**BREATHE THE FUTURE-HYBRID EDUCATION IN VET**

Project No: 2021-2-PL01-KA220-VET-000050664

# PR1: Global report about the VET hybrid education focus group

Developed by IPSantarém

March 2023

**Index**

# REPORT

## 1 Context of the application of the questionnaire

| Country | Context of the application of the questionnaire | Participants |
|---|---|---|
| **Cyprus** | Eurosuccess Consulting organised its focus group online. The participants were VET experts, business tourist experts and academic experts. First, a presentation was made by the host organisation to introduce to the participants the proposed hybrid VET educational model and afterwards the participants had the opportunity to ask questions. Finally, a discussion followed regarding the advantages and disadvantages of hybrid teaching in general and about the suggested educational model. | 4 |
| **Greece** | The focus group was applied F2F, at one of the biggest VET providers in Patras, Greece, on the Thursday 16th of March 2023. It lasted and had the duration of 2 hours and 30 minutes. <br><br> The focus group started by presenting the hVET project and its promotional material (website, brochure etc) the partners and the aims of the project. Then an introduction to the hybrid VET educational model in detail took place. <br><br> Then, the questions were asked to the participants orally in a way of discussion, but also by presenting them on the screen giving the participants the opportunity to elaborate his or her personal opinion and share the experience they got. | 6 |
| **Poland** | The focus group was conducted on 14 March 2022, on the ZOOM platform. Five teachers, working in VET schools, took part in the interview: | 5 |
| **Portugal** | In Portugal, the focus group was applied online, trough the Zoom platform, on the 2nd of March 2023 and had the duration of 90 minutes. After a brief presentation of the hVET project, the hybrid VET educational model was presented in detail. Then, the questions were asked to the participants orally, in Portuguese, but also by presenting them through a PowerPoint. Each participant was given opportunity to clearly present his/her opinion about the questions asked. | 6 |
| **Turkey** | In person or online meetings. | 8 |
| | **TOTAL** | **29** |

For each of the following sections about the results, a summary is presented, followed by the detailed presentation of the results. Some transcripts of the participants answers are also presented by country:

- Cyprus (Cy)
- Greece (Gr)
- Portugal (Pt)
- Poland (Pl)
- Turkey (Tk)

## 2   Results of the application of the focus group.

### 2.1   Questions about the hybrid VET educational model.

**Summary**: When asked about the hybrid VET educational model, many participants of the focus groups considered it well-grounded, articulated, analytical, helpfull and mostly functional for the hybrid classroom. The mains strengths stressed were being practical, keep the students motivated and reduce dropouts, involves companies in the educational experience (creation of curriculum, during training, etc.).

Nevertheless, some mentioned that is a challenging model to the teacher and could be difficult to implement in courses with a high practical hands-on component - needs adaptation and specific resources that can be used simultaneously F2F and online. Therefore, practical examples are needed. Another difficulty is to engage and keep the VET student motivated along time. Some companies could have reluctance to show to the students' confidential situations (such as some technologies used).

1.1. About the strengths of the model concerning the facilitation of VET' students learning and keeping students motivated, some participants mentioned that:
- This model could, in fact, keep students motivated because it starts from themes or questions that may interest students (Pt).
- The hVET have specific characteristics (they like mostly practice tasks) and this model goes in that direction (Pt).
- Engages companies in the educational experiences, which is a powerful idea (Pt).
- It is a model suited to disruptive contexts, such as the pandemics (Pt).
- This model is grounded in practical activities, which could better motivate and engage the students (Pt).
- It is an adequate model for modular training (such as micro credentials) (Pt).
- The participants said that it can be effective to reduce dropouts. Because students go to school less. Students go to school less than normal education. By devoting more time to social activities, they can participate in more social life outside of school (Tk).
- The participants said the hybrid VET educational model is adequate for the usage of digital technologies because you must know how to use a computer also able to use webcam with some special software's (Tk).
- The participants mentioned that the proposed model of hybrid teaching is practical and useful as it prepares both VET teachers and students in face-to-face teaching. A proposition was made regarding the 7 E teaching model. A participant suggested that should be a phase 1 were both VET educators and students have the chance to meet up in face and break the ice between them. In phase two, participants will continue with their education online and in a third phase they will meet up again after the completion of the course. Also, it was mentioned that the HVEt educational model is adequate as it combines both online and face to face teaching giving the opportunity to the participants to be interactive and self – motivated (Cy)
- Another teacher pointed out: "In pandemic we had hybrid education. It was more difficult than online classes. Students took advantage of that: they did not want to get up, they were

