

## Technical Brief

# ENHANCING TEACHER'S PEDAGOGICAL SKILLS THROUGH THE ZAMBIAN EDUCATION SCHOOL-BASED TRAINING (ZEST) PROJECT IN SELECTED SCHOOLS OF CENTRAL PROVINCE IN ZAMBIA

Prepared: 9<sup>th</sup> August 2021

Volume 1; Issue No. 2

### Introduction

Education in Zambia has been a priority since independence in 1964. As a signatory to the Sustainable Development Goals (SDGs), Zambia ascribes to goal number 4, addressing quality education<sup>1</sup>. However, the country's efforts for quality education continue to be hampered by several critical factors, including but not limited to: (i) limited teaching and learning materials, (ii) non-conducive learning environment, (iii) inadequate Early Childhood Education (ECE) provision, (iv) non-effective pedagogical skills among some teachers (v) and limited learner teacher contact time etc.

To address some of the challenges that go with teacher pedagogical skills, the Ministry of General Education (MoGE), has been working with World Vision Zambia (WVZ) and The Open University (OU) to implement the Zambian Education School-based Training (ZEST), funded by the Scottish Government since 2018.

This brief describes the ZEST project being implemented in collaboration with the Ministry of General Education to enhance teachers' pedagogical skills in Zambian primary schools. The brief also describes the challenges and opportunities of the project and what needs to happen going forward.

### Technical Approaches

The ZEST project supports the Zambian Government in implementing the School Curriculum. The project is currently being implemented in Kabwe, Chisamba and Mumbwa districts of Central Province. ZEST supports teachers through active teaching approaches and collaborative working within the existing system of regular teacher group meetings (TGMs) and collaborative planning. Figure one (1) shows the ZEST/lesson study cycle with a few amends done in consultation with MoGE. The main difference between ZEST and the currently used School-Based Continuous Professional Development (SBCPD) model is that lesson demonstration has been replaced by an expectation that all teachers will try out the planned activities and reflect on how they went for learners and teachers. Working with the Ministry of General Education (MoGE), the project has co-designed and tested resources for use by teachers, school leaders and education officials for three years (2018-2021). The curriculum calls for more learner-centred approaches and a focus on teaching skills and values alongside the knowledge. ZEST strengthens the existing system of lesson study by providing Open Education Resources (OER) made available to all stakeholders (MoGE & JICA, 2015). Where possible, teachers are encouraged to observe each other informally for short periods; thus, ZEST involves all teachers as active participants. The ZEST is implemented under already existing structures such as the School Programme of

<sup>1</sup>SDG 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

In-Service for the Term (SPRINT), which provides structured activities to undertake in Teacher Group Meetings and resources to support active teaching and learning at the school level. Implementation is a phased model segregated into 5 Years (Cohorts). Years 1, 2 and 3 are simultaneous design and implementation, learning from practice in schools and districts, and amending resources based on practical implementation in schools.



Figure 1 ZEST/Lesson Study Cycle

## Outcome of the Interventions

The ZEST has had exciting results on teacher resource access and lesson planning. Specifically, the programme has been shown to:

- Increase confidence in the use of learner-centred approaches. Teachers report regular use of techniques applied in the ZEST model.
- Increase use of pair or group work in 'most' or every lesson: 68% reported asking learners to work in teams in most or every class; 71% reported asking learners to work in groups in most or every lesson.
- Enhance open questioning by teachers, which also encourages the construction of sentences, critical thinking and further questioning by learners.
- Enhance learners' motivation and interest to use local resources in their learning.
- Increase pass rates. As can be seen from the case study below, school authorities perceived the increased pass rate since the introduction of the programme to be associated with the ZEST project.



### **Case Study: Success Story of the Application of the ZEST in Chisamba District**

As Chisamba District Education Standards Officer, Paxina Mwenya participated in the ZEST programme from May 2018 to March 2019 as part of Cohort 1. Speaking on behalf of the District in a filmed interview in September 2019, Paxina confirmed that Chisamba remained fully committed to the ZEST programme. The original Cohort 1 schools continued to embed the teaching approaches and SPRINT processes in their day-to-day school lives. The District and School colleagues regularly offered support to other Cohorts about their experiences/challenges with ZEST. Further, the District was keen to scale up the project to the remaining Chisamba schools at the earliest opportunity. Some of the original Chisamba schools participated in the Raspberry Pi<sup>2</sup> proof-of-concept activity. As identified in early 2020, they have continued to exceed expectations regarding the uptake/use of devices. Paxina has also seen an improvement in Chisamba's exam pass rate, from 41.53% in 2018 to 46% in 2019.

