## **SchoolNet Zambia**

## **International Development Research center (IDRC)**

# TECHNICAL REPORT TO IDRC ON A PROJECT TO PROMOTE INFORMATION AND COMMUNICATION TECHNOLOGIES IN ZAMBIA THROUGH SchoolNet ZAMBIA

**CENTRE FILE: 94 - 8924** 

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### **Technical Report**

### SchoolNet Zambia /(IDRC) Project - October 1999 - March 2000

### Introduction

SchoolNet Zambia decided to start implementation with connectivity of schools and Provincial Resource Centers followed by Training and ending with establishment of the head Office and the training of senior managers at the Ministry of Education Headquarters.

The first task that SchoolNet Zambia undertook was to visit schools that had computers and had intentions to introduce computer Science education. Visits were also undertaken to Provincial Resource Centers to determine the suitability and institutional preparedness to have the prospective institutions connected to Internet and e-mail. This task was undertaken from 1<sup>st</sup> October 1999 31<sup>st</sup> October 1999.

All schools falling under the IDRC/SchoolNet Zambia project were assisted in form of Modems, Line jacks, Connectivity, Internet bills (Zamnet, Internet Service provider) Training and technical support at the time of installation.

### Schools Connectivity – 3<sup>rd</sup> November 1999 to 18<sup>th</sup> November 1999.

Seven out of the proposed four schools have so far been connected bringing the total number of schools that are supported by SchoolNet Zambia to eight.

Theses include, David Kaunda High School, Hillcrest High School, Kabulonga Boys' High School, Kabulonga Girls' High School, Canisius Secondary School, Matero Boys' Secondary School, Matero Girls' Secondary School and Kufue Boys' Secondary School.

### Schools Connectivity Status

Name of School	Date	No. of	No.	E-mail address	Problems
	Visited	PCs	Tele.		
	(1999)		Lines		
Matero Girls' (Lusaka)	3 rd – 4 <sup>th</sup>	15	1	Matgirls@schools.sch.zm	• One telephone line
	November	386 PCs			Most PCs need
					upgrade
					• One computer
					literate teacher
Matero Boys' (Lusaka)	5 <sup>th</sup> and 6 <sup>th</sup>	20	1	Matboys@schools.sch.zm	• One telephone line
	November	386,			
		486, &			
		2 P II			
Kabulonga Girls'	7 <sup>th</sup>	3	1	Kabgirls@schools.sch.zm	• One telephone line.
(Lusaka)	November	386 PCs			No IT teacher
					•
Kabulonga Boys'	$8^{th} - 9^{th}$	2	1	Kablonga@schools.sch.zm	• One telephone line.
(Lusaka)	November	486 &			No IT teacher
		P II			
David Kaunda High	10 <sup>th</sup>	15	1	Dkschool@zamnet.zm	• One telephone line
(Lusaka)	November	486 &			
		P II			
Kafue Boys' (Kafue)	15 <sup>th</sup>	2	1	Kafueboy@schools.sch.zm	• One telephone line
	November	PII			• Difficulties
					connecting to
					Zamnet
ST. Canisius Secondary	16 <sup>th</sup>	8	1	Canisius@schools.sch.zm	• One telephone line
	November	384 &			• No IT teacher
		486			
Hillcrest High	$17^{th} - 18^{th}$	16	1	Hillcret@zamnet.zm	• One telephone line
(Livingstone)	November	386,			
		486, P I			

#### **General Problems**

- All schools have their only phone line in the Headmasters' Office and not in the Computer Lab. Schools therefore had problems of finding time to effectively utilize the Internet and they where made to share the same line for Computer and administrative purposes. Some, however, came up with specific time slots with regard to the use of the Telephone line and the Internet.
- Some schools located in remote areas face problems of dialing into Zamnet due, to some extent, poor Zamtel lines. An example is Kafue Boys' Secondary School which has to dial through the Mazabuka (03 Code) Telephone exchange in order to get through to Zamnet.
- Most computers in schools where of limited capacity. In some cases SchoolNet Zambia had to wait for Schools to upgrade their PCs before going ahead with Connectivity.
- Some Headmasters still lack appreciation of the educational value of Internet and email. This in most cases caused problems. In some cases Headmasters shoot down the idea of Internet connectivity largely because of the Telephone and Internet Service providers' bills which they where asked to continue paying after the completion of the Project.