on holidays during the classes. It did not happen always and not all of them did that, of course. The engagement was very low." Another teacher noted: "That's true, but it's harder to get commitment from students in practical jobs - cooking, hairdressing. We can't enforce the manual activities that are needed during exams." (Pl)

- Another participant added: "It's not a question of the profession or the preparation of the teachers. Students' engagement depends on how much they want to benefit from the classes in any form. For young people, online/hybrid teaching is difficult, but I see an opportunity for this type of solution with adult learners." (Pl)

- Another teacher evaluated the Model as follows: "These 7 elements are nicely described. Will the student want to benefit from hybrid learning? It is not up to us anymore. We can build students' engagement. Nowadays, teachers are talking about moving away from assessing students with grades. The focus is more on the intrinsic motivation of a student. However, Gen Z is not like that - they want to get something, they are specific with what they want. The theories are divergent, but they have points in common. If a student is ill or has phobias - they cannot go to school in the long term – they can join hybrid classes. In the case of adult learners, hybrid education is possible. Adult learners are the people who care about education, they want to participate in the classes, though sometimes they cannot participate in face-to-face classes, e.g., due to the distance. Therefore, hybrid education is possible for adult learners – adults want to be engaged in hybrid classes." (Pl)

- It will work as long as the students are really aware of the objectives and the purpose of it. What they will gain by implementing it. (Gr)

- Step by step procedure always helps. Student centered and well targeted. (Gr)

- Some different approach of exploiting the great Greek environment in educational aspects brings back the good old times of AGORA in Ancient Athens. (Gr)

- Companies and VET schools will finally have a common roadmap. (Gr)

- Keeping students focused and motivated is always a challenge. With this structure we need to implement the steps to our everyday routine in a common framework and without improvising. (Gr)

1.2. Do you find the hybrid VET educational model, proposed by the hVET project, adequate to teach vocational skills remotely?

- Although the competences development has a strong focus in "action" and "doing," the teacher, through this model, could be able to do this if strongly connected with companies (Pt).

- Engages companies in the educational experiences, which is a good idea (Pt).

- Teaching professional competences online needs adaptation and specific resources that can be used simultaneously F2F and online (Pt).

- The companies must be consulted frequently about the implementation of this teaching model. This is mostly important during the VET' students' internships (Pt).

- The participants thought that student who are not in class, made mistakes while practicing. It is hard to correct. Sometimes we lost internet connection. Students do not have all the materials while hands on lessons. So that is the biggest problem (Tk).

- Participants mentioned that there is a hybrid advantage in recording the lesson/course and that although for some vocations might be difficult to apply this proposed teaching model,

but it can be adjusted to the needs of VET educators and students. Therefore, they think the hybrid VET educational model is adequate to teach vocational skills remotely. Finally, participants said that practical training should be taken into consideration (Cy)

- One participant referred to the element "Engagement": "Depending on the profession taught in the hybrid model - engagement will vary. It is difficult to enforce engagement in an occupation such as bricklayer. The other students will do the tasks in the studio and online learner will just observe them. How much will he/she gain from this? The teacher can evaluate it later, find out how much knowledge the student gained, but he/she will not acquire practical skills in this case." (Pl)

