THE WAY FORWARD

It turns out that the average age of teachers in this educational segment is over 50 years. This means that in this age group, in Eastern Europe, their English language skills are usually lower than those of their students.

The need for national language learning materials is higher than usual. In addition, it turns out that the general IT knowledge may be lower for teachers than for students.

The use of LMS is new for both teachers and students. There was therefore a need for separate training of teachers in the use of the LMS system and the systematisation introduced in this project. The same applies to the use of the ZOOM video platform. A separate course was therefore developed for teachers to enable them to use the LMS in a structured way. This was not planned in the project, but experience showed that this was very necessary at an early stage.

The introduction of practice-oriented training in digitised courses is also new, and there is a need for separate training for teachers in this area. Experience suggests that a checklist should be developed for teachers to verify whether they have sufficient knowledge and expertise in all the areas covered by the course. It is not within the budget of this project to create such checklists, but this should be implemented in new projects.

Experience has shown that many of the teachers lack industrial experience from newer industrial companies, which means that a number of technologies and international standards may be unfamiliar. Especially in courses that focus on the needs of industry, we can see that the teachers have too little industrial expertise.

The students felt that they did not receive sufficient follow-up from their own employer. Routines and methods should therefore be developed to cover the students' follow-up and counselling at the individual company. Separate courses may need to be developed so that the company's follow-up manager can follow the courses.

It turned out that some of the students had insufficient or irrelevant work experience for these courses. One way to solve this is to divide the classes into groups where experienced employees can guide younger and inexperienced participants. This option for group work should be considered and tested in subsequent projects. Similarly, a more targeted RPL survey could be introduced at the time of admission to the courses to ensure that those admitted have relevant industry experience. This needs to be discussed in detail depending on the type of course.
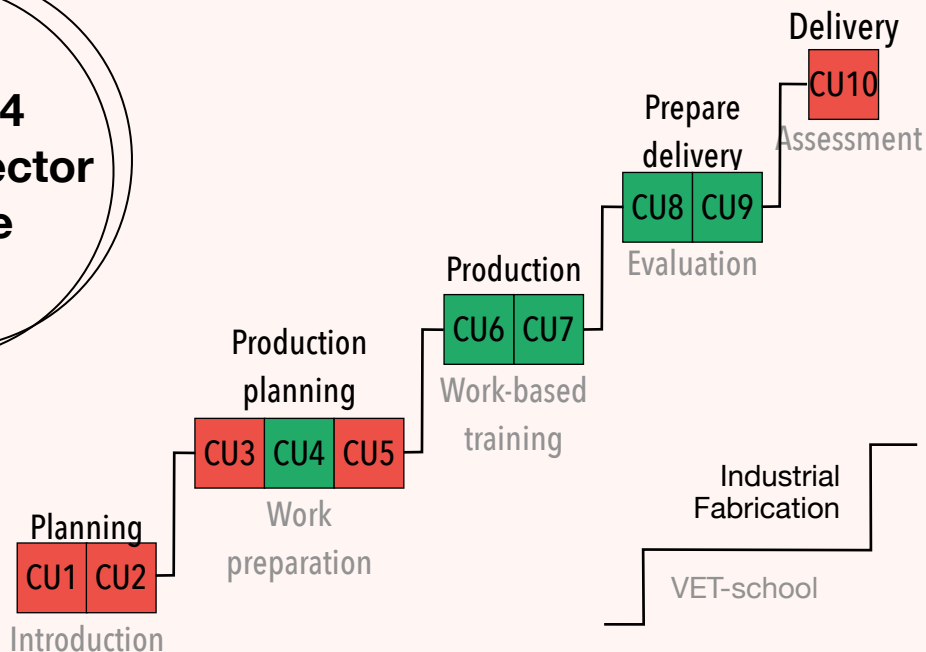
Standard background material was used for these courses. There were no funds within the project framework to customise this. In addition, reference was made to several international standards. These were very comprehensive and, in some cases, only an extract of the standards was needed. This was not possible to implement in the project. Similarly, this creates a general problem where courses must make extensive use of international standards as part of the course material. Here, an agreement should probably be reached with the international standardisation organisation to gain access to the standards for teaching purposes.

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ISO 3834 PED Inspector Course

Delivery
CU10
Assessment

Prepare delivery
CU8 CU9
Evaluation

Production
CU6 CU7
Work-based training

Production planning
CU3 CU4 CU5
Work preparation

Planning
CU1 CU2
Introduction

Industrial Fabrication
VET-school

The abilities and ambition levels are different for the various students when they enrol on this type of course. In the completed courses, there is no differentiation at this level. This issue can be addressed in future projects.

There is a general desire to use their national language both in the use of IT tools and in the development of course material. The expectation for the target group for this type of course should be to be able to collaborate with other international organisations. In this respect, it is important to be able to master an international language in addition to the national language.

It should probably be made clear in the course introduction that it is assumed that the participants will work in companies where international co-operation or international deliveries are an important element and where the language form of the learning material cannot therefore be the national language. It should be noted that several of the standards that companies must use in their daily work are not translated into the national language either. This should probably be discussed more extensively with industry organisations at national level. Within an international co-operation in which PED is an important premise, among other things, students should probably be required to master more than their national language.

There is a desire to utilise modern simulation tools wherever possible and appropriate. Experience from the students' participation shows that there is a desire for a greater proportion of the teaching to be carried out as distance learning so that travelling can be reduced.

The experience of using modern IT tools in teaching has awakened a desire to be able to utilise more modern IT tools. For example, tools in the LMS platform or in Zoom and completely new tools for interaction that can be used to reduce the barrier to asking questions. For example, tools for discussion forums where students can be anonymised in relation to each other. However, if this is to be introduced, we will probably have to require the students' and teachers' language skills to be raised.

This project has omitted to discuss problems relating to the assessment of individual units of competence. It would be natural to address this issue in a new project.