Computer Faires

On two occasions, once in Dube, Soweto and once in Midrand, Johannesburg, we organised materials to present and promote the operations of Soweto SchoolNet. In Dube, the Technology Fair was held at a church and major issues in developing technology in Soweto were discussed. The IDRC supported this Fair financially, and presented the Acacia Project to the people of Soweto at this gathering. In Midrand, some very useful contacts were made with big business such as UUNet Africa (now Internet Service Provider for the schools in the project).

1.6 Soweto SchoolNet Newsletter

A monthly newsletter has been started that is distributed to the schools to inform them of events and projects that are on the go in Soweto SchoolNet. Schools are encouraged to register with Soweto SchoolNet and take an active role in developing their schools' computer resources. I initiated this concept of publicity and a structure is now in place for future editions.

1.7 Web Design

The Website for the Soweto Technology Project (STP) is located on the new Linux server at the centre in Pimville, the URL is http://www.sowetotec.org.za. The Soweto SchoolNet home page is located at http://www.soweto.gp.school.za. Throughout the project I have made minor alterations to the site to keep it up to date. However, without computer access outside of work time, I found the exercise to be a little too time consuming taking away from the real work that needed to be done. Now, Christopher Geerdts (see Appendix A) in his own personal capacity has taken over the management of the STP web sites. Soweto SchoolNet, as it is understaffed, will no longer need to worry about Web design aspects. Also, this encourages ongoing communication between STP and the IDRC.

1.8 Fundraising Activities

We are constantly on the look-out for companies wishing to sponsor hardware and software to schools to aid the project. UUNet Africa has agreed to provide a free Internet account to any school wishing one. Ariel Technologies has donated 10 computers which were given to 10 schools on the official opening of Soweto SchoolNet. Approximately 40 computers have been organised for schools by SSN. CiTec has helped to provide our 64k diginet access to the Internet. Microsoft has provided Office software for our computer lab. Lotus has provided SmartSuite packages for distribution into the schools. Tecor is going to help to install internet-based educational software in our lab so children will have access to distance education. I was directly responsible for securing the Microsoft Office licenses for the lab as well as 30 copies of Windows 95 for use in schools and the UUNet Africa accounts for schools were achieved through a contact I made at the computer

fair in Midrand, Johannesburg. I was also very involved in communication process between STP and Ariel Technologies to arrange for the computer donations.

- o Citec Pty Ltd. (www.citec.co.za)
  Internet Service Provider for lab.
- o UUNet Africa (www.iafrica.com)
  Internet Service Provider for Schools.
- o Ariel Technologies (www.arriva.com)
  Computer Donations to Schools.
- o Microsoft SA (www.microsoft.com/southafrica)
  Software Donations.
- o Lotus SA (www.lotus.com)
  Software Donations.

1.9 Specific Activities/Meetings

A visit was made to the Microsoft Digital Village in Chiawelo, Soweto. This centre, established by Microsoft, was a good example of how our centre should be modelled. We discussed many aspects of training and computer education in Soweto, they have agreed to send schools to us because they deal with the general public and not schools in particular.

A similar visit was made to Future Kids in Pimville, Soweto. This is an international franchise that gives children basic computing skills. The operation in Soweto does not seem to be doing very well. Although Future Kids is a very successful franchise elsewhere, they do not have enough hardware to provide large sized classes. We have recently had a meeting with the new management of Future Kids and we may be able to arrange that they use our facilities to teach classes for the marginalized youth of Soweto. This would relieve our strain on teaching capacities and allow more time for school support.

The U.S. Information Services (USIS) Library in Dube, Soweto was contacted. They have a satellite dish that can be used for video conferencing. We will likely use these facilities for video-conferencing for the "Bridge of Books" exchange with Chicago, USA (see section 3.5).

On numerous occasions the Soweto Technology Project has had visits from dignitaries. The Canadian Secretary of State to Latin America and Africa, the Deputy Minister of Industry Canada, the British Council, the World Bank, and the Victorian Education Department (Australia) have all been through the Centre and approve of the facilities and the training that takes place there.