- The little practical nature of the Model was also pointed out: "My general reflection: all these 7 moments based on the 7E teaching model are more cognitive than practical. Employers are practitioners and not theoreticians. The model is meant to promote close cooperation with companies. The authors of the model indicate that the hybrid teaching model in VET promotes close cooperation with companies - my doubt is that the employers will not be interested in listening about the 7 moments. The employer is not interested in this conceptual level. What is important for the employer is the result of work visible in the form of the implementation of professional tasks at the workplace. On the other hand, VET is on the side of the potential employee - the employer is less interested in what measures are taken in the process of VET (the model refers to this) - only what is the effect of the measures taken - the effect expected should be the efficient and effective performance of vocational tasks at the workplace by the student - the potential employee". (Pl)

- This is confirmed by another teacher: "Adult education would benefit from hybrid education. It is also an interesting approach for the children who cannot attend classes face-to-face due to different reasons." (Pl)

- Participants pointed out the difficulties of implementing the Model: "I remember the first online practical classes... painting and decorating classes - I discussed the tools and how to use them. The first reaction from my students was: "I can't do this because I don't have these tools at home." It was a huge obstacle for us. The students wanted to do the task, but they did not have the tools. Theoretical subjects can be taught with adults and youth. However, it will not work in the case of practical subjects. We cannot replace a brick with a video... We cannot replace hair with a video. My second thought: I wonder about the tools teachers will have. If teachers have a few cameras in the classroom and teaching materials that are interesting, the students will be eager to work. Creating educational materials by oneself is difficult, the teacher does not always have time to prepare them". (Pl)

- The benefits of implementing the Model in hybrid teaching were also enumerated: "Individual teaching is very expensive. It is almost PLN 20,000. for 16 h per week. It can be provided remotely at the request of a parent or an adult student. For example, students with social phobia do not want face-to-face contact" and "Students who, for example, had an accident, can use the hybrid to attend lessons". (Pl)

- I.T. is always on a screen, thus easy to remotely implement. What helps here is the structure to follow. (Gr)

- The skills to be taught remotely have nothing to do with the technical approach on the details, but the soft skills to be worked on the students. A similar thing happens in practice in companies. (Gr)

- The structure proposed is well analysed and if there is a constant support (remotely) the result will be great. (Gr)
- Since we solve the problems of infrastructure (material and non material) we can easily implement an adequate teaching framework for non F2F procedures. (Gr)
- Having an online roadmap and hints and tips for implementation it will work properly. (Gr)

1.3. How do you envision the companies' role in the hybrid VET educational model, proposed by the hVET project?

- The role of companies is fundamental and is a strength of this model (Pt).
- This model prepares students to teleworking, which is a model already preferred in some companies. For example, is very suited to IT contexts, where the work is mostly arranged by objectives, and not working hours (Pt)
- A close articulation with the companies is a necessary condition, and this model contemplates it. However, a close articulation between the VET institutions, VET teachers and the companies, during the internships is also fundamental (Pt).
- This model also potentiates the creation pf a curriculum with the companies, better suited to their needs (Pt).
- If local companies are involved during all moments of the VET students training, this could be helpful for their competences development (Pt).
- Companies save both time and money and at the same time they get to educate and train their employees. Also, they should take into consideration the fact that the proposed educational model should balance face to face and online training. Finally, it was mentioned that someone who is unable to be present at the training has the opportunity to continue their training online (Cy).
- The participants of the focus group appreciated the inclusion of companies in the Model: "I like the idea of involving companies"; but at the same time, they expressed some concerns about it: **"**There is a shortage of workers in the construction profession, so employers want a wider collaboration with students than just apprenticeships. But do you think the employer will show their technology to the apprentices? I am not talking about the construction industry. For example, in logistics, some things are confidential. If you want to take a picture of something, you need permission to photograph a machine to show it later at school. Will it be possible to take a camera into the company?"; "I am afraid that using a camera in the employer's premises will be impossible"; "Companies are afraid. It is not clear who will be watching them. In our local company not, every employee has access to some places – it is confidential even to them". (Pl)
- There is no VET without companies. Apprenticeships and practical training is the essence of VET. The companies role is significant thus needs a total support in the implementation of this model. (Gr)
- Finally we see in a proposal the role of companies. Lets analyse it more with practical steps on their specific contribution here. (Gr)
- For I.T. jobs the remote working is a must in our times. This will be the case in most of the jobs in the few next years. We need to understand this and prepare our students ASAP. (Gr)
- Companies and VET providers need to speak the same language at last. This model helps with the translation. (Gr)

