

University of Eswatini

A focus on building up institutional capacity



Programme objective | **To build on the research and innovation capacity of higher education institutions in sub-Saharan Africa**

Region | **Southern Africa**

Introduction

The University of Eswatini (UNESWA) became a hub university in the HEP SSA Programme in 2019 after an initial participation as spoke university. In their role as a hub university UNESWA aimed to develop a framework to facilitate the creation, transfer and commercialisation of knowledge within and between sub-Saharan universities and industries.

Each of the project partners were selected for the specific contribution they could make to the project, with the **ultimate objective of fostering enhanced mutual learning** among all partners. The University of Stellenbosch, as one of the leading universities in Southern Africa, was included as a second hub institution to further **enhance the capacity-building efforts** towards the spoke universities. The project ran between 2019-21 (extended due to Covid-19 pandemic) and received £193,461 funding.

Spoke universities

- University of Stellenbosch (UoS)
- National University of Lesotho (UoL)
- National University of Science and Technology (NUST), Zimbabwe

Industry partners

- The Eswatini Electricity Corporation (EEC)
- Eswatini Postal and Telecommunications Corporation (EPTC)
- Palfridge
- Touch-IT
- TECH-SD
- Eswatini's Royal Science and Technology Park (RSTP)

UK partners

- University of Essex
- Glasgow Caledonian University (GCU)
- Canterbury Christ Church University (CCCU)



Main activities

As part of the project, the partners implemented a series of knowledge sharing and training activities that focused on:

- the **design and redesign** of curricula to create relevant and authentic engineering programmes using **outcome-based pedagogical principles**,
- the use and implementation of a **virtual i-lab**,
- collaborative design of a **work-based learning programme** in key industries,
- commercialisation of intellectual property through **entrepreneurship training** of staff and students, and the establishment of **commercialisation infrastructure**.

Results and impact

The Work-Based Learning (WBL) element of the project was highlighted as a successful area of activity and a “real eyeopener”. A UNESWA staff member completed a successful placement at the Work-Based Learning Unit of Glasgow Caledonian University in January 2020, and subsequent online engagements have revealed a great interest from industry partners in these opportunities, including concepts of codesign and recognition of prior learning.

Another key activity to support entrepreneurship and innovation was the **establishment of the virtual innovation lab (i-Lab)**, at Eswatini’s Royal Science and Technology Park and at the university in the newly established Innovation Hub. An important prerequisite to introducing the virtual i-lab was to design and deliver **entrepreneurship training to all staff and students**. Through the HEP SSA project the University of Eswatini has adopted a strategic plan and appropriate policies to foster innovation and entrepreneurship, and in parallel, the university is developing infrastructure and accompanying training provision for staff.

“UNESWA has moved leaps and bounds towards the adoption of new learning concepts and outcome-based approaches.”
– Chris Fowler, Project Manager

Adapting to the changed circumstances during the Covid-19 pandemic, **the project team successfully developed an initiative named the ‘Lion’s Den’**. The concept is the equivalent of the TV show ‘Dragon’s Den’, in which entrepreneurs pitch for investment from a panel of venture capitalists. However, in this case **the pitches are for academic proposals** and the concept is delivered through a series of webinars. After attending a webinar on how to write a research proposal, **the participants write and present their own research proposals to a panel of experts**. Following feedback and suggestions, the panel of experts decide whether they want to ‘invest’ in the proposal, which means that they offer the option of collaboratively working together on the research idea with the pitcher. The successful candidates can also benefit from a week spent at Stellenbosch University with their adopted Lion.

Sustainability of the results

The results of the projects fit well with UNESWA’s strategic plan for 2016-2021, which emphasises the need to improve the relevance and authenticity of its programmes through **outcome-based learning approaches**. The project impacts envisaged within a five-year time horizon include an **increase in the number of start-ups and IP creation, improved employability of graduates, improved quality and quantity of research, as well as commercial exploitation of patents**. The strategic fit of the project activities with the institutional strategy helps ensure the long-term sustainability of the results.



Source: University of Eswatini