The South African television program "Beyond on 3" which looks at technology trends came by to interview the members of Soweto SchoolNet as part of a documentary on SchoolNet SA. The show will be aired in late 1998.

II. Difficulties Faced and How they were Resolved.

2.1 Computer Lab

The computer lab has a few problem areas, the main one being that its current usage is not at 100%. This will hopefully be rectified as we have assigned the role of Project Manager/Computer Lab Scheduler to one of the employees of the centre, Edgar Steeneveldt. With Edgar managing the computer lab usage there will be one person responsible for scheduling course times and ensuring that only persons designated to use the lab will have access and at the appropriate times. The Project Manager should also be the key public relations person for the schools.

2.2 School Connectivity and Support

The problems encountered in supporting schools with Internet Connectivity are the direct result of a more fundamental national problem. The educational budgets per school are in no way adequate to support the necessities of education. School ICT and ICT in general is a relatively new idea, one of which most people in the teaching generation have little or no knowledge. If a teacher does acquire technological skills, he/she will generally leave the field of education for a more lucrative position elsewhere.

Technical expertise and support comes at a high price in South Africa. The funding for ICT is definitely not available, but is absolutely essential. I was told informally by the principal of E.W. Hobbs Primary School in Eldorado Park that their annual budget per child is R40 (~CDN$10). This is not enough to cover the cost of text books, paper, and pens. Schools in the project have to look to their communities for added financial support.

Another frustration point in connecting schools to the Internet is that Telkom, the national telephone company, has a monopoly on telecommunications. For this reason telephone costs are very high and schools are unable to stay online browsing for long periods of time (local calls being charged at 3 minutes per unit). At St. Matthew's Primary School, the phone line was disconnected after receiving a bill in the amount of R500 for one month (~CDN$130)!

In the end, the main problem with trying to support all of the schools that need help with computer problems is that it is a never-ending task. Unfortunately, since there is not sufficient technical knowledge of computers in the schools very simple problems can not be solved internally. If one was to run around to all the schools that needed help all the time no other work could be achieved. Therefore, I decided to limit my days of the week where I was available for technical support. This is definitely a key area where better service could be provided to the schools.

Technical problems that are very common in the schools are as follows:

- Modem connected improperly.
- Modem blown from lightning strike. (proper protection not used)
- Hard drive failure due to power surge.
- Improperly configured software.
- Substandard phone lines.

2.3 Crime

Soweto is a very impoverished area. There are so many unemployed youth with very little direction in their lives; many of them resort to violence and crime in attempt to resolve their situations. The source of problems in many ways in Soweto is lack of education. So, it's sad to realize that when criminal activities cause a school to lose a computer that the problem is simply amplifying itself in that the quality of education is being reduced by the crime in the surrounding community.

For the most part, we try to ensure that a school receiving a computer will have sufficient security in place to prevent it from being stolen. Also, the school is encouraged to insure their computers. Unfortunately some schools are in such reputably poor areas of Soweto that insurance companies will not do business with them. Eldorado Park Secondary was not able to insure the computer that we gave them for this reason; in the week of August 3rd, 1998 the office block of Eldorado Park Secondary was burnt down by arsonists and the computer destroyed.

In more than three schools that I visited around Soweto, the main vault where all office equipment is stored were infiltrated and contents were stolen. E.W. Hobbs in Eldorado Park had the doors to some of its classrooms stolen. A teacher's car was stolen outside of St. Matthew's Primary.

The list doesn't stop there; these are just a few examples of how criminal activities hinder to the Soweto SchoolNet Project.

2.4 Classes for Teachers and Students

There has been a little bit of difficulty getting the word out to schools that the centre is open for their use. This is slowly being resolved and by the time I had left the STP, a steady momentum was visible. Publicity for the centre will be the responsibility of the assigned Project Manager.

