

## Report on Buffleshoek Acornhoek Helpdesk Training

**Course: Deploying Student Technical Support Solutions (Helpdesk)**

**Date: 6-10 July 2015**

**Trainer: Themba Mabaso**

### Introduction

The intention of this project was to offer the [Microsoft Partners in Learning HelpDesk](#) course to unemployed youth in the Acornhoek area of Mpumalanga with a view to suitable candidates then being able to offer technical support to the nine schools supported by Buffelshoek Trust, the organisation which sponsored the training, as well as other local schools.

### Participants

The 29 participants were all out-of-school computer literate youth including some graduates. The participants live in the villages surrounding the school and up to 60km away. None of the participants was absent from any session except for one who had found a job on Monday.



### Training Venue

Training took place at the Acorns to Oaks Secondary School in Acornhoek in the Mpumalanga province. In this venue the trainer was given a computer room plus a big room to conduct this training. This is the room (*shown on the left*) with computer hardware on the tables.

## Training Day 1

The trainer arrived at 7:30 to setup the training rooms to start the training at 8:30. By this time all 29 participants had arrived and training started. The trainer introduced SchoolNet SA and himself. After this he then asked the participants to introduce themselves. The trainer then introduced all the chapters that were to be covered throughout the entire week. After introducing these chapters, he skipped Chapter 1 (*Planning Your School's Helpdesk*) and moved straight to Chapter 2 (*Understanding Hardware*) which is about hardware components that make up a computer. He, however, gave them Chapter 1 as a reading homework which was to be covered the following day.

In this chapter (Chapter 2) hardware components were covered. Participants were shown a range of components – some working and some not- and were given a chance to play with these before getting to know what they were and what they were for (*left photo*).



## Training Day 2

As the trainer had given participants reading homework on Chapter 1 (*Planning Your School's Helpdesk*), this chapter was discussed. The trainer then continued with Hardware chapter. After finishing this chapter, it was then time to dismantle computers and reassemble them. Participants were divided into three groups as there were five computers for this exercise. They did this with caution as they had been taught about the safety precautions of working with the computer. There was a lot of excitement as for most of participants this was their first opportunity to see the inside of a computer and to work on its components.

## Training Day 3

On this day the trainer decided to jump to Chapter 6 (*Supporting Networked Computers*). This chapter is the most challenging and it is not related to any other chapter. Because of its challenge, it is better if it is done in the morning than in the afternoon. An introduction of TCP/IP was made since it is the common language that computer network devices use to communicate with each other. Domains, Workgroups, IP addressing, subnet mask, gateways, DHCP and DNS servers were explained. Participants were then taken to the computer lab for more demonstrations and practice. Practice included recording IP addresses for other computers using the *ipconfig* and *ping* command, configuring computers for static IP addresses, etc. They seemed fascinated by this chapter.

The trainer then moved to Chapter 3 (*Installing an Operating System*). This chapter is about preparing and installing an Operating System. The trainer then explained things that they needed to know about preparing to install an OS. Things like disk partitioning, formatting, file system, dual boot, boot

sequence, etc. This introduced them to the planning and installation of an OS. Windows XP and Windows 7 were to be installed on one computer.

#### **Training Day 4**

On this day installation of Windows XP was done with one group while the trainer was guiding them. Windows 7 was also installed on the same PC, as dual boot, which meant that this PC had then had two operating systems (Win XP & Win7). The trainer then played with the *Control Panel* for both Operating Systems. The *Control Panel* is like the technicians play ground where he or she can change the system settings.

While demonstrating these, the trainer decided to also introduce the concept of drivers which is Chapter 4 (*Supporting Hardware*). This chapter gave participants more understanding of hardware and how it works as the trainer had been introducing this from chapter 2. However, this chapter concentrates more on hardware drivers and their configurations. They came to understand that any computer hardware needs a proper a driver in order to work. They were shown *device manager* from this *Control Panel*. They were also shown how to update, rollback, delete drivers and some hardware configurations.

#### **Training Day 5**

On this day the trainer moved to Chapter 5 (*Supporting an OS*). Since most problems are caused by a malfunction in an operating system, a lot of time was spent in discussing common problems with Win XP and Win 7 and how to tackle those problems. Special tools like *safe mode*, *system restore*, etc. were shown and demonstrated. Some exercises like increasing virtual RAM were done as per manual and they did them by themselves.

Chapter 8 (*Supporting Security Needs*) was also covered on this day. Software security may mean installing and updating antivirus software and using strong passwords when giving the users. Hardware security might be securing electronic devices from static electricity damage or physical securing of hardware against theft by using clamps.

Chapter 9 (*Performing Maintenance and Completing Special Projects*) was also covered on this day: Not much time was spent on this last chapter since it is self-explanatory.

On this last day Chapter 7 (*Introduction to Troubleshooting*) was done. This chapter is about the way one arrives at where the problem is likely to be. The trainer gave them some tips e.g. when the computer does not boot up at all when plugged in to power. In such a case a technician would pull out RAM and/or processor and put it back in again which is called *re-sitting* a component and the computer will, in most cases, work normally again.

Below are some of the photos that were taken during the training



### Conclusion and Recommendations

All nine chapters of the HelpDesk course were covered as well as material that was not in the manual. The participants were great and they responded so well, which made them to be one of the trainer's best groups. They even decided to meet on some weekends to discuss challenges and share experiences.

It is suggested that they start supporting the schools as soon as they open as this will allow them to put what they have learnt into practice. The new HelpDesk graduates will also need to be supported by a dedicated professional ICT technician for the first few months for better results.

[SchoolNet SA](#) Trainer (Themba Mabaso)

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