

Carina Adam

► **Effects of the COVID-19 pandemic on Vocational Education and Training. A best practice example: lecturer development project TRAINME**

Not only did COVID-19 have an impact on Vocational Training in the TVET colleges directly but also on continuous professional development of the lecturers. Classes had to be held online; distance learning and remote teaching were the buzzwords. An entirely new structure had to be designed, both for teaching and learning. TRAINME is a BMBF-funded project for further education of South African TVET lecturers that was hit by the pandemic in the middle of the programme. The project reacted to challenges with great flexibility and substituted large parts of the training with virtual offers.

1. Introduction: what is TRAINME?

TRAINME stands for “Modular Training and Further Education of South African TVET lecturers in Mechanical and Electrical Engineering”. It is a joint project of the Inter-Company Training Centre in Eastern Bavaria (UEBZO) and the University of Stuttgart, funded by the German Federal Ministry of Education and Research (BMBF). The project was initially designed for a duration of 36 months (1/2018-12/2020) and was to cover two test runs of the developed modules and contents.

2. The TRAINME concept

In the first step, the University of Stuttgart identified and analysed the specific needs of lecturers at TVET colleges before the exact training content was defined in close cooperation with the South African Department of Higher Education and Training (DHET).

To ensure a smooth start of the training, the UEBZO invited training participants to a kick-off meeting to introduce the training concept, clarify any technical issues, and answer initial questions.

Since the participating lecturers came with different preconditions and a varying knowledge of the specified topics, a self-study phase guided by the TRAINME team of online coaches was set up before the first practical training.

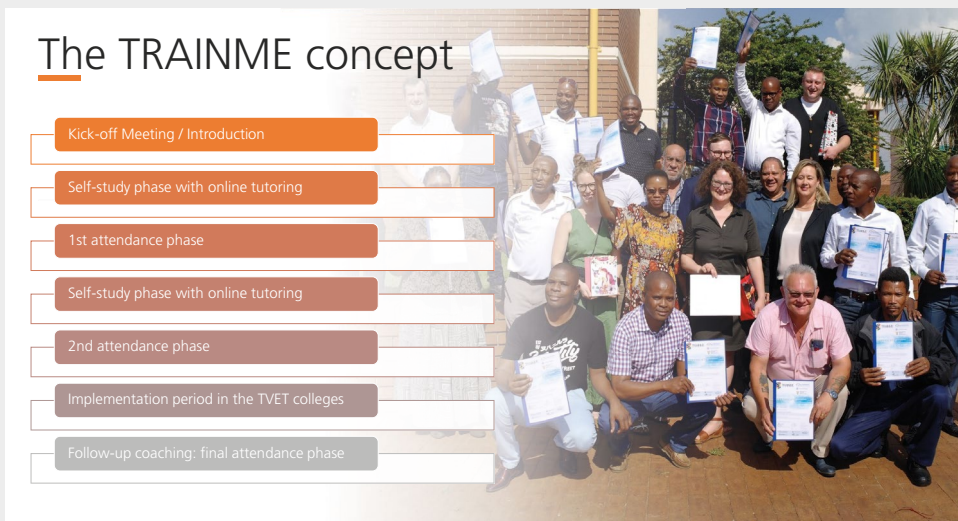
In the one-week attendance phase, the contents of the preceding self-study were reviewed and put into practice. Equipment was handed out, existing material was discussed, and pedagogical as well as practical lessons took place.

This practical training was followed by another self-learning phase, using a learning management system (LMS) with corresponding tasks and again with the participation of the TRAINME mentors.

A second attendance phase was carried out before introducing the newly gained knowledge at the lecturers' colleges.

A few weeks later, the participants met again for a follow-up coaching session where their experiences with implementation were discussed in order to close gaps. The entire training was then concluded with a graduation ceremony (figure 1).

Figure 1: The TRAINME concept



Source: UEBZO

3. Master Trainer approach

To ensure the sustainability of the training, the participants of this first cohort could apply to become Master Trainers, i.e. learning how to teach the TRAINME contents to their fellow lecturers. These Master Trainers should then function as multipliers at the college level and in regional support teams.

The plan was to offer them a course on Adult Education, involve them in the development of the training for the second cohort, and have them teach in the practical phases of the second cohort under the supervision of the TRAINME team.