2.5 Lack of Project Focus

Mr. Tom Baloyi, director of the Soweto Technology Project, is a very enthusiastic man with the right personality to interact with business and government to form essential relationships to receive funding and equipment for a successful program in Soweto. Unfortunately, he spends all of his time in meetings gaining leads in the corporate world and has no time to coordinate and manage a project for school Internet connectivity. The Soweto SchoolNet has therefore had a misguided direction with its employees not fully knowing their job description. It is for this reason that a Project Manager must be appointed. Edgar Steeneveldt has been appointed to Project Manager. He is a more senior member of the STP who has gladly accepted the management responsibilities.

I believe that with proper job descriptions laid out and proper scheduling of employees' time more effective work will be done with the limited man-power available. A secretary has been hired to manage Mr. Baloyi's affairs as too often the work of Lucky was distracted by menial tasks such as typing letters, managing e-mails, answering phones, organising last minute events that do not directly relate to Soweto SchoolNet. Mr. Baloyi does not have the necessary knowledge of computer skills to have the correct vision for what Soweto SchoolNet can

become. There is a lot of potential in this project and with the correct management it will become the example for many projects likely to develop around South Africa.

III. Successes

3.1 Computer Lab

The computer lab in Soweto is a wonderful success. According to my research it is second only to Microsoft's Digital Village and should soon be filled with students anxious to check their e-mail. The new ISDN 64k line has now been installed at the centre and the Internet connection is running very smoothly. Now teachers can use this centre as a very valuable resource to supplement their curriculum.

3.2 School Connectivity (www.soweto.gp.school.za)

School Connectivity is and should be one of the main focuses of Soweto SchoolNet. E-mail in schools provides the students with the opportunity to see outside of their local environment and into the outside world. To experience new culture without travel and most important to share ideas with people around the world, in other words to participate in this new global forum. During this six-month internship we have succeeded in solidifying Internet connections at the following schools:

E.W. Hobbs (Eldorado Park): Currently the model school in the Soweto SchoolNet project, E.W. Hobbs, uses the Taxis Mail/Pegasus provision from the Gauteng Schools' Network to supply their school with email accounts. They now have an Internet account with UUNet Africa and are able to browse the web on any of their 9 lab computers. The projects have already begun at E.W. Hobbs, as they are corresponding with St. Matthew's Primary in Soweto. If you would like to contact E.W. Hobbs, they are at ewhobbs@iafrica.com. The principal Stanley Geldenhuis can be contacted at stanley@hobbs.jhb.school.za and the computer technician Alroy Plaatjes is at alroy@hobbs.jhb.school.za.

St. Matthew's Primary and Secondary (Kliptown, Soweto): Although the physical location of the primary and secondary schools is the same, they operate independent of each other. The primary school has a 12-computer lab with one of the computer connected to the Internet. They also use the service from the GSN to provide their children with e-mail accounts. Lorraine Sekete, the librarian at the school can be contacted at stmatthewsjp@iafrica.com The secondary school does have a beautiful new 21 -computer lab, however, they have been waiting for a phone line to be installed ever since I arrived in Soweto. The councillor at the secondary school who is responsible for computer affairs is Shona Middleton, and her e-mail address is currently shona_middleton@hotmail.com.

Winnie Ngwekazi Primary (Pimville, Soweto): Winnie Ngwekazi has one computer connected to the Internet. This is used primarily for e-mail communication. The staff member most closely connected to computer usage is Lindy Baleni (wngwekazi@iafrica.com). She is a clerk at the school.

GoudPark (Eldorado Park): GoudPark has a computer technician who runs a lab and computer classes. He can be contacted at goudpark@pixie.co.za.

Musi High School (Pimville, Soweto): Musi High is part of a program being run by Wits University designed to study the effectiveness of ICT in education. They therefore have a large computer lab running on a Novell Netware network. Students from other schools in the community come to Musi High to send e-mail, but they all use the same e-mail account. To contact the school, write to musihs@iafrica.com.

