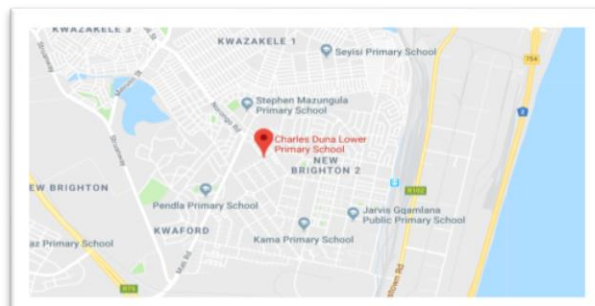
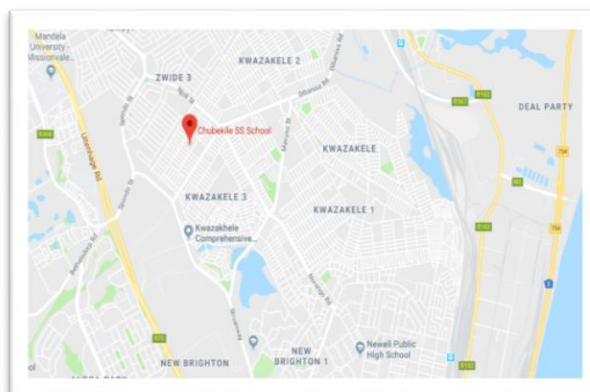


Hermann Ohlthaver Trust NMU ICT Engagement 2018



Report on Semester 2 July to end of September 2018

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1. INTRODUCTION

In this second semester report (July to end of September 2018), we are reporting on our activities at Charles Duna Primary School and Chubekile High School in Port Elizabeth in the Eastern Cape Province.

2. CHARLES DUNA PRIMARY SCHOOL

Our support of ICT at Charles Duna Primary School and Chubekile High School continued during the second semester. There is a steady growth in adoption of ICT by educators. Importantly, another Mathematics teacher, Ms Solwandle, has now joined in on the act by using the computer laboratory to complement her classroom teaching. Also noteworthy, is the work by Ms Calana in using the computer laboratory, as well in her classroom, to expose her learners to digital resources. The computer laboratory is now by far the most popular centre at school. The ability of the senior learners in grades 6 and 7 to use digital resources to do projects and assignments has improved tremendously over the course of the year. This was achieved as a result of the timetable that is in place which allows learners regular access to the facility. In the following sections, the progress from July to the end of September 2018 is reported.

2.1 Learner Access to the Computer Laboratory

During the first semester we reported that 462 learners had access to the computer laboratory. Grades 4A and 4B have been added to the timetable and are accompanied by their Mathematics teacher, Ms Solwandle. This pushes the number of learners accessing the computer laboratory up to 560 (See Table 1 below).

Table 1: Access to computer laboratory

Classes allocated periods on the Computer Laboratory Time Table		
Class	Periods per week	# Learners
Grade 3b	2	39
Grade 4a	2	50
Grade 4b	2	48
Grade 4c	1	47
Grade 5a	2	41
Grade 5b	2	39
Grade 5c	2	39
Grade 5d	2	41
Grade 6a	3	34
Grade 6b	3	35
Grade 6c	3	37
Grade 7a	2	36
Grade 7b	2	36
Grade 7c	2	38
Total # of Learners		560

2.2 New German Volunteers

Johanna and Marie ended their tenure in South Africa during mid-August. We have now been joined by their successors, Sophie Hasselmeyer and Matthis Wilhelmi. Their arrival was delayed by almost one month, as they were only able to join us in the second week of September. Before leaving Germany, they were briefed by Johanna and Marie regarding the work in the computer laboratory. So far they were introduced to the computer lab and have been working through the Mathematics software. They have also been familiarised with the existing timetable for the lab.



2.3 Teacher involvement

Below we provide an overview of what some of the teachers are engaging with currently.

2.3.1 Ms Solwandle

This teacher works in the Mathematics section teaching grades 4 and 6. She has now also been slotted on the timetable for the computer lab. She accompanies her learners to the lab on Mondays and Tuesdays and mainly uses TuxMaths for mental Maths activities. She has now also been trained to utilise other Maths software such as Mathemagic and the PhET simulation software. She will start introducing the PhET simulations to her learners during the next term.

2.3.2 Ms Calana

Ms Calana, the Natural Science for the grade 6 and 7, is continuing to make extensive use of the ICT resources available. She regularly uses a data projector in class for lesson delivery. She makes extensive use of the "TTS website" to download lesson plans and worksheets for use by learners. The grade 6 and 7 learners were able to access the lab regularly during term 3 researching the theme of energy. The pictures that follows, are examples of worksheets used by learners to complete an investigation by accessing online resources in the computer lab.

