PR1 - Study on 21st century relevance of textbooks and learning content

SUMMARY

The aim of the first working phase (PR1) was to perform a thorough analysis of learning outcomes, curricula, learning materials and applied methods of the initial/basic training of two sectors: Agriculture and Forestry, IT and Telecommunications in all partner countries. The survey was focused on identifying the needs of VET teachers and students regarding textbooks and digital learning materials and asking companies (from the selected two sectors) about their requirements against young professionals applying for their vacancies.

Different methods for multiple approach were applied:

- *desktop research based on the preliminary needs-analysis to learn about the available official textbooks, standard curricula and learning materials related to the initial training (IVET) in all partner countries, in order to get a deeper insight into the similarities and differences among the systems and a detailed overview of the VET System in each country.*
- *Interviews with stakeholders involved in VET education (teachers, students and company representatives)*
- *an online questionnaire for teachers to get a clear picture of their digital skills level in accordance with DigCompEdu and their preferred teaching methods and practices with regard to the application of innovative methods.*

Having the results analyzed in the partner countries, country reports were compiled based on which the Comparative Study was prepared to reveal the current state and needs of the stakeholders of VET in the targeted sectors in Italy, Germany and Hungary.

Desktop research

Analyzation of the initial VET education in the partners countries has shown that although the structure of the VET system is very different, the main trends are close to each other in the three countries. The Italian VET system seems clearer than the Hungarian and German as it doesn't offer vocational qualification at EQF level 2, while in Hungary and in Germany there are special "catch up" and "transition" programs for students challenged by learning difficulties.

Interviews

RESPONDENTS	GERMANY	HUNGARY	ITALY	**TOTAL**
TEACHERS	6	10	5	**21**
STUDENTS	5	15	5	**25**
COMPANIES	2	10	2	**14**

Analyzing the results of the interviews we got the following conclusions.

Teachers: are not satisfied with or even are short of up-to-date textbooks and teaching content in their subjects. It is due to the fast-changing, constantly developing technologies of the industries, mainly in IT and Telecommunications related subjects. To overcome this lack, they need to compile their own teaching materials for which they use resources on the Internet.

Students claim for better structured course materials and new, more complex assessment methods rather than simple grading. Overall, they prefer using digital training materials to paper-based textbooks.

Companies seem satisfied with the obtained theoretical knowledge and practical skills of the fresh graduates or trainees they are contacted with. They mentioned the lack of project management skills and soft skills that are highly needed in real work, such as design thinking, critical thinking, communication skills in the first row. Companies suggest that there should be more autonomy for teachers, more up-to-date theoretical training, closer cooperation with companies.

Based on the results gained from the thorough survey, we can state that there is a defined need for a new model of collaborative learning content development in the selected sectors by all the participants of the learning process (teachers and students) and the end users (companies) regardless of the differences in the VET systems in the partner countries and putting improvement of soft skills of students in front.

Online survey

The questionnaire was available in English, Hungarian, Italian and German and all together 63 respondents filled it in. The questions were also about the availability and usage of the textbooks in the partner countries, and how far were the teachers prepared for applying active teaching methods like project-based learning; new assessment methods, like peer assessment; freely available digital learning contents (OERs) and their awareness of the needs for educational changes in order to reflect on the needs of the labour market of the 21st century.

Some important findings have been resulted that fully support the interviews' results. *The vast majority of teachers claimed that they are not familiar how to apply project-based learning, only a few of them run projects with their students frequently. There are teachers who apply innovative assessment methods, but more than 50% of the respondents have no information about the innovative methods, and other 51% who have heard about it but don't know how it works. Teachers admit that digital tools can support developing the soft skills of students, however, most of them evaluate their digital competences as middle level.*

The figures underline that most of the VET teachers are fully aware of the demand for fundamental changes in their teaching methods, they understand that there is a need for innovative approach in pedagogy because of the new learning attitudes of the millennials. They have recognised the importance of high-level soft skills of their students to be successful in the labour market. However, they admit that they aren't prepared for meeting these demands and developing their teaching methods without support.

The final product of Project Result 1 is a Comparative Study on 21st century relevance of textbooks and learning content.

The next project phase (PR2) will reflect on all these needs and feedback and will develop a valuable training course for teachers preparing them for applying a new model of teaching that integrates labour market-oriented content development and project-based methods in a collaboration with other teachers, students and companies.