4. Plan vs. reality

Plan

The initial plan for 2020 was to carry out a workshop with the designated Master Trainers and prepare them for teaching the second cohort with an improved schedule and revised content. An extended kick-off week was planned for March 2020, followed by the usual self-study phase, two practical training weeks in May and June, an implementation phase at colleges, and the final follow-up coaching week in September. In this way, the entire course could have been handed over to the DHET in December, fully evaluated and transferable.

Reality

The abovementioned workshop with the Master Trainers was supposed to take place exactly when the pandemic started to spread on different continents. Accordingly, the first steps were to cancel the Master Trainer workshop and the kick-off meeting for the second cohort. Although in the beginning we thought that we might just have to postpone the programme by a few weeks, it was foreseeable that the project would not be finished in time, so we requested an extension of six months from the funding organization. However, as agreed before, this extension had to be cost-neutral, so the project members decided to temporarily reduce their working time within TRAINME in order to save funds. In the remaining project phase, several adaptations and changes to the initial planning were made.

Adaptations made to the initial planning

A new concept for the training of the second cohort had to be developed.

First of all, the Master Trainer workshop was redesigned into a blended learning format. The contents were made available online, and virtual classroom sessions were scheduled. This change of the plan brought up several challenges:

Participation and access

Not everybody interested in the programme could easily participate as some of the lecturers had only limited Internet access.

Adjustments

The existing online contents (a classic “Train the Trainer” setting) had to be adjusted to the requirements of the South African setting and suitable media had to be selected. At the end, we mainly used WhatsApp, Zoom, MS Teams, and the ÜBZO Learning Management System. The newly emerged problems needed to be addressed first, so we added a module on remote teaching since this was the challenge our participants were most confronted with due to the pandemic and the resulting distance learning.

Motivation

While initially participation and motivation were high, the level of enthusiasm sank as time passed by and the end of the new training arrangement due to the pandemic was still not in sight.

Schedule

At the start of the COVID-19-pandemic, we were still hoping to carry out the second testing of our modules in September 2020 at the latest and finish it accordingly by Easter 2021. However, in September we could not travel or meet in a large group.

Further adaptations and changes

Plan B was to start at a later date with a probably compacted schedule. All arrangements were made for a kick-off meeting with the second cohort in January 2021, but just a few days before it would have taken place, the COVID-19 situation worsened again and everything had to be cancelled.

The worst-case scenario would have been to annul the second testing, close the project, work with the data gathered so far, and offer flexible support to the lecturers.

As the South African lockdown level was reduced again a bit later, another start of the second trial was planned for May 2021. However, with the German travel restrictions still in place, it did not make sense to carry out the training in South Africa.

Further adaptations and changes

In April 2020, only eight weeks before the end of the project, we asked for another three-month extension (until September 2021), which was granted. The current plan (as of July 2021)¹ is to meet with the Master Trainers in September and prepare them to teach the next cohort.

1 The text was written in July 2021. As the project planning is dynamic, please refer to the website for current updates: <https://www.uebzo.de/forschung/trainme> (Retrieved on 29.11.2021).

In the meantime...

Although we were not able to travel and had to spend fewer hours on the project, TRAINME did not stand still. In the end, we even gained valuable time from the effects that the COVID-19 pandemic caused. This additional time was used to revise the teaching contents and the material. Since a good relationship with the first cohort participants had been established, the TRAINME team was asked for support with remote teaching, which we happily provided. The University of Stuttgart took the chance to collaborate with the Technical University of Munich (TUM) and their GIZ project VET College Leadership for Transformation. The TRAINME team had been asked to proofread the Trends Mapping Study on TVET by UNESCO–UNEVOC, which we also accepted. An interactive image brochure of the TRAINME programme was designed by the University of Stuttgart². Another big task was to keep the designated Master Trainers up-to-date and, after some time, also back on track. Arrangements were made for a revised second trial, and a more compact schedule was put together. As was already mentioned, this face-to-face training session scheduled for January 2021 could not take place, so it was moved to an online setting on the UEBZO LMS that had to be continuously taken care of.

With the second extension and still slim chances of holding presence training, we started creating a study book and a teacher's manual for each TRAINME module to be handed out to the lecturers in September 2021 (see Figure 2 on page 125). With the help of this material, the Master Trainers should be equipped to teach the TRAINME contents on their own.