Further, Paxina's recording is used as part of the digital ZEST materials to share her/Cohort 1's experiences with future cohorts. The inclusion of videos in the digital materials allows wider dissemination of Cohort 1 experiences with other districts, who may not otherwise have heard from other ZEST participants due to travel challenges.

"When we go out monitoring, there are several changes that we have observed. Previously, when teachers were doing their preparations and met challenges with certain topics, they would skip such a topic without consulting their peers. Such issues are no longer happening. Since they now have a provision of consulting each other, whenever they meet challenges, they consult fellow teachers, and they plan together the best way to handle such a topic."

"As District Education Standards Officer, I feel there has been a change in teachers' attitudes since we began this programme because looking at the SPRINT we were doing, you would find that teachers prepared lessons together and then they would choose only one teacher to present in a class; the others would be there to observe. But as it is now, when teachers prepare lessons, everyone of them has to go and implement that particular lesson that would have prepared as a group, meaning so many classes and all the teachers participate in the implementation."

"I want to say this to the DEBS in other districts, that are joining the ZEST programme, that it is a wonderful programme and it enhances teaching and learning in schools."

<sup>2</sup>Raspberry Pis are small single-board computers which crucially allow offline access to uploaded resources

## Limitations and Challenges

Despite the positive outcomes of the ZEST project, a number of challenges and gaps were identified. The notable ones are detailed below:

- The COVID-19 pandemic severely disrupted the work of schools across all three cohorts, and its impact continues to be felt, particularly in the observed use of group and pair work in classrooms.
- Digital resource use culture in schools is still lacking. As a result, accessing suitable devices (smartphones, tablets, laptops) is limited, and school authorities' commitment and leadership to influence the use of digital resources in schools are suboptimal.

## Opportunities

Despite the challenges, there are opportunities to scale up the programme and increase the application of the ZEST in the current benefiting schools. The following are some of the notable opportunities:

- With adequate support, Zonal Officers and School Champions with technical skills of the operations of the ZEST project can ensure its fidelity, quality and sustainability.
- All ZEST materials will be published online as open educational resources (OERs) and freely available for use – discussions will take place with MoGE about how to roll these out across all primary schools in Zambia.
- The ZEST is a flexible project which can easily be embedded with other education programmes. To this end, World Vision Zambia is considering embedding the ZEST with the Zambia Reading for Education and Development (ZREAD).
- The MoGE have shown interest in the project. Therefore, scaling up the project will have government buy-in.
- The global COVID-19 pandemic has come with its own benefits, including the adaptation of virtual technologies, highlighting new opportunities that could make the project more sustainable. For instance, fortnightly, Zoom meetings were held with World Vision Zambia, Open University and Mumbwa Schools to provide ongoing support for teachers and feedback for the project team about how the resources were being used. In addition, WhatsApp provided an opportunity for schools to share experiences and ask questions. Materials were converted to bitesize PDF documents and shared via WhatsApp. These materials were then added to school Raspberry Pis for all teachers to access. This demonstrates that virtual platforms (Zoom, WhatsApp) can be used to provide support to schools, and the confidence in using digital materials is growing.

## Our Call for Action

Although the ZEST has scored successes, the following areas still require the participation of different actors to ensure the effectiveness of the ZEST project:

### Policy Makers

- MoGE at the district level to encourage teachers/districts to share their experiences and ideas and build collaborative learning networks.
- Enhance understanding of the training resources among District and Province officials.

### Partners

- Explore options for expanding Raspberry Pi use and

support by MoGE.

- Partner with MoGE to increase access to the internet in schools and enhance virtual meetings and access to online resources.

### Programme Implementers

- Monitor the fidelity of the ZEST to ensure it produces the intended outcomes.
- Create a monthly community of practice involving teachers and school leaders.

## References and Resources

MoGE & JICA (2015). Impacts of Survey of Lesson Study in Zambia. Lusaka: MoGE/JICA



World Vision is a Christian relief, development and advocacy organisation dedicated to working with children, families, and their communities to reach their full potential by tackling the root causes of poverty and injustice. World Vision serves all people, regardless of religion, race, ethnicity, or gender.

For further information please contact:

**Misheck Mwanza**  
 Technical Program Manager  
 for Education  
[Misheck\\_Mwanza@wvi.org](mailto: Misheck_Mwanza@wvi.org)

**Carol Mweemba**  
 Associate Director – Advocacy, Reports  
 and Campaigns  
[Carol\\_Mweemba@wvi.org](mailto: Carol_Mweemba@wvi.org)