Digital Education for Food Entrepreneurs

EVALUATION OF THE SELFIE TOOL ASSESSMENT RESULTS

Digital Readiness for Agri-Food Entrepreneurship Training: Addressing the Digital Competence of VET Educators

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Brief introduction

The SELFIE tool was developed by the European Commission for schools to reflect on and assess their digital capabilities. It was used in this project as it is online and freelyavailable. This tool was specifically designed for use in schools across Europe and is available in over 30 languages, including project partner languages. Using a variety of questions, this tool was used to gather the opinions of vocational education and training (VET) educators with regards to their use of digital technologies for teaching and learning. For this project, the SELFIE tool was distributed to four school environments throughout Europe. Two of these are post-secondary non-tertiary level education facilities and two are upper secondary vocational level education facilities. All participants were employed as educators at these locations.

This report outlines the perceived capabilities of VET educators, as found through employing the SELFIE tool, to incorporate digital technologies into their teaching and learning environments. Results highlight the various areas which need to be addressed for VET educators to feel confident in their digital capabilities. Through analysing the SELFIE tool results, it is evident that VET educators require an increased number of teaching and learning resources, in particular those which offer information and guidance on how best to deliver online courses and what supports may be used to enhance online learning environments. These findings will support and guide the development of digital tools and resources to upskill VET educators, ultimately resulting in an agri-food sector that is better-equipped to navigate online environments.













Overview of Areas

The SELFIE tool collects information on how digital technologies are used to support teaching and learning in schooling environments. Information is gathered relating to a number of different areas in which digital technologies may be used. These are; 1. Leadership, 2. Collaborating and Networking, 3. Infrastructure and Equipment, 4. Continuing Professional Development, 5. Pedagogy: Supports and Resources, 6. Pedagogy: Implementation in the Classroom, 7. Assessment Practices, and 8. Student Digital Competence. Participants were asked to highlight the areas they are aware of and utilise digital technologies in. For each area, the scores gathered by partners were collated, with their cumulative scores depicted in Image 1.

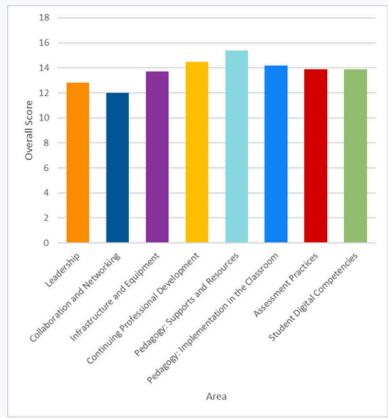


Image 1: A graph depicting which areas VET educators use digital technologies in their teaching practices.

VET educators use digital technologies the most for supports and resources to accompany their teachings. This suggests that educators enjoy using and are interested in having a range of supportive digital resources available to them. Conversely, digital technologies are not often used for collaborating and networking. Considering the positive view VET educators reported having towards supports and resources, future developments of these should focus on enhancing digital collaborations and networking. These collaborations and networking opportunities may be at a variety of different levels, such as within a classroom at an educator-learner level, between educators within one organisation, or across multiple organisations.







Leadership

The first area investigated in the SELFIE tool is leadership. This relates to where digital technologies are used in teaching and learning environments. The resulting scores for this area are depicted in Image 2.

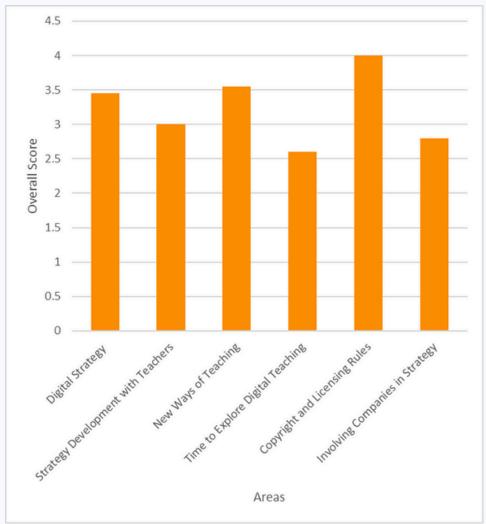


Image 2: A graph depicting the areas in which digital technologies are used most frequently in teaching and learning environments, as reported by VET educators.

