



Survey results of VET teachers' digital skills

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Smooth Hybrid and Online Working for VET The (SHOW-VET) project had a 'kickstart' when the results of the situational analysis of VET teachers' digital skills were presented in the project's kick-off meeting in May 2022 in Ähtäri, Finland. The project aims to increase VET teachers' competences on implementation of blended and online teaching, thus, working towards this aim a survey was conducted at the very beginning of the project. This article will describe the general results and highlights areas where additional training would be needed.

Digital survey

An anonymous web-based survey was created by JAMK University of Applied Sciences in collaboration with the other project partners. The aim of the survey was to map VET teachers' current digital pedagogical competences among the four partner countries (Finland, the Netherlands, Italy and Spain). In the survey, the participants assessed their own digital pedagogy skills and prospects for digital activities in their own teaching processes. The survey included 18 questions of which 15 related to digi-pedagogical competences and the last three (3) were open-ended questions for qualitative responses. VET teachers were asked to assess their current digital pedagogy practices by responding to the set statements in the 4-point Likert scale ranging from 1=completely disagree to 4 =completely agree, which also had the possibility to choose an 'I don't know' option.

The survey was conducted using JAMK's Webropol-system in early April 2022 resulting in 218 VET teachers answering to the survey. Nearly two-thirds (64%) of the respondents were men and one third (34%) were women. The majority of respondents (82%) belonged to the age group of 55 years or younger of whom a good a quarter (28%) having less than 5 years and 24% 5-10 years' experience in teaching, whereas nearly half of the respondents (47%) had less than two years of experience in hybrid teaching. VET teachers' (n=218) answers were analysed quantitatively and qualitatively. For the Likert-scale questions SPSS-analysis programme was used to identify frequencies and means of each question, and the open-ended questions (3) underwent an inductive content analysis (Tuomi & Sarajärvi, 2018) utilising the Atlas.ti programme.

Results of the survey

The results of the quantitative survey were grouped into three different clusters: General digital competences for online teaching; Competences for creating learning processes in online environments and Skills and competences for further development.

General digital competences for online teaching,

The first cluster, General digital competences for online teaching, included five different sets of questions relating to 1. own organisation's technological learning environment; 2. searching for and utilising digital materials; 3, copyright competence; 4. web content production and 5. information security and data protection.





Overall, the results indicated VET teachers' having good competences in general digital skills the average scores ranging from 2,8 (copyright competence) to 3,4 (own organisation's technology). Deeper statistical analysis revealed that 61% of the respondents do not utilise international and 52% do not use national databases to search for digital materials for their teaching. Also 37% of the respondents reported that they were not sufficiently aware of their country's specific copying licensing policies, and 44% were unaware how to use the Creative Commons licencing system.

Similarly almost half of the teachers (49%) were not familiar with the EU's GDPR requirements for hybrid and online teaching.

Competences for creating learning processes in online environments

The second cluster, Competences for creating learning processes in online environments, also included five groups of questions. When looking at the average results of each question group, the figures are fairly similar. The lowest scores were displayed in feedback and assessment (2,8) and planning online teaching (2,9), whereas the remaining groups had very similar scores; building interaction and teamwork (3,1); guidance in online (3,0) and learning tasks (3,0). However, when digging deeper in the statistics, some differences were found.

VET teachers' scores indicated that 43% of them do not use digital technologies to give feedback and 52% do not utilise interactive tools for self- and peer-assessment. In planning online teaching, the scores revealed that 38% of the respondents do not use collaborative digital tools or interactive teaching materials (46%) and 48% of them do not co-operate actively with companies specific to their fields. When asking VET teachers about building interaction and teamwork, it was found that 32% do not use varied methods to create feelings of participation or team building (42%) in digital environments. Statistics also revealed that a sizeable number of VET teachers do not engage students (35%) or colleagues (44%) in digital learning material production.

Skills and competences for further development

The third cluster included three groups of questions covering the areas of 1. developing and sharing my own digital competences; 2. using and developing activating teaching methods, and 3. gamification as an activating teaching method in online learning.

When evaluating one's own digital competences the scores were high (65% or more) in five out of six statements. Only one statement differed as 54% of VET teachers indicated not knowing or using national or international teacher networks to maintain their digital competences. Looking at the answers in using and developing activating teaching methods, the scores exposed that 60% of VET teachers were not aware of activating teaching methods for online environments. Likewise, for the majority of the respondents (61%) using gamification in online teaching was not a familiar method.



Training, resources and confidence building wanted

The qualitative analysis of the open-ended questions reinforced the points raised from the quantitative survey. When asking VET teachers about *how they would like to develop their competences as a digital teacher*, the majority reported wanting to learn more about how to use different digital resources in a pedagogically appropriate way. Notions such as how to engage learners, increase participation, build successful and varied learning processes in digital learning environments were common. Many wanted to gain more confidence in teaching their subjects using appropriate digital tools in hybrid or online contexts.

The second open-ended question formulated as, *what would you need from your educational institution to develop your digital pedagogical competences*, was answered a surprisingly parallel way – the teachers wanted extra training. However, not just any training, rather more specific and targeted training to meet their specific needs. For example, interactive tools, cybersecurity, refresher courses with industry experts, tips about digital tools and programmes as well as teamwork were mentioned. In addition to wanting more training, the VET teachers hoped to get appropriate time and other resources to develop their digital pedagogical competences.

The last question was reserved for any other comments and a number of varied notions were made that echoed the results of the previous questions. However, one noteworthy point was raised relating to students' digital skills and learning preferences. Some teachers commented that there should be time and space to have dialogues with students to understand their views, skills and the emotional aspects of digital learning.

Conclusions

The situational analysis of VET teachers' competences on implementation of blended and online teaching in four partner countries, highlighted VET teachers' willingness, and areas for upskilling competences. Based on the analysis of the survey, four main concluding aspects and suggestions for the next steps are emphasised here. Firstly, all teachers regardless of their age, experiences in teaching or field of expertise, can improve and further develop their digital-pedagogical skills.

Everyone wanting to improve their skills should be given these opportunities and offered places to practice online teaching. Secondly, ways and methods to improve interaction, collaboration and networking with students and other stakeholders in digital environments would be required. Thirdly, initiatives to cooperate with colleagues, students and industry representatives when creating learning materials and designing digital learning environments are recommended. This would require analysing and selecting appropriate digital tools for the chosen pedagogical ideologies and practices as well as identifying ways for assessment and feedback to support them. Lastly, it is essential that VET teachers are aware and follow the necessary guidelines issued by both European and national level authorities related to working in digital environments.

Supporting VET teachers' confidence and competence building in digital-pedagogical aspects, will offer one way to maintain high-quality VET education and increase the profession's attractiveness.



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References:

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