Technical Professional Training for the Fourth Industrial Revolution

THE INTERVENTION, AT A GLANCE

This project will develop micro courses and certificates for technical and technology education (TVET) that will prepare youth for higher value-added fields of work and train them to complete new technical tasks. The project will provide key evidence to restructure traditional TVET training and adapt it for new fields. The delivery of these courses will be made through different channels, such as digital platforms, to determine their efficiency over other alternatives.

WHAT IS THE CONTEXT?

There is uncertainty on the changes that the fourth industrial revolution will bring to work structures. Technological advancement is progressively replacing low-skilled workers and the COVID-19 pandemic is likely to enhance these trends. The difficulties young people are facing in seeking employment have become increasingly evident. The skills and competencies they possess fall short of the needs of the productive sector and, concurrently, employers are finding it difficult to fill their vacancies and to finance investment in training. Although industries have become an increasingly active participant in designing training plans to empower their workers and make them the pillar of their transformation processes, until now, these efforts have focused on executive levels that are generally covered by traditional higher education. For those in the technical and technological education, these options are limited or nonexistent, thereby making it essential to start exploring new forms of training.

WHAT DOES THE INTERVENTION CONSIST OF?

• Identifying skills and knowledge gaps between the demand of the productive sectors and the supply of technical training in Mexico.
• Developing micro courses to meet the demand by companies in different industries.
• Supporting the delivery, monitoring and certification of micro courses based on new technologies and adapted to the Latin American context. This includes the technological support and virtual supplement necessary for the proper delivery of the micro courses.
• Conducting an evaluation of the effectiveness of the micro courses on the learning content.
WHO DOES WHAT?
Each of the intervention activities: identification of gaps, development of micro courses and impact evaluation, will be carried out by the Monterrey Institute of Technology and Higher Education in coordination with the IDB.

WHAT ARE THE EXPECTED RESULTS?
• Diagnosis of the gaps between the demand of the productive sectors and the supply of technical training in different regions of Mexico.
• Technical content of micro courses developed, to meet the demand by companies in different industries.
• Two micro courses developed and delivered to meet the demand by companies in different industries.
• Lessons learned from the implementation process of the intervention.
• Impact evaluation regarding the effectiveness of the various delivery modalities of the micro courses on the successful completion of the course and beneficiaries’ skills acquisition.

WHY IS THIS INTERVENTION RELEVANT?
This intervention will enable us to have a better understanding of the skill gaps between the demand of the productive sectors and the supply of technical training in Mexico. It will also provide information on the degree of propensity to participate in the complementary technical training model through micro courses. Finally, the intervention will provide crucial information on the relevance and effectiveness of diverse forms of training, which can be used latter in other contexts and/or countries.

SCHEDULE

July 2021
Project approval.

End 2022
Diagnosis of the gaps between the demand of the productive sectors and the supply of technical training in different regions of Mexico.
Technical content of micro courses developed, to meet the demand by companies in different industries.

End 2023
Two micro courses developed and delivered to meet the demand by companies in different industries.
List of registered students.

End 2024
Lessons learned from the implementation process of the intervention.
Impact evaluation regarding the effectiveness of the various delivery modalities of the micro courses on the successful completion of the course and beneficiaries’ skills acquisition.