- We now got the framework and we also got the tools to bring Companies in their interconnected role with VET providers and students. (Gr)

## 2.2 Questions about hybrid teaching.

**Summary**: When questioned about the factors and challenges that can influence hybrid teaching, the participants of the focus groups mentioned ideas related to: the capability of communication of the teacher, for example, to keep the focus of the students, personal relation between students and teachers – keep students motivated and attend to their specific needs, ability of creation of innovative educational resources for hybrid settings and usage of specific strategies on hybrid educational contexts (e.g. defining the goal of the lesson at the beginning of the class is essential for the students work).

Other situations about the teaching environment were also mentioned, such as, the need of specific infrastructures and equipment (e. g. PC, microphone, speaker), stable and fast internet connection, good IT support, an appropriate scenario for teaching and concerns about data protection. Some participants also referred the peculiarities of the modern VET learner, such as an inability to learn trough technologies, and the importance to give attention to eventual the psychological problems of the students.

About effective digital tools, Mentimeter, Microsoft Teams, Moodle, Office 365 (OneNote – private teacher space and collaborative working space), Google suite (for sharing resources and collaborative work), Nearpod, EduWall, Canvas, Toontastic, Powtoon, Zoom, Kahoot and Jam board.

2.1. Based on your experience, what are the three main factors that might be affecting hybrid teaching and how can we overcome these? Please provide specific examples and solutions.

2.3. What was the greatest challenge you encountered when delivering a hands-on subject in hybrid mode? (e.g., technological problems, lack of collaboration among the teacher and the student, lack of understanding the sequence and the steps of the proposed model).

- Teacher must communicate very well (Pt).
- Teacher must read and understand the VET students' needs. For that reason, students must have the camera on, when they are following the classes online (Pt).
- The type of resources of strategies used by the teacher are fundamental. It is important that teachers anticipate the students' reaction and have alternative solution to achieve the goals (Pt).
- Teacher must also be open to learn with the students (for example, about new digital applications that can be used online) (Pt).
- There must be rules of participation to better conduct hybrid teaching (Pt).
- Students' motivation and engagement in the activities is fundamental for hybrid teaching and better results (Pt).
- VET schools must have appropriate infrastructures and equipment to conduct hybrid teaching, such us a good interne signal (Pt).
- Having specific pedagogical resources for hybrid teaching (Pt).

