Planning for innovation in TVET
Online discussion in focus

Introduction

Discussions at UNESCO-UNEVOC's 2018 Learning Forum on 'Managing skills in a time of disruption' underlined that new and radical shifts are needed to ensure that TVET systems can respond to changes in climate, demography, business and labour markets, technology, and migration. The speed and scale of these changes in today's world call for a broad process of transformation, with TVET institutions increasingly acting as drivers of innovation in their local ecosystems, and – in parallel – innovating the learning processes and products offered to youth and adults as well as increasing citizens' potential to innovate.

Against this background, UNESCO-UNEVOC International Centre for TVET is undertaking several initiatives aimed at strengthening TVET institutions and boosting their potential to play a key role to promote innovation, entrepreneurship and sustainable development, not only within their own organizations but also more widely in their local communities.

The 'Skills for Innovation Hubs' (i-hubs) initiative, implemented by UNESCO-UNEVOC, aims to facilitate institutional development and build institutional capacities to enable TVET institutions to become learning 'hubs' where all stakeholders – teachers, leaders, students, entrepreneurs, the private sector, local or regional authorities – can be supported in the development of new ideas, activities, and practices. The project takes as a starting point that making TVET more innovative increases peoples' potential to innovate and better prepares them for the changes taking place in the economy and society.

The i-hubs project is expected to develop a comprehensive outline of planning for innovation in TVET that includes a conceptual framework of innovation in TVET and different tools that can be used by TVET institutions in the development of innovation action plans. The i-hubs Innovation Framework, developed in cooperation with several TVET institution around the world, aims to provide the TVET community with a solid approach to diagnosing and measuring their innovative capacity, as well as identifying their strengths, challenges, and new opportunities for collaborating with relevant and innovative external actors.

In line with the objective to produce a comprehensive framework for innovation in TVET by 2020, this online discussion will debate the process of planning for innovation in TVET institutions, schools and training centres. The discussion will present the i-hubs Innovation Framework and allows the TVET community to provide feedback on the framework and process of planning for innovation in TVET, including the analysis of the tools, its parameters and main challenges related to its implementation. The online discussion will be broken down in a number of threads, as follows:

- From 28 October: Introduction to the i-hubs Innovation Framework
- From 29 October: Innovative Practices in TVET: the case of SENAI-CIMATEC
- From 30 October: Diagnosing innovation in TVET: Introduction to Balanced Scorecard
- From 31 October: Diagnosing innovation in TVET: Indicators of innovation in TVET
- From 11 November: Analysing the Skills and Innovation Ecosystem: The Innovation Ecosystem Map
- From 13 to 15 November: Developing an Innovation Action Plan: i-hub's Project Design Matrix

Topics and leading questions

Topic 1: Introduction to the i-hubs Innovation Framework

This topic will address the main concepts related to innovation in TVET, particularly from the development and implementation of significant new or improved approaches in four perspectives:

- Products and services offered to students/clients (e.g. new TVET courses and programmes)
- Teaching and learning processes (e.g. new pedagogic practices, the introduction of new teaching or pedagogical equipment and technologies)
- Leadership and organizational practices (e.g. changes in strategic planning, financing, human resources management)
- Skills and innovation ecosystem (e.g. new partnership with companies, development of external consultancy)

In this topic, **Mr. Peter Greenwood (UNESCO-UNEVOC Advisor)** will present the i-hubs Innovation Framework and give an overall view of the tools for planning innovation in TVET.

Leading question:

- How can institutions be better prepared to implement innovative practices in TVET by implementing a comprehensive process of self-assessment

Topic 2: Innovative Practices in TVET: the case of SENAI-CIMATEC

The second topic will present an interesting example of an innovative practice in TVET. An innovative practice is a new approach to TVET practice within the institution to make TVET more relevant to needs of the economy, society and environment.

Mr. Luis Breda (Co-Director of Innovation and Technology at SENAI CIMATEC, Brazil) will present the experience of SENAI CIMATEC in integrating the outcomes of innovation projects into the TVET learning cycle.

The aim is to show how the knowledge gained through innovation projects contributes to increasing the relevance of TVET formative offer.

Leading question:
- What is innovation in TVET?
- What are the main challenges in implementing innovative practices in TVET?
- What can we learn from the case of SENAI-CIMATEC?

