



INNOVATEC – National session of innovation and technology

Promising Practice

Implemented by: National Institute of Technology (INATEC)

Where: Nicaragua

Status: Launched in March 2021

Summary: INNOVATEC is a national event focused on technical education to foster the creative talent, innovation and learning of students and teachers from all over Nicaragua.

Overview

The National Institute of Technology (INATEC) was founded in 1991 as the governing body of technical and vocational education and training in Nicaragua. It has a national network of

56 Technological Centres,

throughout which quality TVET is provided free of charge. INATEC offers training in

66 technical careers

at the general technical, technical specialist and technical baccalaureate levels as well as complementary and specialized courses in the socio-productive sectors to more than

400,000 students and participants

in various flagship programmes in the community, territory, department and region. Its vision is to position itself as a national and regional reference for training, technical and technological education, with innovative training offers that are adaptable to the country's social, economic and political dynamics.

Description

Aligning with the national plan to combat poverty and increase human development

The INNOVATEC initiative seeks to promote creativity, innovation and technology and is supported by the Government of Reconciliation and National Unity of Nicaragua. It aligns with the national plan to combat poverty and increase human development through education, which is one of the strategic priorities of the Nicaraguan government.

Bringing together teams and projects from all over Nicaragua

The programme incorporates stages such as strengthening skills, project formulation and development, a selection stage, and an improvement stage of the selected projects. All this work culminates in the national event that brings together teams and outstanding projects from all over the country. Students from different universities and high schools can participate in this national event as well as institutions and companies from various sectors.

Increasing exposure to technical and professional education

In the past few years, INNOVATEC has positioned itself as a platform that capitalizes on and gives visibility to the educational work carried out by INATEC, showcasing the talent that has emerged and what training is being provided at the technological centres. INATEC extended its reach to national TV with the INNOVATEC TV programme. In this programme, the best teams from INNOVATEC present their project ideas or prototypes to a group of representatives from institutions and private companies. These representatives act as experts and give feedback to improve the projects.

Objectives

The purpose of this initiative is to promote creativity and innovation among TVET students and teachers and to help them put into practice the skills and abilities acquired in the training processes.

The national session of innovation and technology through education and technical training is unique in the country, in that students and leaders of careers and technical courses strengthen and consolidate experimental research from their theoretical learning.

Outcomes and impact

For INNOVATEC 2022, a total of 104 project ideas were submitted by 520 creative participants. Project ideas were related to different vocational areas such as agriculture and forestry, commerce and service, construction, etc.

The biggest impact of this initiative is the motivation of students and teachers to create innovative projects where together they can put into practice the skills developed in the learning process.

The initiative promoted the collaboration of students and teachers in processes of inquiry and the collective construction of products and services. Students worked together with their teachers to apply the knowledge acquired in training processes. Furthermore, it provided opportunities for students to experience multidisciplinary work and entrepreneurship, which are very much requested by industry to prosper in the labour market.

Challenges

Forming multidisciplinary teams from different technical areas

One of the challenges was forming multidisciplinary teams from different technical areas since students are more used to working with those who share the same technical background. INATEC addressed this by promoting the initiative and encouraging students from different technical areas to apply. Once the multidisciplinary teams developed their projects, a national exhibition was held with the participation of different institutions and companies. These opportunities enabled students to enhance their confidence and presentation skills.

Formulating project ideas

Another challenge was to formulate a creative and innovative project idea. Methodologies such as design thinking, problem tree, and theory of change were promoted among students to facilitate this process and to help them become more creative and innovative.

Supporting and motivating teams

A final challenge was getting the multidisciplinary teams to stay together working as a team until the successful completion of their project. INATEC supported these teams by providing mentors/teachers whose role was to accompany students continuously and to motivate them to work effectively as a team.

Next steps

The next steps to be taken by INATEC are:

- Forming multidisciplinary teams and a network of mentors at the national level;
- Formulating a creative and innovative project idea according to the demands of the economy and society;
- Integrating actions within the framework of the INNOVATEC route from 66 educational programmes of technical education careers in different sectors such as service, hospitality, tourism, agriculture, forestry, industry, construction, art and culture; and
- Integrating new methodologies that contribute to the consolidation of innovation, development, research and development.

Learn more

Maria Esmeralda Aguilar Gutiérrez, Vocational Training Director, INATEC, helped to compile this document.

For more information, please contact:
meaguilar@inatec.edu.ni

To learn more about INATEC, visit:
<https://www.tecnacional.edu.ni>

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unevoc-pp@unesco.org

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