Educators are confident in the availability of digital technologies information about copyrights and licensing rules. However, there is a clear shared perception from educators across the project partners that a lack of time to explore digital technology exists as a main hindrance to educators' skill development. With huge variations in individuals time availability and commitment abilities, setting a definitive repeating timeslot dedicated to exploring digital teaching is a challenge. A potential solution to this issue would be to develop an easily accessible online training course with on-demand resources and information as opposed to time-specific training slots.







Collaboration and Networking

Following on from leadership, educators were asked about their agreement with a range of statements in relation to their use of digital technologies for collaborating and networking activities. The results of these can be found in Image 3.

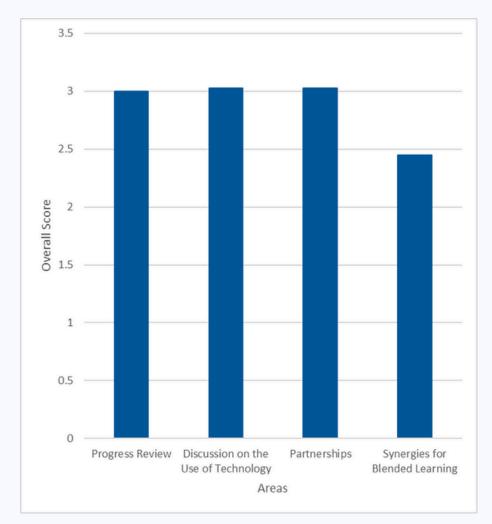


Image 3: A graph depicting the different collaboration and networking activities that digital technologies are used for in teaching and learning environments, as reported by educators.

The area that Educators reported being using digital technologies the least is synergies for blended learning. Since the Covid-19 pandemic, blended learning has become a key element to incorporate into teaching and learning environments. This result suggests that educators lack confidence in building and managing blended learning environments. To support educators in overcoming this challenge, supports developed in the future should focus on the benefits of, and how best to employ, a blended learning environment. This would give educators the ability to support learners who may not be able to attend all inperson lessons. Additionally, offering course content online would allow learners to return to and revise topics they may have found particularly challenging.







Infrastructure and Equipment

Infrastructure and equipment relates to the supports available in teaching and learning environments for using digital technologies. Educators were asked to identify the areas they consider well-supported. These results have been outlined in Image 4.

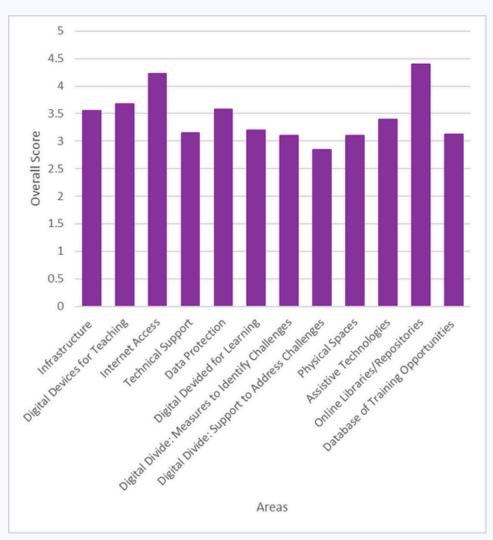


Image 4: A graph depicting the infrastructure and equipment supports available in teaching and learning environments, as reported by educators.

Educators believe they are well-supported with good internet access, digital devices that they may incorporated into teaching, and the availability of online libraries and repositories for course content. Conversely, educators feel that access to support when they face digital technology challenges is lacking. It would be beneficial for future resources to include details on common barriers encountered while digitally upskilling and how best to prevent or overcome them. Offering this information in the form of an open, online resource may be better than as a scheduled training session, as educators would be able to return to the resource as and when issues occur.







Continuing Professional Development

Educators are expected to remain up to date with content relating to their specific role. To do so, it is essential that they partake in continuing professional development (CPD) activities. These are often in the form of online training sessions, and collate the latest information, practices and recommendations in a given area. Educators' opinions on their CPD needs, experiences and awareness of available CPD opportunities are depicted in Image 5.