- Prepare the classroom scenario so that in-person and online students can clearly observe the explanation of the teacher, when needed (Pt).
- Deliver the information with the same efficacy to both in-person and online students (Pt).
- Defining the goal of the lesson at the beginning of the class is essential for the students work (Pt).
- Maintain the focus of the students and collaborative work is essential (Pt).
- Internet connection must be stable and fast. They stated that the internet infrastructure should be ready for this (Tk).
- Students might have virtual glasses so they can feel themselves in a real class with home comfort (Tk).
- All the students must have same opportunity. Students should have the same financial means. Thus, they can have pc, so that students can have computers and other technological equipment with the same competence (Tk).
- The participants agreed that there would be adaptation problems about the Hybrid Education Model being implemented in their classrooms. Many students had no pc, microphone, speaker, or internet connection. Some of them have all this but had not enough gigabytes. Many students who have no PC use their parents cell phones for online lessons (Tk).
- The participants think that technological problems would be most frequent problems. Also Lack of collaboration among the teacher and the student There may be deficiencies in cooperation between the teacher and the student. For example, the remotely connected student may be busy with another job. The teacher cannot follow this continuously (Tk).
- Participants suggested that there should be enough time for Q and A and lesson plans should be kept short and focus on group teaching to avoid physical and mental exhaustion. It was also mentioned that a 2nd trainer/teacher will help to support the VET educator. Digital skills are a key factor to trainers and students. Finally, GDPR (General Data Protection Regulation) should not be neglected (Cy)
- The experts mentioned that one of the great challenges that they encountered when delivering a hands-on subject in hybrid mode was maintaining the focus of the students (Cy)
- Participants emphasised the difficulty of teaching practical vocational subjects in hybrid form: "it's impossible to do it in the same way as physical classes, because we can't teach anyone to use tools and perform certain actions without actually doing it. On the other hand, certain stages of this form of education can be done in a hybrid form. In the pandemic, the problem was that there was a lack of both teaching materials and videos, because it is better to show practical actions before asking students to perform them on their own. So sometimes it took several hours to find a good video to show them how it should be done." "Since virtual collaboration is a future competence, perhaps we should associate hybridity with the use of virtual reality in VET schools. A good practice I recently saw was PLC programming using VR kits." (Pl)
- Participants indicated their role: "We used to focus on an educational role - we were held accountable for results, so we enforced knowledge. Our role today in a world full of knowledge is to point to good knowledge - new skills, learning about tools. We are guides because knowledge is easily accessible. Each of us can reach for new knowledge. We are not motivated, we do not see the point of acquiring knowledge, but the teacher is supposed to be a guide. We use holistic teaching - building on what you already know. Paving the path." (Pl)

- They also highlighted the psychological problems of the students: "I see a psychological-pedagogical role. I used to be more of a teacher, now I am more of a psychologist, a support, a friend. There is less acquisition of skills, and we focus more on the mental health and life in society" and the need for a different approach to teaching: "For me, the practical implementation of the hybrid teaching model requires a different kind of motivation and commitment to the teaching process. It needs to be done in a much more conscious way". "On the one hand, the model should be disseminated – it is an informational and cognitive role. As a career counsellor aware of the fact that we learn throughout our lives, I treat the model as a context for shaping the future competence - the ability to learn consciously, to know the mechanisms of learning, techniques of learning". (Pl)
- They also pointed out the peculiarities of the modern learner (Pl):
  - ❖ "In the virtual world, students are waiting for ready-made materials. They do not want to look for things, they want to have it on a silver platter. They do not like to search, to compare. They do not think critically. The virtual world has locked them and sometimes they don't want to cooperate with each other."
  - ❖ "Young people are not able to use new technologies to acquire knowledge. They can use it for entertainment. But when you give them a simple task to do with their phones - they cannot do, look for, or do not want to do it. There is a lack of that engagement here."
  - ❖ "They read vaguely; they look at the pictures".
- Participants listed the risks that could affect hybrid teaching (Pl):
  - ❖ "Financial problems. Schools cannot afford to buy the right equipment for active student participation. Students borrowed laptops from us. It would be nice to use augmented reality during classes. Unfortunately, we are not able to equip all students".
  - ❖ "The system and the Internet can hang. The more equipment, the more Internet resources. If a teacher gives a video in a very good quality, more equipment is needed."
  - ❖ "Big classes - 32 people in a class - if one student from a class needs hybrid teaching, it's difficult to arrange."
  - ❖ "The hybrid model shows student, teacher, employer...and where is the parent? Parents play a significant role in the implementation of hybrid classes."
  - ❖ "I see the threat of image sharing. We do not know who is listening to us. The students do not give their consent to be listened to and watched. We can't control that."
  - ❖ "Financial costs associated with ICT (Information and Communication Technologies) used in the implementation of the hybrid learning model".
- Good IT support, good internet connection, good manual on outdoor activities. (Gr)
- Material and non material infrastructure, eg devices, well structured curriculum activities proposals and full support from the management. (Gr)
- If we keep off our mind, situations of force majeure then I would highlight the motivation of teachers and students, the management will to implement this and finally the support of the key players (VET teachers, students, providers and Companies). (Gr)
- Motivation, Support and Communication. (Gr)
- We need a roadmap to implement this with analytical KPIs to reach upon the implementation. Also a training on how to implement the structure in our daily activities. (Gr)

