

# **Country Brief: Tanzania**

| Country Leads   | Other Hub Core Team in Tanzania  |
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| EdTech Hub Tanzania Country Leads,<br>based in R4D, Dar es Salaam:<br>Jamie Proctor (FCDO secondee) –<br>sits between R4D and FCDO<br>Johnpaul Barretto | EdTech ODI Fellow, embedded in Tanzania<br>Institute of Education (TIE, Dar es Salaam):<br>■ Maria Stierna ( <i>until August 2023</i> )  |
|   | Research and Programme Manager, based<br>in R4D, Dar es Salaam:<br>■ Maryam Aboud  |
|   | <ul> <li>Learning Management System Team, based<br/>at University of Dar es Salaam:         <ul> <li>Prof. Joel Mtebe, Aron Kondoro, Amina<br/>Kiluwasha, Salome Maro, Oscar<br/>Mashauri</li> </ul> </li> </ul> |
|   | <b>Specialist Network,</b> based in Dar es Salaam:<br>■ Hannah Simmons   |

The EdTech Hub Tanzania team has developed in-depth relationships with the Government of Tanzania (GoT), led by Johnpaul Barretto and regularly visits government, university, and partner offices. The full EdTech Hub Tanzania team meets in person once a month at an all-team meeting involving the global EdTech Hub team supporting Tanzania.

The EdTech Hub Tanzania team supports the GoT through focused engagement with key education sector entities, specifically the Ministry of Education, Science, and Technology (MoEST), the President's Office – Regional Administration and Local Government (PO-RALG), and the TIE through embedded technical assistance (TA) in two key areas: teacher continuous professional development (TCPD) and data for decision-making (D4D).

Between July 2021 and March 2023, the Hub partnered with various organisations, including the World Bank, IDRC, Global Affairs Canada, FCDO, UNICEF, Bill & Melinda Gates Foundation, University of Dar es Salaam, Aga Khan Foundation, Aga Khan University, and Haki Elimu to provide technical assistance (TA) to the GoT across the areas listed below.

- **TCPD**: through TA, Innovation sandboxes, design-based implementation research (DBIR), and experimental research.
- **D4D**: TA and development of a basic education dashboard.
- Cross-cutting work that included supporting the GoT with its disbursement-linked indicator (DLI) submissions, reviewing and revising its EdTech Strategy, and establishing an EdTech working group.

The Hub team has had significant success linked to the government's TCPD reform. Much of the successful progress has come with significant Hub support through an integrated approach, bringing together research and evidence with technical assistance to strengthen deliverables developed by the government for education development programmes, including EP4R and World Bank Boost. EdTech Hub in Tanzania leverages central, international, and local in-country grants to fund its work. This approach allows for large-scale, long-term interventions, research, support, and shorter-term agile TA support to government requests.

Within the education and human development landscape in Tanzania, the Hub's unique value proposition is based on the ability to provide evidence-backed TA for the use of technology across the national education system, which other stakeholders do not provide.

# EdTech Hub's Helpdesk in Tanzania

EdTech Hub has worked on seven Helpdesk requests in Tanzania. Two were for the World Bank, three for FCDO, and the rest involved collaboration with the World Bank, UNICEF, and FCDO. Most of these requests were about using data for decision-making, while the others were about using technology to help with early learning and supporting marginalised learners.

## Example

• Using education technology to support learners with special educational needs and disabilities in low- and middle-income countries

| Activity   | Description  |
|--|--|
| Teacher Continuous<br>Professional Development<br>(TCPD): Development of<br>national TCPD plans<br>(Completed in March 2022)<br>Large (Over GBP 1 million) | Edtech Hub supported the Government with developing<br>a national, school-based TCPD implementation plan and<br>associated materials, leading to the World Bank assigning<br>USD 60 m to support TCPD. The Hub also supported the<br>design and plans for the use of digital technology to<br>supplement the planned TCPD, including the National<br>Teacher Needs Assessment Report, Local Government<br>Authority Guide for conducting Teacher Assessment, and |
|  | the national TCPD implementation guide.  |
| TCPD: Practical research<br>and TA<br>Hub Led Research (HLR)   | The EdTech Hub is leading design-based implementation research (DBIR) with TIE and Aga Khan University to test and improve the government's TCPD intervention as it is rolled out in primary schools. <u>The HLR study</u> will be vital   |
| (Ongoing)  | to the success of the overall intervention, helping to minimise areas of uncertainty and risks of failure before   |
| Large (Over GBP 1 million)   | scale-up. Three government officials from the<br>implementing institution are embedded in the research<br>team to understand what changes can improve the<br>intervention. These officials will work with the rest of the<br>government to ensure that the changes are adopted.  |
| TCPD: Learning<br>management system (LMS)<br>TA  | The TCPD LMS is an essential component of the<br>government's TCPD plans and already has nearly 50,000<br>teachers accessing it. EdTech Hub supported TIE to   |