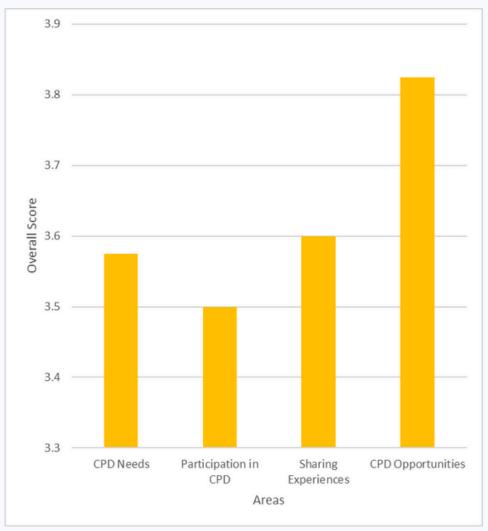


Image 5: A graph depicting educators' CPD needs, experiences and awareness of opportunities, as reported by educators.

Educators are highly aware of the CPD opportunities available to them. However, their participation remains low. This may potentially be because of the time needed to commit to extra-curricular activities and the often time-specific nature of online training workshops. To overcome this issue, CPD activities may gain higher attendance if they are made available on-demand. This will give educators the flexibility to complete them at a time most suitable to them.







Educators were asked to score their abilities in using digital technology for a range of teaching and learning activities, the results of which are seen in Image 6.

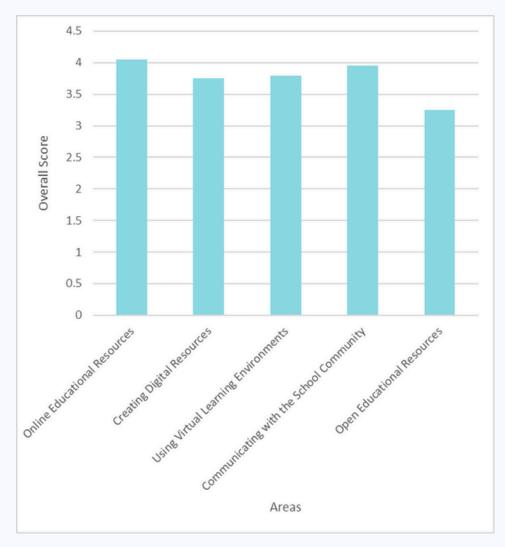


Image 6: A graph depicting the teaching and learning areas which educators' are confident in their abilities to incorporate digital technologies, as reported by Educators.

Educators are confident in their ability to access and integrate online educational resources into their teaching and learning environments. Similarly, they are confident in their abilities to communicate with the school community through digital technologies. However, educators report a low level of confidence in their abilities to use open educational resources. These are teaching and learning materials created to be free for the end user, in this case educators, to own, share, and in most cases, modify. In order to overcome this, it is essential that open educational resources are more heavily promoted to educators.



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Pedagogy: Implementation in the Classroom

Also falling under the heading of pedagogy, is that of implementing learning into the classroom environment. Educators were asked to score their confidence in using digital technologies for various teaching activities. The scores of which are outlined in Image 7.

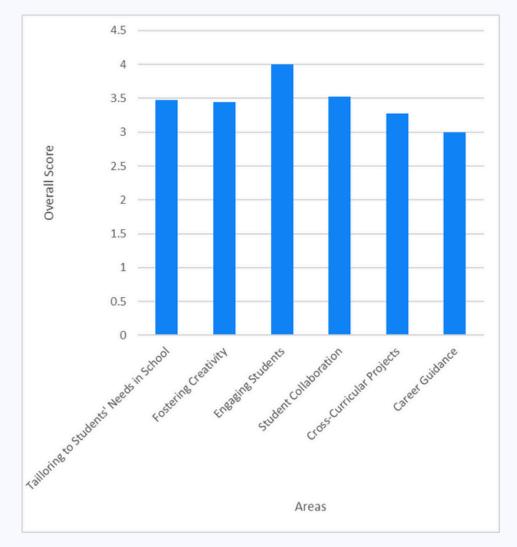


Image 7: A graph depicting educators' confidence in using digital technologies for various teaching activities, as reported by educators.