- If it was online, the connection and the devices used. If it was 50% 50% the framework of the students to follow. (Gr)
- The roadmap to follow in online sessions is always a struggle. The time to be used effectively is something we need help. The students need to understand why the online session is as important as the F2F ones. And it can be fun as well. (Gr)
- Give me a program with analytical examples and there is no problem. The only problem is there is not such a program to follow (tailor made for online sessions of aesthetics for example). (Gr)
- The readiness and proactiveness of a teacher to overcome problems with humour was always saving the day. Thus the support of the Administration played also a key role in cases where students were reluctant or indifferent. (Gr)
- When students are more aware of IT solutions than a teacher, he or she have to follow the students advice. Even a paradox it helps moving forward in cases where problems of IT arise. The only problem is the bad internet connection in Greece. Even so if the teacher is well prepared everything can be covered and solved (even partially). (Gr)

2.2. Are there any digital educational tools that you have used that have proved to be efficient in hybrid teaching? If yes, in what ways? Please explain by giving specific examples (e.g.: helped in increasing and maintaining students' participation, audio-visual and interactive material, etc.)
- Mentimeter – to ask questions to the students and give them immediately feedback (Pt).
- Microsoft Teams, Moodle, Office 365 (OneNote – private teacher space and collaborative working space) and Google suite – for sharing resources and collaborative work (Pt).
- Nearpod (Pt).
- EduWall (Pt).
- In Turkey, the participants said that generally we do not use a special software in our lessons. They use screen sharing in online lessons. Zoom program is considered sufficient for online courses (Tk).
- Participants mentioned that they have used digital educational tools that have proven to be efficient in hybrid teaching such as Moodle, Kahoot and Jam board. These digital educational tools give the opportunity to monitor students' progress, to anonymously participate in class and as a result the feeling of shame that students might feel is reduced (Cy)
- Mentimeter – Canvas – Powtoon (Gr)
- M365 or Google Workspace depending on the class. (Gr)
- Toontastic, canva, Adobe Platform, PPTx. (Gr)

## 2.3 Questions about the VET learners' skills.

**Summary**: When questioned about the qualities of a student in hybrid education should be diagnosed by the psychometric test, the focus group participants mentioned autonomy, problem-solving, resilience, confidence, team working and other qualities, such as self-awareness.

3.1. What qualities of a student in hybrid education should be diagnosed by the psychometric test we want to build as part of the project?

- Autonomy (Pt).
- Problem-solving (Pt).
- Resilience; Not giving up (Pt).
- Confidence (Pt).
- The Educators should know technology well follow and should be open to innovations. They think educators ready for this, but students' possibilities are not enough (Tk).
- The participants suggested based on their experience that VET teachers/educators need to develop their digital skills, being able to be multitasking and have a lesson plan in mind that can be adjusted in any time regarding the circumstances of each student. Also, all the experts in the focus group agreed on the fact that VET teachers should be built their soft skills (communication and interaction skills) with VET students as its most of importance (Cy)
- Focus group participants identified the following characteristics of the learner in hybrid learning (Pl):
  - ❖ "What motivates him/her? What passions does he/she have? What does he/she do after school?"
  - ❖ "What is his/her learning style? Is he/she visual, kinaesthetic?
  - ❖ "The test should check students' 'maturity' to use hybrid learning effectively."
  - ❖ "In my opinion, since the basis of the career pyramid understood as personal development is self-awareness of one's own personality, talents, interests and values, if we are talking about hybrid learning I would like to know the person's resources in this area."
  - ❖ "Housing conditions (whether, for example, he/she shares a room with a younger sibling) - this is about material status, the possibility of learning in a quiet, peaceful space. There is also the issue of distractions – switching off all the other devices".
  - ❖ "What technical capabilities does he/she have at home? Does he/she have good internet, appropriate IT tools to participate in the lesson".
- Self Confidence (Gr).
- Problem Solving (Gr).
- Solution Orientation (Gr).
- Confidence and Trust to the teacher student relationship (Gr).
- Team working (Gr).