The following schools have been connected with one computer as an administrative machine:

Silver Oaks (Eldorado Park): silveros@iafrica.com

Lanceavale High School (Eldorado Park): lhs@iafrica.com

Ibhongo (Moroka, Soweto): ibhongo@iafrica.com

Mafori Mphahlele (Soweto): mafori@iafrica.com

Moletsane (Soweto): moletsan@iafrica.com

Letare Secondary (Soweto): letare@iafrica.com

Progress High (Eldorado Park): prohigh@iafrica.com

Please see the page www.soweto.gp.school.za/schools.htm for a list of schools soon to be connected.

3.3 Classes for Teachers and Students

The classes that are being held are working out wonderfully. Teachers are learning about the Internet and e-mail and they are very excited to gain access to international information and contacts. With very little previous computer experience teachers can begin to pull information from the Internet and send e-mails to teachers and friends around the world.

The computer laboratory timetable looks like this:

Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
Course for Marginalized Youth	Course for Marginalized Youth	Course for Marginalized Youth	Course for Marginalized Youth	Open Session	Microsoft Office Training Course
Computer Literacy for Teachers	Internet Course For Teachers	Computer Literacy for Teachers	Internet Course For Teachers	Open Session	CyberKids Computer Program

3.4 International Student Project

The International Student Project that I supervised was a wonderful example of what educational projects can be done using the Internet.

During the week of August 9th-15th, 1998 the second annual International Student Project Forum was held. The venue was St. Alban's College in Pretoria, South Africa. This forum was the culminating point for a project that lasted six months and involved schools from South Africa, Australia, Cyprus, Philippines and Japan.

Students from each of these countries were given a hypothetical situation, a moralistic problem facing the world today, and were asked to solve the problem with the main research tool being the Internet. In the initial stages of the project each of the children posted a cyber surfer profile of themselves on the project mailing list for all involved to read. Once everyone was introduced each school was partnered with another international school according to their hypothetical situation. The co-teams were able to help each other solve the posed problem using e-mail as the main point of communication.

In the final forum, the teams travelled to Pretoria to meet each other face to face. During the week, workshops were held to help the children prepare for a final presentation of their solutions. As well, a dramatic presentation was prepared to introduce all of the teams' presentations.

The week began with a philosophical speech by Professor Bhengu, Minister of Education. After this, an ice-breaking session led by Justin Shortal from the Victorian Education Department in Australia was held. The kids were starting to feel comfortable with each other at this stage and from there everything went smoothly. Hard days of intensive group work were followed by scenic tours of Pretoria and surrounding areas. On Tuesday evening, a conference was held at the Civic Centre in downtown Pretoria where the acting mayor made an impressive statement on the advancements of education through international collaboration. On Wednesday evening, the kids were able to decide whether to visit a Cheetah reserve, the Sibaya Zulu exhibition, or Sun City. On Friday, the week's work paid off in a big way. Schools from around Pretoria were invited to attend the final presentations; they were creative and stimulating.

The teachers involved in the conference were able to voice their opinions on the usage of the Internet in education. It was decided that the International Student Project should have a path of growth, increasing its target group and global participation. Each teacher vowed to continue with Internet-related projects within their school and to promote collaboration internationally in any way possible.

The Soweto Technology Project, with financial assistance from Telkom, the national telephone company, sponsored a team of 5 'gifted' students from Raucall Secondary in Johannesburg. The team members, Andy, Eunice, Doris, Boitumelo, and Muneera, were teamed up with a school in Australia called Lilydale. The topic of the hypothetical situation that they tackled was "discrimination and reconciliation". After school every Friday the children travelled to the Soweto Technology Project computer lab in Pimville, Soweto. Here, they were able to surf the Internet for pertinent information or send e-mail to teams in other countries to ask for assistance in researching their topic. In the end, they prepared a wonderful drama presentation, based on true cases from the Truth and Reconciliation Commission hearings in South Africa.

