

# **INTRO:**

In the challenging context of a Lesotho primary school, Mamoeketsi Primary School, Moliehi Sekese encourages learners to use technology in their science studies and prides herself on making children aware of how both computers and their environment have the potential to improve their lives.



# Innovation in challenging environments

# **SITUATION**

As they completed each project, students learnt how to take pictures using their cell phones, how to store the images and then how to transfer the pictures onto a computer. They also used the text messaging function of their cell phones to collect their notes and to share these among the class.

Using these skills some students went into the hills to take photos of indigenous plants, while others went to the village to interview community members about the medicinal qualities of local vegetation. The students then used their notes, as well as information from Encarta for Kids and the Internet to compile PowerPoint presentations of their findings. They also produced a flyer that they distributed to herd boys to make them more aware of the importance of conservation. Finally, the students set up a blog so that they could communicate with other communities about their indigenous plants.

## **OUTCOME**

Moliehi Sekese presented the details of this project at both the Pan African Microsoft Innovative Teachers Forum held in Mauritius in September 2009 and the Worldwide Innovative Education Forum held in Brazil in November the same year. At both of these events, Sekese was voted as the Most Innovative Educator by her peers. Teachers from around the world were won over by her enthusiasm for using technology with her students and her tenacity at overcoming a lack of resources to provide her students with an opportunity to learn in an engaging way.

### **BENEFITS**

Modest about her achievements, Sekese cites the support that she received to help plan and implement her project. Firstly, she was assisted by Dr Kasongo Kalanda, the manager of the Microsoft Lesotho School Technology Innovation Centre. He told teachers about the competition and encouraged them to start thinking of ideas for their own projects. Sekese was also able to use the computer facilities and Internet access at the Lesotho School Technology Innovation Centre to work on her teaching resources and to set up the blog.

She then attended a Microsoft Innovation Workshop run by Peter de Lisle at the Lesotho School Technology Innovation Centre. De Lisle is a previous winner of the South African Microsoft Innovative Teachers Forum and, in 2008, he attended the Hong Kong worldwide Microsoft Innovative Teachers Forum to share with others



Sekese said that Peter gave her "lots of good ideas and showed me how to go about it. He also showed us Sarietjie Musgrave's (a previous winner's) project and I thought: "Wow – people can do things like this."

Musgrave was runner up in the Worldwide Innovative Teachers Forum held in Hong Kong met Sekese when she served as a judge at the Lesotho Innovative Teachers Forum. At this event, Musgrave was inspired by the Lesotho teachers saying: "I was amazed at the entries taking the context of most of those schools into consideration! I was thinking about staff at my own school who have never even attempted using ICT in the classroom, but who have got access to so much more than the Lesotho teachers. I felt humbled by all those teachers."

Through working with Sekese and the other African teachers who were going to attend the Worldwide Innovative Education Forum in Brazil, Musgrave was able to help them enhance their entries and present their projects in the best possible way. It is now the turn of these teachers to share their knowledge and skills with others in their schools and countries.

Sekese's students responded so well to incorporating technology into the lesson and the opportunity to gather information from a range sources that she says: "I now can't imagine teaching in the classroom with me being the only source of knowledge to my learners." Other teachers at Mamoeketsi Primary School have followed her example and classes are now arranged in a different setting altogether for almost every subject.

Sekese says: "I will be working with the Lesotho School Technology Innovation Centre in Maseru to help train other teachers and also going into the rural areas to show them some of the software that I learnt about in Brazil." She will also use the contacts she made in Mauritius and Brazil, as well as the platform provided by the Partners in Learning Network, to continue to work on projects. She says: "It was exciting to meet teachers from around the world – and now we can communicate and collaborate. We are already mailing one another and seeing how we can help each other. Teachers from the UK and the USA are very interested in my project and they want to help."

In January 2010 Sekese was invited to visit schools in the UK and March 2011 in Norway and Sweden to share her experiences and inspire teachers who, despite all the resources available, feel they are not able to integrate technology. She has helped people to see that any challenge can be overcome with the right attitude and a bit of hard work.

Of the Innovative Teacher Forum, Sekese rsaid: "It changed the way I teach. I am motivated by what I saw for the first time. Using IT is the best way of teaching". She went on: "As a teacher and environmental activist, I am passionate about the use of technology in teaching, especially the subjects related to environment. I believe that learning is a three legged pot (the learners, the community and technology). Efficient teaching requires the involvement of the three in order for learners to achieve."

Just as Sekese looked at Musgrave's project a year ago, she has since helped to train hundreds of other teachers in Lesotho on integrating ICT. This resulted in two Lesotho teachers being chosen to participate in the Worldwide Innovative Education Forum held in Cape Town in 2010 and another two teachers in 2011 in Washington DC.

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