## EdTech Hub's work in Tanzania

| (Ongoing)<br>Medium (GBP 50K–250K)   | develop a working Teacher LMS, available at<br>https://tcpd.tie.go.tz/.<br>The Hub team continues to support TIE to maintain and<br>improve the system during the current testing and<br>growth phase, with the goal of developing a user-friendly<br>LMS owned and managed by TIE. The LMS will be used at<br>both primary and secondary levels and presents a unique<br>opportunity to deliver quality content to teachers.  |
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| Data for decision-making:<br>Powering ministerial<br>decisions<br>(Ongoing)<br>Medium (GBP 50K-250K) | EdTech Hub aims to equip senior officials in PO-RALG and<br>MOEST with the information they need to make decisions,<br>in the most user-friendly way. This support has been<br>requested by the government and is a vital part of<br>building the ongoing relationship between EdTech Hub<br>and GoT.<br>The work centres around building a prototype dashboard<br>using publicly available data published by the<br>government. The team continues to work with the GoT<br>and other stakeholders to understand what decisions are<br>being made and what visualisations are needed to make<br>them.  |
| Cross-cutting sector TA<br>(Ongoing)<br>Small (GBP 50K or less)                                      | The Hub team in Tanzania plays an active role in<br>convening and influencing across digital, data, and<br>technology in education in Tanzania. These efforts are<br>channelled through the Science Technology and<br>Innovation Development Partner Group (DPG), currently<br>co-chaired by Jamie Proctor, and the Education DPG.<br>The team has also supported the GoT with reviewing and<br>revising its EdTech Strategy.  |
| EdTech In Zanzibar<br>(Ongoing)<br>Medium (GBP 50K–250K)   | Early work in Zanzibar centred around establishing a<br>virtual learning environment (VLE) for the education<br>system, including a content co-curation guide for the<br>government on sourcing content and aligning it with a<br>national curriculum, and populating an e-learning<br>platform.<br>The work included a sandbox to design the VLE<br>implementation plan in Zanzibar. The evidence<br>generated in the sandbox pointed to a teacher-centred<br>VLE, which was adopted in the World Bank's project<br>appraisal document for an investment of USD 50 m into<br>basic learning.<br>The team is currently exploring further opportunities for<br>providing support to the Government of Zanzibar. |

# Examples illustrating the impact of our work in Tanzania

#### Development of the National School-Based TCPD Implementation Plan: Unlocking GBP 50 Million of World Bank Funding

Through an accountable grant (AG) with FCDO Tanzania, EdTech Hub provided the

government with TA towards the achievement of disbursement-linked indicators (DLIs) for the World Bank Boost programme – specifically, the disbursement linked result (DLR) 1.1, to develop a national school-based TCPD implementation plan.

EdTech Hub supported the government in submitting the required deliverables and responding to questions raised by the independent verification team. Consequently, the World Bank approved the deliverable and released funding for DLR 1.1 (GBP 1.1 m) and assigned GBP 47 m through its BOOST programme to support TCPD over the next five years. This funding will work alongside the GPE-LANES II project to ensure the budgeted GBP 70 m TCPD plans are operationalised.

In addition, the Hub supported the GoT with three key components towards the TCPD rollout:

- The use of digital technology to supplement TCPD, which involved developing a Moodle-based LMS prototype, customising the system for the TCPD context in Tanzania, including translation to Swahili, developing a mobile app, configuring offline access, and developing a demonstration unit.
- 2. The development of the TCPD materials, including implementation guides and editable content to compile initial units.
- 3. The design of the monitoring and evaluation plan and alignment of tools and templates to existing mechanisms, such as the guide for school development.

**Utafiti Elimu Tanzania 2023: Working towards a future-proofed education system** Utafiti Elimu Tanzania is a partnership between EdTech Hub, the Aga Khan University, University of Dar es Salaam, Global Education Advisory Panel (GEEAP), British Council, and FCDO. The March 2023 event emphasised the need for partnerships to address teacher shortages and make education more environmentally friendly.

Attendees included representatives from higher education, development, the private sector, and teachers who called for the need to align research with government goals. The event highlighted the potential of volunteer teachers, focusing on motivation, accountability, and transitioning to formal roles. As such, the government has started to improve the quality of teaching and increase the number of teachers even though the student-to-teacher ratio is significantly high. Speaking at the event, Magret Mussai from the Ministry of Education, Science and Technology mentioned that the ministry was pleased to be working with researchers and is relying on our research to work on policies that can prioritise learning for Tanzanian children. Climate change discussions, such as adapting to classroom temperatures, were led by Jamie Proctor. Participants supported a more coordinated approach to using and sharing evidence, as Utafiti Elimu plans to continue gathering and disseminating evidence annually, targeting Tanzania's learning challenges.

## Influencing the use of data for decision-making with evidence-based TA

EdTech Hub partnered closely with Fab Inc. to support the GoT to improve the use of data for decision-making. This had two headline priorities:

- 1. Teacher deployment, allocation, and retention (TA)
- 2. Ministerial decision-making dashboards.

These priorities had complementary activities in terms of data preparation and visualisation, and two main strands of work have been undertaken to progress these and complete the intended outputs:

1. Compilation of publicly available data and development of an interactive data dashboard showing changes over time and geographical disparities for a range of

indicators relating to primary level: Enrolment, teacher need, teacher allocation, and exam trends

2. Development of illustrative and semi-interactive mock-ups of broader dashboard designs to showcase the further analysis, graphs, and visuals that could be possible with additional data (such as on subject specialisms and infrastructure).

The dashboard provided GoT and other stakeholders nuanced insight into the realities in Tanzania, namely:

- Although teachers are being allocated to places with lower pupil-to-teacher ratios (PTR) through a Teacher Allocation Protocol method, they still move school after allocation.
- The PTR of teachers in a region does not always correlate with how well the teachers are distributed. Some of the lowest-resourced regions allocate their teachers in the fairest way.
- The overall PTR is getting higher. This means there are not enough teachers coming into the education system to maintain desirable class sizes.

The data dashboard is public and provides decision-makers within PO-RALG and MOEST with the information they need to make decisions, as well as providing them and other stakeholders such as EPforR, Shule Bora, and FCDO with information to advocate towards improvements in teacher recruitment, deployment, and allocation. This work shaped the latest funding by the Global Partnership for Education (GPE) – circa USD 100 million