



United Nations  
Educational, Scientific and  
Cultural Organization

UNEVOC

International Centre  
for Technical and Vocational  
Education and Training



## Mapping system response to the COVID-19 pandemic

Promising Practice 2021

## Context

### COVID-19

As a result of the COVID-19 pandemic and the ensuing restrictions, educational institutions across Brazil had to suspend their on-site academic activities.

### Response from TVET institutions

Technical and vocational education and training (TVET) institutions wanted to support the fight against the pandemic. They quickly put their efforts into manufacturing hand sanitizer, personal protection and medical equipment, and supporting repatriated students by providing hygiene kits and donating food.

### Mapping and collaboration

These activities were then tracked through a **mapping system** in order to increase transparency and cooperation with other institutions. In doing so, other public entities, such as city halls, schools, nurseries, and hospitals were able to easily collaborate with TVET institutions to redouble efforts in the fight against COVID-19.

## Overview

**Implemented by:** National Council for the Federal Network of Vocational, Scientific and Technological Education Institutions (CONIF)

**Where:** Brazil

**Theme:** COVID-19 response

**Status:** Programme active since September 2020

*CONIF carries out technical and strategic actions to foster excellence in public education. It is a forum for discussing, proposing and promoting policies for the development of vocational and technological education, research and innovation.*

## Objectives

The key objectives of the system were to:

- **map-out and disseminate information concerning the actions implemented by the Federal Network in the communities where the campuses are located**
- **make it easier for institutions working to fight COVID-19, such as hospitals, to work together with the Federal Network**
- **reach rural communities to help in the prevention and treatment of the virus**



## Mapping system

The institutions within the Federal Network (38 Federal Institutes of Education, Science and Technology; 2 Federal Technological Education Centres, and the Colégio Pedro II), supported by their faculty, administrative staff, students and volunteers, combined their scientific and technological knowledge and skills to produce materials which supported the Brazilian population in their fight against COVID-19.

As a key fixture in the community, the Federal Network was well-placed to deliver actions fighting COVID-19, including teaching, research, innovation, and technological outreach via its network of civil servants and students.

In large and small cities, as well as in remote places where the federal, state and municipal governments often struggle to reach, the Federal Network institutions played an important supporting role. This enabled health professionals to do their job, small-scale rural farmers to sell their products and students and their families to obtain the daily necessities.

In order to show where these actions were happening – and to promote collaboration with other public entities – actions were recorded, defined and categorized, and passed to a team of developers who used mapping software to programme and populate an e-network of services.

The mapping tool provides information on the number of deliveries and actions carried out (searchable in the system by action type, institution, region etc.) such as:

- Number of basic food baskets delivered to students
- Number of litres of hand sanitizer produced and delivered to the community
- Number of litres of hygiene products produced and delivered to the community
- Amount of hospital equipment produced
- Amount of hospital equipment repaired

The tool was disseminated publicly to make it easier for institutions that were fighting COVID-19 to work together. It continues to be updated regularly with actions carried out by both the institutions of the Federal Network as well as those of other collaborators.



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## Outcomes and impact

### Overarching outcome

The overarching outcome was that the mapping system successfully publicized, motivated, and engaged local and academic communities to support the fight against the spread, and the treatment of COVID-19 in Brazil. The programme involved students, civil servants, educators and local communities working together under this common aim.

### Measuring impact

A further positive outcome from the mapping system was its use as a measuring tool to track the size and impact of the Federal Network across all regions of Brazil. This initiative has helped highlight the important role vocational and technical institutions play in contributing to development research and outreach activities both within local communities as well as on a wider scale.

### Beyond COVID-19

The work of the Federal Network not only includes institutional development of its free, public, high-quality vocational education system, but also contributions to innovation, research, and technological outreach across a broad range of development issues. This innovative new mapping system has helped to showcase the Network's transformative power and demonstrated that it is not only capable of changing lives, but also saving them.

## Challenges

### Assessing requirements and information

This involved jointly identifying, defining, and articulating with managers from the entire Federal Network the types of actions against COVID-19 that would be part of the Mapping System. This was necessary so that the data and the way it was presented in the System was relevant and easy to understand by society, making it as effective as possible in the fight against the pandemic.

### System development

To set-up the Mapping System, research was undertaken to find the most appropriate, effective software for developing the tool. Access to *geographical map technologies* was then obtained and in a short time, the developers were able to familiarize themselves with the new technology and create a system that met the requirements. Ongoing improvements to the tool continued to be made throughout the initiative.

### Data input and real-time updates

Once the Mapping System was available online, managers from all units of the Federal Network were encouraged to input information including a description of the actions they were implementing, and the quantity of work carried out. Managers were asked to update the System as often as possible to ensure the data was accurate.

## Insights

### Communication

Messaging and video-conferencing applications were key factors in the success of the project. These tools provided a fast and efficient way of communication. They were needed, not only because the units of the Federal Network are widely distributed throughout Brazilian territory, but also because project members were also physically separated due to social distancing.

### Empathy and motivation

Keeping the team motivated and taking into consideration the state of mind of each team member was crucial given the effect the pandemic has had on everyone. It was important to pay attention to each individual's needs whilst keeping them updated on the project's progress and emphasizing the positive impact their work was having on the fight against COVID-19.

### Engagement and impact

The greatest outcome from this experience was bearing witness to the magnitude of the Federal Network. Not only in terms of its numbers, but also of its capacity to be united, engaged, and focused when faced with a challenge as harsh as the pandemic. The institutions of the Federal Network were able to organize themselves to aid the community to which they belong, contributing to the COVID-19 response in all the regions of the country.

## The future

The actions developed by the Federal Network continue to have high visibility across Brazil. As a result, plans are being discussed to extend this mapping system to other areas of development research and outreach.

Despite the obvious difficulties and uncertainties of working during a pandemic, this initiative has helped reaffirm that investment in education, science, and technology is essential for structural transformations that benefit Brazil's institutions and population. The Federal Network hopes such positive actions as demonstrated through this initiative will promote investment that will continue into the post-pandemic period.

## Learn more

### Contact details:

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The mapping system can be accessed here: <https://covid.redefederal.org.br/>. For more information, please contact: [internacional@conif.org.br](mailto:internacional@conif.org.br).

To learn more about CONIF, a UNEVOC Centre, visit: [www.conif.org.br](http://www.conif.org.br)

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