## 2.4   Questions about the hVET game.

**Summary**: The answers about the focus group participants concerning their preference of a male/female figure was **inconclusive**, because some mentioned they prefer a neutral figure, others a male / female. Other participants mentioned that the figure should be personalised according to the user's interests.

4.1. Do you think a male / female figure in a supporting game would fit or would you prefer a neutral figure?

- Some participants mentioned they prefer a neutral figure, others a male / female figure, and others said that does not matter (Pt).
- The participants believe that as in real life, all figures in the game should have a gender. It may be a factor in the period of sexual identity acquisition depending on age. It can create a true or false example for the students (Tk).
- Participants mentioned that the figure can be personalised according to the user's interests. On the other hand, a binary figure might offend a user as the student might not fit in any of the two biological genders and a neutral figure might not give the opportunity to a possible user to identify himself with the game's figure. Also, students who have a difficulty in hearing or they have a visual impairment should also be included as this proposed educational model can give the opportunity to these students to be a part of the class as normally in traditional teaching, they face difficulties. Moreover, the purpose and the goal of the game is crucial for all the participants (Cy)
- Characters in the game: "Imaginary character e.g., anime. Something about cartoons, anime drawings. There is a fad among students. We have used this theme at school, and it has worked" and "avatars to choose". (Pl)
- Some participants mentioned they prefer a non binary figure, others a male / female figure, and others said that they do not want a human being but an android. (Gr)

4.2. Describe one offline activity that your class would enjoy through a supportive game?

**Summary**: The answers about one offline activity that a class would enjoy through a supportive game given by the focus group participants include activities with KPIs and time limitation, progress levels, an escape room activity, team and collaborative games, with transdisciplinary tasks to develop different skills on the students.

- An activity where progress levels are perceptible during the game (Pt).
- Not too simple, not too hard (Pt).
- An escape room activity or other activity that mobilizes the principles of an escape room (Pt).
- The participants said that games known by everyone would be enjoyable. For example, team games such as football and basketball. Traditional games on streets depends on your culture (Tk).
- Participants mentioned that just the engagement in an activity is important to students as it will help break the ice between distinct groups of students and teachers as well. It was also

mentioned that definitely an offline activity should have levels to keep students motivated and focused (Cy).

- "The games should be closed after some time spent on virtual activities and force another activity to be done other than sitting. E.g., a virtual riddle to solve, and then using the tools at home to investigate whether the riddle can be practically used. Time limitations and physical activities - not just virtual reality, but also exploring the "real" reality." (Pl)
- "Young people are overstimulated, the simpler things are given to them, the better they respond to them. It's either going to be very developed graphics or the other way round - simple graphics." (Pl)
- "The offline work aspect is important so that students do not retreat into themselves after the pandemic." (Pl)
- "Since the competence of tomorrow is virtual collaboration, the game should develop this competence." (Pl)
- "The game should develop the player's competences of unconventional and adaptive thinking, transdisciplinary, changeability of focus, broad-contextuality, design thinking, discovering meaning and making meaning. Definitely the exercises should be transdisciplinary in nature without referring to a specific profession". (Pl)
- Example of an offline task: "finding ADRs in space. Photographing placards, looking for hazards around us, and then a block of activities about vehicles. Find around you the things you read about in the book". (Pl)
- Activities with KPIs and time limitation. (Gr)
- Something with instructions and the teacher to put the result in the screen. (Gr)
- Questions and answers after teamworking. Like group puzzles or group missions. (Gr)
- Hidden treasure in a school (well not really applicable). (Gr)
- Mathematical problems in a building or school yard. (Gr)
- Escape room activity or other activity that mobilizes the principles of an escape room. (Gr)

4.3. Would your class enjoy an online rivalry with a class from another country or just a class from another universe (internationality without borders)?

