Seychelles Institute of Technology: An innovation pipeline

i-hubs Innovative Practice
Context

Addressing emerging challenges
Every nation on earth is facing the economic, societal and environmental disruptions brought on by climate change and new demands on the workforce. For some nations – such as the island nation of Seychelles with its limited land and human resources – these challenges are increasingly existential. Youth unemployment and an influx of foreign labour have significantly impacted the economy, while climate change is raising urgent questions about sustainable development. Addressing these problems requires new skills and approaches, a reality that the Seychelles Institute of Technology (SIT) has turned into an opportunity for its staff and students.

Adopting a progressive approach to innovation
SIT recognizes the need to adapt its teaching and learning principles to tackle emerging challenges, while positioning itself as a proactive partner in innovation to government institutions, non-governmental organizations and businesses. SIT has embraced its responsibility to ensure that its graduates are equipped with skills that meet the demands of future labour markets. The result has been a progressive approach to innovative TVET and a steady stream of graduates who are equipped to take on one of the country’s most urgent environmental priorities: water security.

Emphasizing practical experience
SIT instructors have played a major role in bringing about a shift towards innovation. With full institutional support, the staff at SIT are incorporating less-traditional teaching methods into their instruction. This includes a greater emphasis on hands-on, practical experience outside the classroom and continuing training opportunities for teachers.

Institutional Overview

Seychelles Institute of Technology (SIT), Mahe, Seychelles
Established: 2006
Student body: 310 (2019)
Teachers and trainers: 38 (2019)

SIT is a technical and vocational education and training (TVET) institution operating under the aegis of the Seychelles Ministry of Education and Human Resource Development (MoEHRD). Full-time, part-time and apprenticeship training programme students work towards certificate, advanced certificate, diploma and advanced diploma qualifications. With the exception of the advanced diploma, the qualifications are developed locally to meet industry needs.

Mission statement: “To work in partnership with industry, using quality and responsive programmes, which incorporate innovation and research to enrich learners’ competencies for employment, entrepreneurship and lifelong learning in a globalized environment.”

Enablers of institutional innovation

The following four dimensions of institutional operation represent the evaluation lens that was applied in the selection of this initiative as an Innovative Practice:

Ecosystem Relationship Management: Innovations to stakeholder networks included new engagements, formalized agreements and specific emphasis on partnerships in sustainable development fields.

Products and Services: Institutional shifts in non-traditional products and services designed to align with national sustainable development needs and local job market demands.

Teaching and Learning: Curricular changes accompanied by new pedagogical experiences for instructors that encourage research, innovation and action-based learning.

Strategy and Management: Adjusting institutional vision and priorities to primarily focus on innovating TVET for sustainable development.
Ecosystem Relationship Management has been a major factor in the implementation of innovative practices. In addition to strengthening ties with major public partners in sustainable development fields, SIT has worked to foster new partnerships.

SIT made a conscious effort to select progressive partners in fields related to its curricular and institutional goals. For example, working with the Indian Ocean Commission led to renewable energy training for five lecturers that focused on heating water using solar panels. Not only is providing continual education opportunities for teachers a best practice, but in this case, SIT made sure the instructors returned with skills that would specifically enhance their ability to teach on the topic of solar energy use.

The collaboration between SIT and a range of external stakeholders has been mutually beneficial: access to resources and opportunities for collaboration directly benefit SIT instructors and students, while the innovative practices taught positively impact the public and private sector as well as communities by ensuring an inflow of a skilled and qualified workforce to the labour market and public service. SIT’s open and direct engagement at the national level has allowed the institution to send a clear message that they are ready and willing to collaborate on sustainable development projects.

Non-traditional Products and Services intended to support the sustainable development needs of Seychelles have been a direct result of collaboration. SIT has provided technical input for upgrading occupational trades to include innovative competencies that align with national development goals. This still reflects local job market demand for technical skills, but delivers these skills based on a new set of parameters that takes community needs into consideration. One such example was the Seychelles Water Warriors programme, which saw SIT plumbing students conduct on-site visits to homes in local communities to fix leaky pipes. Other efforts included building rainwater harvesting tanks for private use or constructing a gabion barrage dam to reserve water for agricultural use during drought periods. These efforts were part of a collaboration with an external partner – Sustainability for Seychelles – but paved the way for an in-house effort called Greening the SIT Campus.

Innovative changes to Teaching and Learning processes have been spearheaded by the Academic Committee.

Similar to many TVET institutions, instruction at SIT has generally focused on traditional teaching methods such as lectures and handouts. However, with the help of a new communications policy that encourages peer learning and knowledge exchange among teachers, the staff has been increasingly implementing a more modern approach to instruction. Site visits, on-the-job training and real-time problem solving have increased creativity and innovation among students while also accelerating the rate of learning. Students have started leading their own discussions and exchanging experiences based on completed tasks and projects. Networking through the Academic Committee has encouraged the sharing of best practices and increased the use of information and communications technology (ICT) in research and lesson development.

SIT has cemented its commitment to innovation through changes to Strategy and Management, which includes a Strategic Plan for 2019-2023.

The Strategic Plan established innovation as the core purpose for the institutional vision and priorities. A dedicated Research and Innovation Committee (RIC) with clear management roles has been tasked with executing the strategy using a comprehensive framework of policies and processes. Specific innovation indicators were included to ensure performance management, which is monitored and reported every semester.

Internal communication processes – led by management and deployed through the RIC – engage all staff and learners by challenging them to contribute innovative ideas or initiatives, and share them using segmented digital channels. Market research into innovation needs and opportunities in Seychelles provides new information that can lead to new ideas and initiatives.
Insights

Define clear partnership goals
Innovation was truly spurred by shifting the focus of partnerships to specific developmental goals. Shared pilot projects with partners have given way to ‘fully-owned’ initiatives – an indication that SIT is hitting its stride when it comes to innovating TVET. The momentum behind the innovative practices has been accelerated through dedicated strategic plans, newly enabled management groups and close involvement of staff and students.

Develop an innovation momentum
Initially, SIT was not always in the driver’s seat of innovative projects, but the institution eagerly embraced opportunities and looked to build on them over time. Following several years of gradually finding its footing, SIT is now able to lead future-oriented innovation on its campus and share its expertise with other TVET institutions within the UNEVOC network.

UNESCO-UNEVOC Innovative Practice
SIT is a one-of-a-kind institution in the island country of Seychelles. As such, it takes the responsibility of remaining on the cutting edge of TVET innovation seriously, with new ecosystem partners and a forward-thinking strategy profoundly impacting the country’s TVET delivery. As a UNESCO-UNEVOC i-hubs project partner, SIT provides an excellent example of an institution with a strategy that has been expertly implemented to drive innovation.

Learn more
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Skills for innovation Hubs (i-hubs) is a global initiative led by UNESCO-UNEVOC and supported by the Beijing Caofeidian International Vocational Education City (BCEC), with contributions from the German Federal Ministry of Education and Research (BMBF) and the Federal Ministry for Economic Cooperation and Development (BMZ).

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