5. Lessons learnt, further challenges, and current status

Trial and error

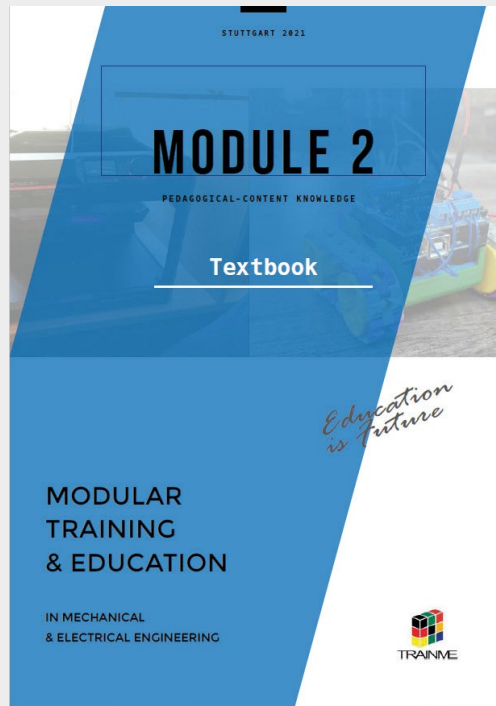
The first phase of our substitution strategy regarding the changes brought to learning by COVID-19 was marked by the trial and error principle. When it came to remote teaching, one simply had to test what worked and what did not. We had to find out the best time slots for online classes, the best provider of video conferencing solutions or virtual classrooms, the most suitable format for study material, the ideal duration of lessons, a good way to keep conversations alive, and the means to stay in touch.

Technical issues

One of the biggest challenges was technical issues. As mentioned above, Internet access could not be taken for granted. Some participating TVET lecturers, or their students, did not have a computer but had to work using their smartphones. Accordingly, the format for provided information had to be chosen carefully with regard to its usability on a mobile phone.

2 See <https://indd.adobe.com/view/19d26479-e832-4f44-8268-3170221fba4> (Retrieved on 29.11.2021).

Figure 2: A textbook to accompany the course



Sources: pictures and graphs by TRAINME (UEBZO and University of Stuttgart)

Personal contact

A very important issue was, and still is, the prior personal contact. We were lucky to know the designated Master Trainers personally as we met several times in 2019 and could establish a good relationship. This trustful basis made communication much easier lowering the inhibition threshold considerably. The participants knew that they could contact us any time without being afraid of asking silly questions.

In contrast to the lecturers of the 2019 cohort, the second group of participants had not met us before they were supposed to start the online seminar in preparation for the practical training phase. As a result, some of them lost their motivation quickly, stopped working on the tasks, and did not respond to any communication by email.

Expectations

Another lesson we have learnt in the last year is not to expect too much from replacing practical training with online or blended learning. There are too many external influences that have to be considered and that are beyond our control. Even for those who were enthusiastic about participating in an online class, the possible learning contents are limited or are at least more difficult to handle than in a face-to-face seminar.

Flexibility

Flexibility is another keyword in this context. You have to be able to react in a flexible way to whatever challenge. It is always useful to have a Plan B, Plan C, and to be spontaneous enough to handle unexpected situations.

Motivation

Another big issue, especially when it comes to distance learning and teaching, is motivation. As mentioned earlier, it is rather challenging to keep your students/participants motivated and to encourage them to continue learning. This requires a lot of pedagogical knowledge, enthusiasm, and varying methods.

Current status of the TRAINME project

We are currently working on a study book and a teaching guide for each TRAINME module. The designated Master Trainers are still in touch with the TRAINME team and are eager to start teaching the contents by the end of this year. We have planned a trip to South Africa in September 2021 to finally carry out the Master Trainer workshop, during which the procedure for teaching the second cohort of TVET lecturers will be discussed and determined. The corresponding kick-off meeting for this second group will take place right after the Master Trainer workshop and will be held by the Master Trainers under the guidance of the TRAINME team.

We are also planning a new set of modules with a focus on digitization for in-service TVET lecturers. The teaching mode of these new modules should again be a blended learning course with self-study phases and live practical training sessions. However, this time we work with a backup solution in case of further restrictions due to the COVID-19 pandemic.