Educators generally feel that they successfully incorporate digital technologies into their teaching to engage with their students and create an environment which fosters creativity and collaboration. Conversely, they are not confident in their abilities to offer career guidance support. Though it is not possible for educators to have expertise and advise in all existing fields, ensuring that they are well connected to others will enable them to introduce their learners to individuals from a wide variety of backgrounds.







Assessment Practices

This topic, assessment practices, relates to how educators use digital technology for assessing and reviewing learnings progress, with results depicted in Image 8.

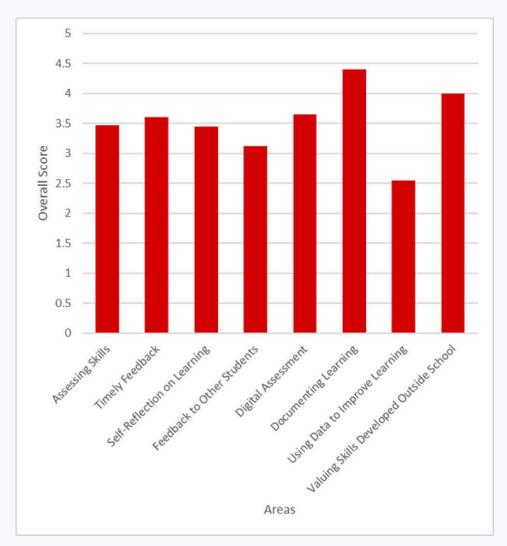


Image 8: A graph depicting educators use of digital technologies for assessing learners progress, as reported by educators.

Educators frequently use digital technologies for documenting learning. However, they are not confident in their abilities to use digital technologies and date for improving learning experiences. Given that educators feel positively about online supports and resources, developments of these in future should offer information on how to collect, understand, and utilise data to improve teaching and learning environments.







Student Digital Competence

Findings regarding students' digital competence in a range of areas relates to how it is observed by educators, with results outlined in Image 9.

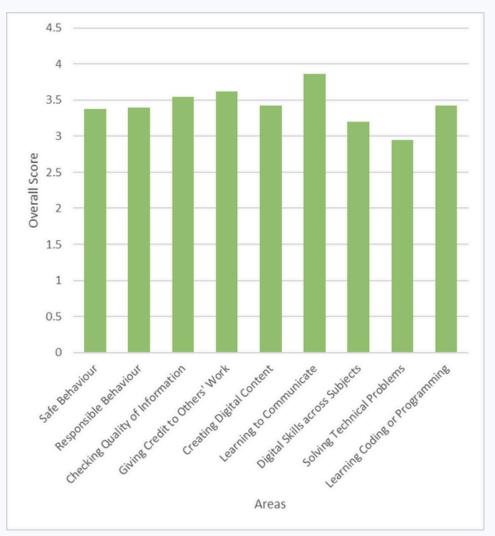


Image 9: A graph depicting the cumulative scores gathered from the SELFIE tool relating to the digital competencies of students in a range of areas, as observed by educators.

Overall, educators report believing that students are digitally competent but lack the ability to overcome barriers as and when they occur. Though developing counteractive strategies may more so involve students directly, it is also critical for educators to act as a source of support and help when needed. This subsequent impact on students learning is another reason why supporting the continued upskilling of educators is critical for the success of their teachings.







Additional Information

Educators were asked a series of additional questions which did not fall into any of the above areas. There related to the usability of technology in their workspaces, barriers which may inhibit them from incorporating technologies, factors effecting blended learning efficiency, the usefulness of CPD activities, and their personal confidence in using digital technologies for various tasks. The results are depicted in Image 10.