QUIZ 1

INSULATION AND ENERGY SAVING

INVESTIGATION: Visual Activity (watch the video clip and fill in the missing answers)

Video Clip 7: How to Demonstrate Insulation Principles | Science Projects
<https://www.youtube.com/watch?v=8I96BzSNNqE> (4:46)

1. You will need the following 10 items: (10 x ½ = 5)

Water _____ ; Zip lock bag x2 _____ ; Hand _____ ;
 Ice blocks _____ ; fat _____ ; Soap wash _____ ;
 Blue colouring _____ ; Jug _____ ; Plastic container _____
 Spoon _____

2.1 Hypothesis question: (2)

How long ^{do} you think the ~~de~~ it will take

QUIZ 1

INSULATION AND ENERGY SAVING

INVESTIGATION: Visual Activity (watch the video clip and fill in the missing answers)

Video Clip 7: How to Demonstrate Insulation Principles | Science Projects
<https://www.youtube.com/watch?v=8I96BzSNNqE> (4:46)

1. You will need the following 10 items: (10 x ½ = 5)

Water _____ ; fat _____ ; plastic jug _____ ;
 Ice cubes _____ ; Spoon _____ ; plastic container _____
 blue food ^{colouring} _____ ; Vegetables shortening _____ ; Hand _____ ;
 two Zip lock bag _____

2.3.3 Ms Peteni (Grade 3B Teacher)

The grade 3B class continued visiting the computer lab during term 3. The focus was mainly to improve their mouse and keyboard skills. These learners were exposed to MS Paint during their weekly period.

Ms Peteni continues to grow in the use of ICT in her classroom. She uses a data projector daily in lesson delivery. The grade 3B class is exposed to a rich variety of digital media in the form of video clips, pictures and notes. This requires intensive preparation which she manages to do all the time. This all translates into a very positive learning environment and can be seen by the eagerness of the learners in her class to engage in learning activities.

2.3.4 Ms Sume (Principal)

The skill of grade 6 and 7 learners in producing presentations has seen remarkable growth over the course of the year. Ms Sume has adopted a “project based” approach to teach the content of the Life Skills curriculum. Learners are encouraged to develop into independent learners who are free to research the various themes of the curriculum and generated their own content. Some of the themes included health issues, substance abuse, careers and the constitution of the republic. With the assistance of the German volunteers, the learners were guided to do web based research, generate written notes and produce PowerPoint presentations as a final product. Below are three examples of presentations developed by learners.

The image displays three sets of student PowerPoint presentations. Each set consists of five slides, numbered 1 to 5.

Example 1: Law Career (Athule Nontshinga)

- Slide 1:** Title slide: ATHULE NONTSHINGA CAREER
- Slide 2:** WHAT IS A LAWYER (with image of a courtroom)
- Slide 3:** WHAT IS A LAWYER
 - A Lawyer is someone who helps a client who made a crime
 - A Lawyer does not help people who made crime only also help people who want divorce
 - To be a lawyer takes 7 years
 - A degree takes three years
- Slide 4:** SUBJECTS I NEED TO DO TO BECOME A LAWYER
 - Psychology
 - Political science
 - Science
 - Naths
 - English

Example 2: Constitution (Samla Ndzuta)

- Slide 1:** CONSTITUTION OF THE COUNTRY
- Slide 2:** Constitution of the country
 - The republic of South Africa is one of the democratic states founded on the following values:
 - Human dignity
 - Human rights and freedom
 - Supremacy of the constitution
 - And a national common voters roll
- Slide 3:** HUMAN RIGHTS
 - THESE ARE THE RIGHTS OF HUMANS
 - WE ALL HAVE THE RIGHT TO BE RESPECTED
 - EVERY ONE MUST BE PROTECTED
 - PROMOTE WHAT EVER YOU HAVE
 - FULFIL THE RIGHTS OF A PERSON
- Slide 4:** HUMAN DIGNITY
 - WE ALL HAVE THE RIGHT TO BE RESPECTED
 - WE ALL NEED PROTECTION
 - HAVE YOUR OWN RIGHTS AS A PERSON
- Slide 5:** FREEDOM AND SECURITY OF A PERSON
 - Not to be deprived of freedom
 - Not to be detained without trail
 - To be free from all forms
 - Not to be tortured in any way
 - Not to be treated or punished in cruel

Example 3: Labour Doctor (Athabile Tshukulwana)