Topic 3: Diagnosing innovation in TVET: Introduction to Balanced Scorecard

The third topic will elaborate on the use of the i-hubs Innovation Framework to develop a diagnosis of innovation in TVET. Focus will be given to one of its tools, the Balanced Scorecard, which helps institutions to assess their internal readiness to innovate. The Balanced Scorecard is a strategic planning and management system that organizations use to establish an evidence-based assessment, both quantitative and qualitative, of the innovation performance. In order to achieve this goal, a wide range of indicators is proposed as examples of changes that pilot institutions may find relevant to track.

The topic will also present and discuss the main challenges related to the implementation of the tool (e.g. collecting and analysing evidences of innovation in TVET).

Leading questions:

- How to use the UNESCO-UNEVOC Balanced Scorecard to assess innovation in TVET?
- What are the main challenges of measuring innovation in TVET?

The topic will also include a lecture from **Mr Rune Knutsen (Advisor in the Department of Education in Stavanger Municipality)** on the benefits and challenges of using Balanced Scorecards in the education sector.

Topic 4: Diagnosing innovation in TVET: Indicators of innovation in TVET

The fourth topic will present the comprehensive set of indicators initially developed by UNESCO-UNEVOC and by the i-hubs in the four different dimensions of innovation in TVET. The indicators are proposed as examples of changes in different dimensions that TVET institutions may find relevant to track. Participants will be invited to analyse these indicators and provide feedback on their relevance for promoting innovation in TVET.

Leading questions:

- How relevant to your institution are the indicators for assessing innovation in TVET as suggested in the Balanced Scorecard?
- Are there other examples of relevant indicators to measure innovation in TVET?

Topic 5: Analyzing the Skills and Innovation Ecosystem: The Innovation Ecosystem Map

This topic will debate the use of a 'Skills and Innovation Ecosystem Map' to measure and identify external stakeholders' commitment to skills development and their potential to leverage innovation. The tool is a resource to support TVET institutions in the strategic management of cooperation with key actors, networks and assets from the skills and innovation ecosystem. The Skills and Innovation Ecosystem Map can identify different 'activity drivers' and opportunities for synergies that can lead to symbiotic situations with a high commitment to skills development and innovation potential. Such areas of overlap can be developed and increased through smart orchestration, contributing to the competitive advantage of regions and companies, in partnership with innovative skills development institutions.

Furthermore, the thread will also present a comprehensive set of indicators initially developed by UNESCO-UNEVOC and by the i-hubs to implement the Skills and Ecosystem Map. The indicators aim to measure and identify external stakeholders' commitment to skills development and their potential to leverage innovation. Participants will be invited to analyse the indicators related to these dimensions and provide feedback on their relevance.

Leading questions:

- How to use the UNESCO-UNEVOC Skills and Innovation Ecosystem Map to identify the most relevant external actors and the different possibilities to enhance engagement in skills and innovation development?
- What are the main challenges of implementing the Skills and Innovation Ecosystem Map?
- How relevant to your institution are the indicators suggested in the Skills and Innovation Ecosystem Map?
- Are there other examples of relevant indicators to measure the engagement of external actors in skills and innovation development?

Topic 5: Developing an Innovation Action Plan: I-Hub's Project Design Matrix

This topic will debate the development of an Innovation Action Plan (IAP). The IAP is a participatory tool developed for the integral management of the cycle of an innovation project, including its planning, implementation and evaluation through a format called Programme Design Matrix. It consists of a set of activities aimed at achieving a specific goal, within a defined timeframe, with defined resources and in a specific TVET institution, in order to reach an innovation-related objective.

The topic will also invite an international specialist on strategic planning to present and discuss the use of the Programme Design Matrix in an innovation action plan.

Leading questions:

- How to use the results of the Balanced Scorecard in the development of an Innovation Action Plan?
- How to define, measure and monitor objectives in an Innovation Action Plan?

Discussion will be led by…

Jan Peter G. de Otero is an experienced adult and vocational education specialist, with a relevant professional background working as a project manager in the National Service of Commercial Apprenticeship in Brazil. The moderator possesses a master's degree in education by the Pontifical Catholic University of Rio de Janeiro, as well as a certification on Education Quality from the Organization of American States. In the last years, Jan Peter is conducting his Ph.D. research on the integration of TVET in systems of innovation at the University of Osnabrück, financed by the German Academic Exchange Service (DAAD). Since 2018, Jan Peter is working as a consultant on innovation in TVET for UNESCO-UNEVOC.