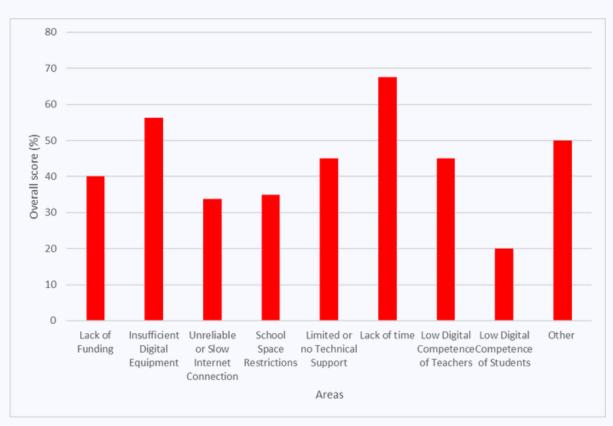


Image 10: A graph depicting factors inhibiting the use of technology in teaching and learning environments, as reported by educators.

Educators believe the main issue impacting the use of technology in teaching and learning environments is an overall lack of time to explore such technologies. In recognition of this, it is essential that training courses, supports and resources are available on-demand, rather than restricted by certain timeslots. This will enable educators to partake in the relevant training at a time which works with their schedule. Additionally, it offers the flexibility to begin a course, complete another activity, and come back to the course later to continue, rather than having to complete the entire session in one sitting.







Negative Factors for Blended Learning

Educators were asked to identify the negative aspects they perceive in relation to blended learning environments. The results of this are outlined in image 11.

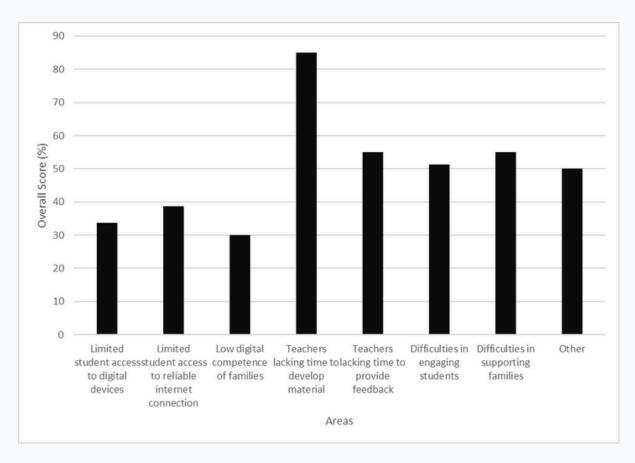


Image 11: A graph depicting the negative aspects of blended learning, as reported by educators.

It is evident that for educators a lack of time is a large issue impacting their abilities to incorporate blended learning into their teaching and learning environments. This is specifically with regards to developing blended learning materials. A potential method to tackle this, is to offer resources which outlines how best to develop a blended learning environment and examples of tools which may be useful to incorporate into this environment. This would act as a resource educators could continually return to while developing material.







Positive Factors for Blended Learning

Educators were asked to highlight the positive aspects they perceive in relation to blended learning, the results of which are outlined in image 12.

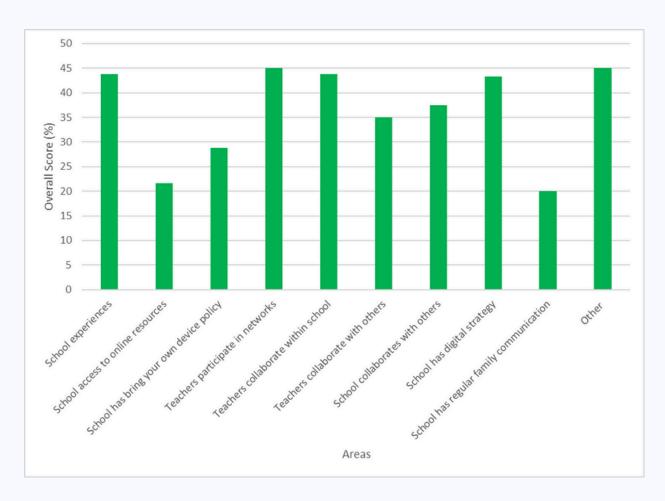


Image 12: A graph depicting the positive aspects of blended learning, as reported by educators.