- Slide 1:** CAREER WHAT IS A LABOUR DOCTOR?
- Slide 2:** A labour doctor
 - Most woman choose to have their babies by OB/GYN
 - These doctor's are trained to provide a wide range of human rights
 - Doctors who have completed four years of training in the field of obstetrics and gynecology
- Slide 3:** Qualification do you need
 - Diploma
 - Bachelor's degree
 - Licensure examination
 - These doctors who deliver babies are called OB/GYN's
- Slide 4:** A parent at labour (with image of a woman in a hospital bed)
- Slide 5:** Subjects do you need ?
 - Science
 - IT
 - Engineering
 - Health Care
 - Trades and Skilled labour
 - English

Additional slides from Example 2:

- Slide 6:** SUPREMACY OF THE CONSTITUTION
 - The constitution has the supreme law
 - The republic has law or conduct
 - has the law that has to be followed by people
 - The obligations imposed by it in all people
- Slide 7:** Constitution picture (with image of the South African flag)
- Slide 8:** BY: SAMLA NDZUTA (with image of a heart)

Additional slides from Example 3:

- Slide 6:** Bachelor of surgery
 - MBBS
 - BMBS
 - MBChB
 - MBCh
- Slide 7:** Medical list
 - Medical school
 - Master bachelor of surgery
 - Bachelor of medicine
 - Bachelor of science
 - Master of medicine
- Slide 8:** BY: ATHABILE TSHUKULWANA (with image of a woman)

3. CHUBEKILE HIGH SCHOOL

In this section, feedback pertaining to Chebukile, for the period August to September, is provided.

3.1 Innovation Leadership Conference

This inaugural conference took place at St Dominic's Priory in Port Elizabeth during the June Holidays. Ms Yolisa Mpahlaza was sponsored by Chubekile High while three additional teachers received sponsorships from SchoolNet South Africa to attend the event.

3.2 August Training

During August, the following aspects were attended to, namely:

- 21st – Web Page design using Komposer (3.5 hours)
- 22nd – Introduction to W3School.com for access to all the HTML tags (3.5 hours).
- Grade 8 and 9 learners were given tasks using Pivotstick Animator
- A review of Tablets at the schools
- 23rd – Further HTML Tags and the use of <https://www.w3schools.com> site
- Tablet investigations
- 29th – Installation of UWAMP and Word Press
- Introduction to Word Press
- Tablet investigations
- 30th – Introduction to Word Press before the server went down
- Tablet investigations

3.3 Computer Laboratory use by teachers

Ms Yolisa Mpahlaza reported that there has been an increase in the use of the Computer Laboratory with teachers taking classes to do research, deliver PowerPoint lessons and write up reports.

3.4 Teacher Laptops

A number of teachers received laptops from the Education Department for use in preparation and in the classrooms. Support is provided when teachers request assistance.

3.5 Computer Tablets

Like the Computer Laboratory, the Tablets had never been used before. On investigation it was discovered that they were linked to the Vodacom Network with open access to the Thutong Educational Network via the dedicated WiFi server. Due to the fact that there was no WiFi connecting to the NMU network, these tablets were of restricted use. They did not have the Google Play store App restricting the installation of additional APKs. This problem was investigated and has been resolved:

- Missionvale High Site:
 - All equipment still in good condition.
 - Logged on – assessed the links were offline.
- Chubekile:
 - Assessed site – got the internet up and running – also faster and more stable than before.
 - The UPS was off, we got the server up and running fine now

The Tablets are able to access the internet through a Raspberry Pi's setup as an access point, as well as a separate access point devices. It was recently discovered that there is an access point in the server cabinet which could potentially be used for this purpose. It was recommended that a password is assigned to this device to manage the use of the WiFi for users accessing the computer room.

3.6 UWAMP Server

UWAMP software was installed on a single PC to act as a web server with Apache, MYSQL and PHP installed. A small group of learners were introduced to working with Word Press before the network went down, but it has now been restored again (see 3.5). The UWAMP server can also be used to distribute other software and information to all PCs on the network. There is a need for learners to have access to their own personal network space in the near future, thus introducing them to the cloud.

3.7 Computer Lab Prefects

A group of 4-5 Graded 11 learners are showing tremendous talent, as well as dedication to helping others. The recommendation is that a system of Computer Laboratory Prefects be adopted for 2019 to assist the staff in managing the centre, especially in the afternoons.

3.8 Schedule for teacher training

Problems has been experienced with scheduling training for teachers, as they have reported an overload of school administration. Efforts will be made to continue with training in the fourth term.

3.9 Chess and Sudoku

Chess and Sudoku have been introduced. There has been a positive response to this approach. It has been noted than many of the learners are only interested in surfing YouTube videos, expected when learners explore the internet.

4. CONCLUSION

The support to the schools is making a difference in both learners' and teachers' lives. It is through the support of the Herman Ohlthaver Trust and Mr Alan Appel that we can continue to provide assistance and hence we would like to thank the Herman Ohlthaver Trust for the fantastic support.