Healdtown ICT Lab project

February 2021

Project Background

SchoolNet SA was requested as part of the Telkom Connected Schools programme to implement an ICT integration training programme for Healdtown Comprehensive School in Fort Beaufort in the Eastern Cape. Healdtown Comprehensive is a school with a rich history, and Telkom was requested to support the renewal project by the Department of Communications and Digital Technologies (DCDT). As with all Technology programmes adopted by Telkom, both infrastructure and training support services are provided to create a digitally adept environment. SchoolNet was requested to expose teachers to the possibilities that exist for leveraging ICT to become a technology-enabled school.

Overview of the Programme

All teachers at the school were requested to complete a baseline survey to provide insights into their ICT skills, and experience of digital technologies. The survey was completed by five out of the eight teachers in the school, however this was to be expected as not all teachers had been formally appointed to the school. The five teachers indicated that they had fairly good ICT skills and requested for intermediate to advanced training.

Based on the survey, SchoolNet in collaboration with the Telkom Foundation and the School agreed on a teacher development programme to be implemented in early January. Unfortunately this had to be postponed due to the Lockdown measures that required a delayed start to the school year.

Overview of Facilitation

The teachers were offered a five day workshop from the 1st - 5th February 2021. The topics covered during the week long training included:

* Using Digital Resources in the Classroom (CTDP 15),
* Create with Digital Tools (5 CPTD),
* Designing Lesson Plans (5 CPTD),
* Introduction to Coding and
* Remote Learning with Google. This was highly productive week and the SchoolNet trainer described the Healdtown teachers as receptive, enthusiastic and eager to learn. The majority of the teachers had basic to intermediate ICT Skills and that made it easy for them to navigate through the programme with less assistance from the facilitator.

As with all courses SchoolNet ensures that stealth learning teaches teachers about digital tools without doing How To Tutorials. Our methodology is to use digital tools and model how these can be used in practical ways in the classroom. The facilitator started by introducing teachers to Padlet, a tool that they used to communicate by posting on a common page. She proceeded to showcase a digital resource called PowToons used for creating animated video presentations for the classroom. Teachers loved this tool as they had never used it before, they traditionally used Powerpoint as the only presentation tool they were aware of. Learning to use PowToon became their highlight of the day. Teachers further acknowledged the impact of learning about the TPACK framework and were inspired to do more after the workshop.

The second topic was **Create with Digital tools**. The focus on this day was exploring SAMR (Substitution, Augmentation, Modification, and Redefinition) model and digital assessments. SAMR provides a technique for moving through degrees of technology adoption to find more meaningful uses of technology in teaching. Teachers explored Kahoots and Quizzes as tools for assessment for the first time.

The next topic was about **Designing Lesson Plans**. The facilitator started by asking teachers to share how they do their lesson plans and after that, introduced them to the key elements of the lesson plan; the five A's. The activity was that they would identify a good lesson plan and a bad one using the google Jam board. Then teachers downloaded the subject CAPS statements and started planning their lesson plans and brainstorming using a mind map.

The facilitator then moved to **Introduction to Coding**. They were introduced to the Microsoft Educator Centre where they had to register to explore a Computational Thinking course and the Hour of Code with Minecraft. The teachers also explored the Computer Olympiad site and tried out one of the Olympiads on applications, which they found interesting and challenging. The facilitator recommended this site for learners to participate as well.

The last topic of the week was **Remote Learning with Google**. The teachers were introduced to remote learning with google classroom, google meet, online teaching and learning strategies. Then they went on to create their google classrooms, some added teaching materials on google classroom for their learners and some created assessments.

Challenges

The only major challenge was connectivity, especially midday, from around 12:00 until 13:30 on a daily basis. Telkom connection is not possible in the area and the only network that was better was Cell C. Overall the five day workshop was a success. Healdtown teachers were pleasant to work with, they were able to adapt to the new ways of teaching.

Teacher Course Evaluation Comments:

"There are many digital tools that I have learned from this training such as Padlet, PowToon, Kahoots, Google classroom and other resources that I can use for my class in all the grades I teach. During this pandemic, these resources can help especially if the school can invest in buying tablets and computers for our learners. These tools can make teaching and learning enjoyable and effective."

"I am certain that I will utilize these resources in creating fun classrooms and lovely assessments." The teachers really enjoyed these activities on creating digital resources for their learners

"From the beginning of this workshop my attention was captured by the new educational sites that are so useful. I have acquired a lot from this workshop. I so wish that I may have time to study more about digital tools."

"I gained a lot from the workshop as I did not have much information on using technology to make the lessons more interesting and enjoyable for the learners and me as a teacher as well. Everything worked out except for small glitches like losing the internet connection/signal sometimes. I regard the whole training as a success."

"I have learnt so many things in this course and I so wish I can get another opportunity of attending another one so as to master everything."