Educators are aware of the benefits of networking with other educators. In doing so, educators can share their skills, ideas, and experiences with others. Additionally, networking with others who have experienced and overcome similar situations may support and guide educators in resolving issues and overcoming challenges. Offering a platform for such communication and ensuring educators have the ability to confidently use this platform for networking and connecting with others is a critical move to support their continuing growth and development.







Usefulness of CPD Activity

Educators were asked to identify the usefulness of various CPD activities, the results of which are outlined in image 13.

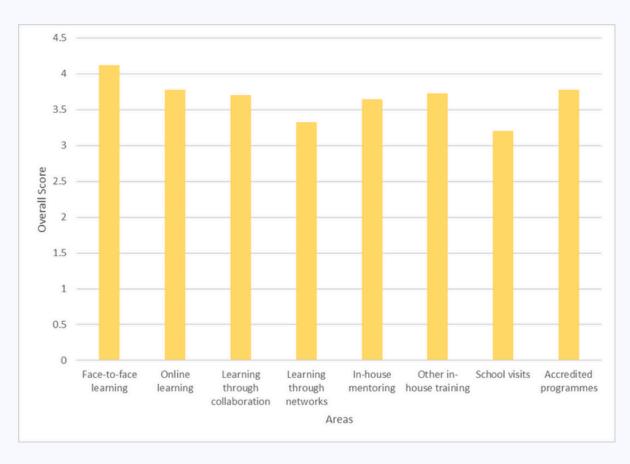


Image 13: A graph depicting the scores gathered from the SELFIE tool relating to educators' perceived usefulness of various CPD activities.

In relation to CPD activity and its usefulness, educators consider face-to-face learning the strongest method of partaking in CPD activities. Online learning is also viewed positively., These findings together suggest that perhaps offering a mix of in-person and online CPD activities is the best way to appeal to a range of learning styles and ensure maximum participation from Educators.







Confidence in using Technology

Educators were asked score their digital capabilities in completing various teaching and learning related activities, the results of which are outlined below in image 14.

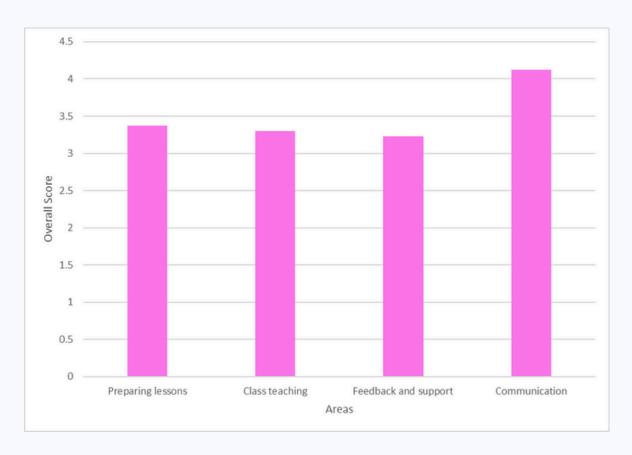


Image 14: A graph depicting educators digital capabilities for completing various teaching and learning related activities, as reported by educators.

Educators are confident in their abilities to use technology for communication, but lack such confidence for preparing lessons, teaching classes, collating feedback and offering support to learners. Future supports should work towards ensuring educators are aware of the tools available to them to help with incorporating technology into their teaching and learning environments. This will ultimately support their progression towards a more blended teaching and learning environment.





Conclusion



The findings of this report emphasise the significant role that the SELFIE tool plays in assessing and supporting the enhancement of digital technology knowledge and skills within teaching and learning environments throughout Europe. The results of this analysis indicate that distinct gaps exist in educators' digital capabilities, particularly in relation to using technology to create blended learning environments and to monitor learners progress. These findings may be used to guide the development of future resources and tools to support educators in their digital upskilling. A key aspect of such resources and tools should be their on-demand availability. This will accommodate an array of different working schedules. Ultimately, the success of transitioning teaching and learning environments towards being more digital will rely on the continuous upskilling of educators. This report, through highlighting the current state of digital competence within education, may be used as a roadmap to guide the creation of tools, resources and training materials for VET educators digital upskilling.



