

ICT strengthening partnership work in Zambian schools

The Zambian Education School-based Training (ZEST) programme has developed a School -Based Continuous Professional Development (SBCPD) model to support the implementation of the revised curriculum and policies for SBCPD in Zambia. In partnership with World Vision (Zambia), officials from the Ministry of Education and teachers and school leaders in over 400 schools, The Open University (UK) has developed a set of resources to support active teaching and learning in Zambia, while promoting a collaborative model of SBCPD amongst teachers.

Our approach

World Vision Zambia's strong local knowledge enabled the project to identify ways of working with schools to ensure distribution of resources and training in appropriate technologies.

The technology that was chosen was a small, low-cost battery powered computer called the Raspberry Pi. These act as portable network hubs independent of the internet, enabling teachers to access the SBCPD resources via localised WiFi. Low power requirements allow schools to charge them via solar power.

Resources are delivered using the open-source Moodle virtual learning environment. This records participation, supporting project monitoring, and importantly, allowing teachers to obtain certificates of their engagement with CPD, contributing to their professional status.

Raspberry Pis have now been distributed across all 400+ schools involved in the project.



Offering support

The role of School IT Champion has been created by the project. These are teachers that are trained to maintain the Raspberry Pis and support colleagues. This has leveraged local knowledge and revealed expertise amongst some more junior teachers who have been given the opportunity to grow professionally. 'Super Champions' have been identified by District Officers thus developing sustainability and resilience through local networks beyond the end of the project funding.

The global pandemic closed schools in Zambia. However, a WhatsApp group has been set up to support the School Champions network, and this was used during the pandemic to enable the project team to keep in touch with teachers and continue distribution of resources when physical visits were not possible. Teachers were able to continue to virtually meet even when schools were closed.

Findings



Teacher training enabled to continue through the pandemic via WhatsApp and Zoom. Teachers buying phones and supporting digital monitoring tools, as introduction of digital tools led to increased use, confidence and appetite for technology as part of SBCPD.



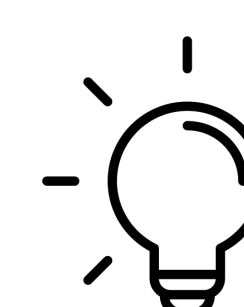
Key role played by School Champions – challenging hierarchies, harnessing local expertise and working together with local staff. 'Super champions' emerged that can build and develop networks across schools.



Importance of local partnerships with both Zambian Ministry of Education and WVZ to deploy and support technology use.



The importance of affordable, simple to use, and easily accessible digital storage: supports sustainability and scalability and increases the reach of Open Educational Resources.



Technology excites people and schools are developing other uses for the Raspberry Pi beyond the work of the project.

The challenge

Supporting SBCPD across a wide geographical area over the past five years has led to challenges particularly in getting resources to teachers. Schools have very limited resources, and printing and distribution of paper-based materials is costly, logistically difficult and not sustainable. ZEST has developed open educational resources that can be distributed digitally as well as on paper.

Ownership of smartphones is widespread, but internet connectivity is sometimes unreliable and costly. Many rural schools lack reliable electrical infrastructure, although some have solar power.

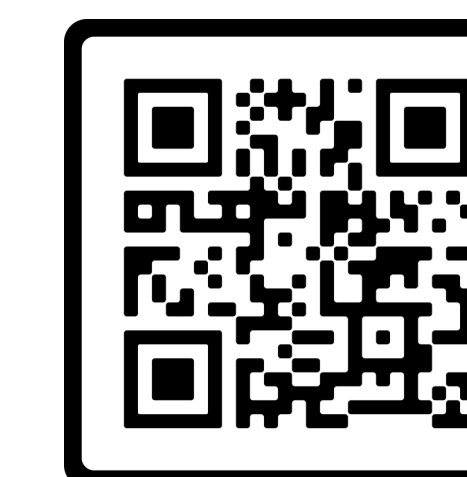
One of the key approaches taken by ZEST has been to encourage collaborative working in schools, so a major challenge was how to use digital technologies appropriate for the local contexts and supporting local partnerships.



“ZEST has had a very, very big impact – we had lots of printed materials – now we download them – it is so good.”
Headteacher



Next steps



QR codes have been developed to allow broader access to the OER. Most smart phones on sale now in Zambia link directly with QR codes. Once the initial link has been made online, educators can download the resources when they do have access, and then use them offline.



Bringing in volunteer-run community schools: the emerging super champions can act as a bridge between formal school sector and community schools, extending SBCPD and digital expertise to build capacity in less-resourced schools.

Potential interest in expanding this model of SBCPD across other Provinces through the support of provincial education officers involved in the partnership.

Research has been carried out in partnership with World Vision Zambia, and the support of teachers and educators in Central Province, Zambia. It was funded by a grant from the Scottish Government.

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