### Provincial Teachers Resource Center Connectivity 18th – 26th November 1999

Two out of the proposed 14 Provincial Resource Centers which had upgraded their computers were connected. The upgrading of computers in Provincial Resource Centers is ongoing and it is hoped that when the exercise is completed by the Danish Volunteer to comply with the SchoolNet Zambia entry level in terms of hardware, software and Y2K requirements and. (Windows 95, 16MB RAM, P100 and 500MB HD). Most Resource Centers have computers with limited capabilities, 4MB RAM/200MB HD/P40, all the remaining 12 Provincial Resource Centers will be connected to Internet.

Name of Resource	Date	No. of	No.	E-mail address		Problems
Center	Visited	PCs	Tele.			
	(1999)		Lines			
Livingstone Provincial	18 <sup>th</sup>	4	1	Lstoneprc@schools.sch.zm	•	One telephone line
Teachers' Resource	November	ΡI				
Center (Livingstone)						
Kitwe Provincial	$22^{nd} - 23^{rd}$	3	2	Kitweprc@schools.sch.zm	•	Limitations on
Teachers' Resource	November	386				hardware
Center (Kitwe)						

#### **Provincial Resource Centers Connectivity Status**

#### **General Problems**

- Mainly the major problem was the limited capabilities of computers.
- One telephone line.

#### Head Office Connectivity - January - March 2000

Currently, SchoolNet Zambia Offices are at David Kaunda High School where SchoolNet Zambia was founded. This was found to be the ideal place as the school is one of the few government Schools which offer Information and Communication Technology as a subject and also has a newly electronics workshop and two Computer Labs which are to be equipped with 50 PCs, two file and print servers.

This has been made possible under the African development Bank (ADB) Project; an Initiative made by the school. The equipment has since been procured and shipped. Installation and configuration of a Local area Network is scheduled for April – May before the beginning of the second term. The School is centrally located and will be used as a training, research and demonstration Center for SchoolNet Zambia.

The Ministry of Education (Minister's Office) has also been connected to Internet and SchoolNet Zambia is currently organizing to have senior managers at the Ministry Headquarters trained in the use and educational value of Information and Communication Technologies and Internet and e-mail in particular.

Name of Institution	Date Visited (1999)	E-mail address
SchoolNet Zambia	11 <sup>th</sup> November	Schoolnet@schoolnet.org.zm
SchoolNet Zambia Kuliwa Sibajene Syakwasia	11 <sup>th</sup> November	Kuliwa@schoolnet.org.zm
SchoolNet Zambia John Syamuntondo	11 <sup>th</sup> November	John@schoolnet.org.zm
Ministry of Education Anwell E. Simwawa (SchoolNet Zambia)	12 <sup>th</sup> November	Smwawa@schoolnet.org.zm

#### SchoolNet Zambia Head Office Connectivity Status

Furniture and Office Equipment including a Laptop, digital camera and printer, has already been procured for SchoolNet Zambia offices which are now connected to Internet. A web Site is currently being designed and will be hosted by Zamnet.

#### Problems

- All the SchoolNet Zambia staff are part-time and only offer their services to SchoolNet Zambia when they have the time to do so. This impacted on Project implementation. Project Managers should in future be full time. This posse as a challenge for SchoolNet Zambia to have its staff fully employed.
- The need to have vehicles was also identified during project implementation.
- The delay in releasing funds (August 1999 as opposed to March when the project was scheduled to start) and the school calendar in relation to the project duration also created problems of effective monitoring and implementation of the project. For instance the project commenced at the time schools where either preparing or writing final Examinations (October November). SchoolNet Zambia was therefore only left with one month in which to carry out a collaborative project (February when schools reopened for the 2000 academic year).