Mr. Ron Beyers, project organiser from St. Alban's College (www.stalban.pta.school.za),
expressed that the International Student Project is not about the technology of the Internet but
about students using the technology to realise that each one of us is a "global citizen". The project
brings these "global citizens" together to share their culture and their ideas on the world's future.

3.5 Bridge of Books Project

The Bridge of Books Project is a project coordinated by a woman in Chicago, Illinois named Sue
Hepker (suehepker@aol.com). The idea of the project is for schools in Gauteng to create an
electronic book about their community. Two schools here in Soweto, St. Matthews and E.W.
Hobbs, will be involved. The project has a large budget that will bring useful programs and
technology into these two schools.

IV. Future Directions for the Soweto Technology Project

4.1 Project Focus

In this section, I will outline the focus that the Soweto Technology Project would benefit from achieving in its Soweto SchoolNet. There is huge potential for this project as long as people are dedicated to the task at hand. Soweto SchoolNet has evolved out of the Soweto Technology Project, however the SchoolNet project should be its own entity with a staff dedicated to school ICT. Three main focuses of the Soweto SchoolNet project are:

1. Internet Connectivity in Schools.
2. Training Courses to Support Teachers and Students.
3. Computer Courses for Unemployed Youth.

These areas are the most important aspects and they require dedicated staff members.

4.2 Staffing Issues

The most obvious reason that the SSN has not flourished is that it is understaffed and therefore under organised. The following diagram displays how the staffing of SSN might be structured:
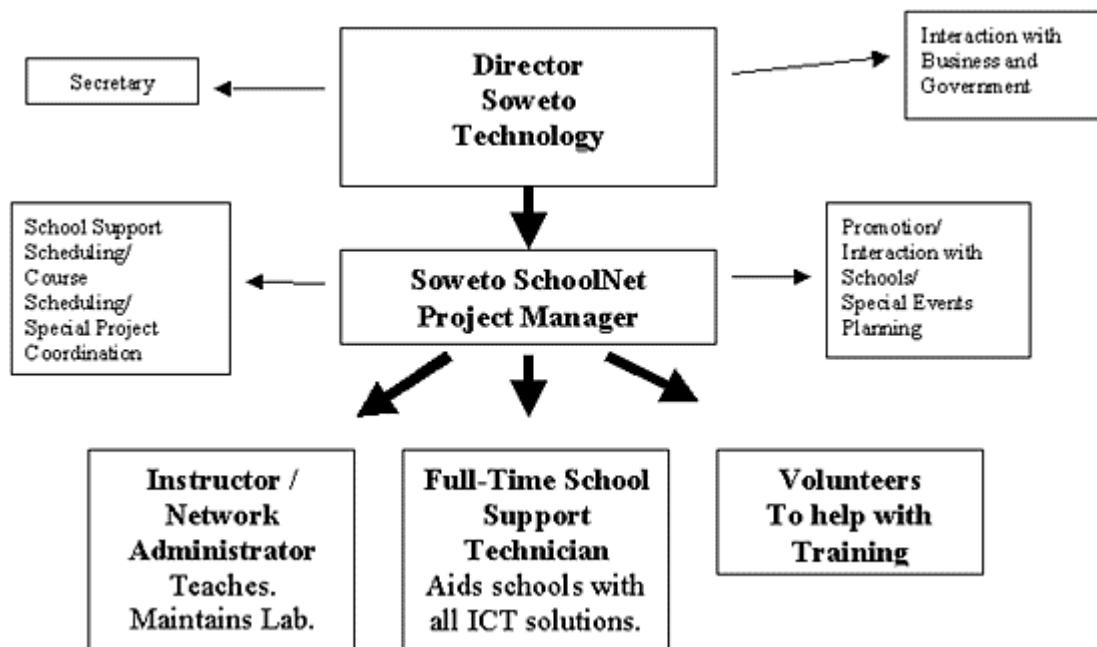
Revenue for the project would continue to come from business, government, and fees for computer courses. Currently, Mr. Tom Baloyi is Soweto Technology Project director, Mr. Edgar Steeneveldt is Project Manager, Mr. Lucky Tshavungwe is Instructor/Network Administrator, and a secretary has been hired to manage the administration. Upon my departure a full-time school support technician will be required.

4.3 Political Issues

A coalition between the Soweto Technology Project and the Gauteng Department of Education (GDE) District C2, the division of the provincial education department dealing with a district encompassing parts of Soweto and Eldorado Park, has been made at the physical location Soweto Teachers' Resource Centre in Pimville, Soweto. This centre was first established by the Depatment of Education to give teachers access to supplemental resources and training workshops for their subjects. The STP and the GDE, however, are having enormous trouble seeing eye to eye. The GDE feels that it does not benefit from the partnership and the STP feels the same. This is a very unfortunate situation as the two organisations should be sharing the same vision of improving education in Soweto and neighbouring areas. This is a major stumbling block. Proper communications should be set up between the two bodies so that a progressive attitude can be accomplished at the centre. If this is not possible then the drastic measure would be for each to go their own way. However, it seems that the Soweto SchoolNet Project should rely heavily on the experience of the GDE and the GDE should appreciate the efforts of the SchoolNet project to bring technology into the schools. A symbiosis is possible and also very necessary, therefore more effort should be allocated to improving relations between the two groups.

V. Personal Reflections on the NetCorps Programme

5.1 Good Experiences Specific to Placement

One excellent aspect of my placement with the Soweto Technology Project is that the STP already had one employee, Lucky Tshavungwe, who is at relatively the same point in life as I am. We were able to share the experiences that we have had thus far in life and use our combined knowledge to tackle problems encountered at work. Hopefully, I have transferred most of my technical skills to him so that the work in Soweto can continue as it has been. I know that I have learned a lot from Lucky.

The Soweto Technology Project was very good to me through the whole internship. I was provided with transportation, very important in Johannesburg, and was accepted very easily into the project.

Having the IDRC in South Africa was a real benefit for me in this internship. Chris Geerdts specifically has been very helpful in assisting me in any minor glitches along the way.

At times, working in Soweto was difficult because I encountered cultural differences that were mentally tiring to deal with. In this placement, I was given the option to live in or out of Soweto. It was decided that it would be safer to live outside of Soweto. In the end, it was probably an "easier" route in that I could escape to a culture very similar to the one I was brought up in at the end of the day. Whether I would have learned more being totally immersed in the culture I'll never know but I do know that it was nice to be able to remove myself from the stresses of adapting to a different lifestyle.

5.2 Possible Improvements for Future Placements

The only problem that I have noted with an internship program like NetCorps is lack of continuity. Especially with a term of only six months, an intern can lay the roots for a project but will never see it through. The two possible solutions to this are:

- Longer Internships.
- Overlapping internships with the correct documentation to avoid a "lag" phase.

5.3 Importance of NetCorps

There is not a single doubt in my mind that the NetCorps internship has been a valuable and unforgettable experience. I have not only learned about integration into a new cultural setting, but I feel that I have experienced more of the world and understand more how business and politics come together to shape the society we live in. Only in developmental work can you be so close to the front line on governmental decisions and policy making. In South Africa particularly, a country that is very well developed in some ways but still has a lot of untouched and amateur industry, the development of a country becomes very transparent.

In terms of professional development, I have learned a great deal about computer networking, computers in education, teaching, and doing business. My professional confidence has increased ten-fold since my arrival and I feel more prepared to be selective about my future career. This internship may have also helped me to decide what that career might be.

NetCorps is valuable for the global community in that it brings people together. It supports countries that don't have technological skills and allows them to participate in the growing communications age. As people gain more and more access to information, the stigmas between cultures will gradually dissipate bringing the world closer together.

Appendix A – Contact Details

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