**Summary**: About an online rivalry with a class from another country, the most part of participants of the focus group considered it a good idea to motivate VET students and engage them on activities that have the capability of develop their skills.

- Some participants referred that playing with classes from other countries could be a particularly good idea to motivate VET students. Although competition, collaborating in a common task could also being a good idea (Pt).
- The participants think that they would like it. That would be a game online strategy, action games or knowledge competition (Tk).
- The experts from the focus group said that their students would definitely enjoy an activity like this as these kinds of activities boost their motivation, encourage them, and help them develop their strategic and soft skills at the same time (Cy).
- "Students play with other students from different countries on a daily basis. The language barrier for them no longer exists. There should be an opportunity to play on an international

level. The possibility of cooperation, interaction is good. Team plays with another country -
not just competition with them. This approach is important on a social level." (Pl)

- YES as long as it may be equal graded for all. Greeks love competing other countries. (Gr)

## 2.5   Questions about the hVET course.

Please give us your opinion about the preliminary course content of the hybrid VET educational model.

**Summary**: The focus group participants globally agreed with the global course content of the hybrid VET educational model and presented some specific suggestions, such as, keep the manual short and easy to read and with technical suggestions.

1. The future of education for VET schools – pointing out open challenges as well as emerging trends?

The experts agreed on the fact that the future of education for VET schools tends to become more face to face and students desire a hands-on experience rather than an online one. Some of them mentioned the there is an increased need after the pandemic of face-to-face teaching as students feel more comfortable, they are far more focused on learning when on campus and their attention is undistracted (CY).

2.Description of elements of creation a successful hybrid learning environment in VET context (organized in the teaching moments of Engage; Explain, Explore, Exchange, Elaborate, Evaluate, Empower);

The experts mentioned that IT skills and being familiar with each teaching subject when in a hybrid learning environment in VET schools are some of the most crucial elements of creation a successful hybrid learning environment in VET context. VET educators through technological advancement have the opportunity to enforce the hybrid learning model of the 7Es (Cy)

2.   Blended delivery of apprenticeship/ work-based learning;

Experts mentioned that this can be achieved through a supporting team which will aid and support the VET educator throughout the course. Also, communication online and offline is important for the implementation of this proposed educational learning model as humans are social beings. The nature of the teaching course was also mentioned as a fundamental element when there is a blended delivery of apprenticeship/ work-based learning. Experts mentioned that through their experience when you put down two different subject areas (a theoretical and a practical one) this blended delivery differs, however through the proposed educational model they believe that this can be effective (Cy)

3.   Embedding inclusion in the hybrid setting;

Participants mentioned that inclusion is of outmost importance. First, it was discussed that inclusion in an online learning environment might be harder than in a face-to-face learning environment. The

experts concluded that a hybrid learning setting has its advantages and disadvantages as all learning school settings. So, inclusion can be achieved both in an online and a face-to-face learning experience which is possible through this proposed educational model and through the enforcement of the 7Es (Cy).

4. Essential skills for modern day teachers (skills to interact effectively in hybrid class environment, with a focus on DigCompEdu);

The focus group mentioned that some of the essential skills for modern day teachers are being an expert on the course that you are meant to teach, to be interactive with your students, to be able to communicate effectively and collaborate with other VET educators to make the hybrid educational learning experience more beneficial. Moreover, a support team for the VET educator will also be productive to a hybrid setting and being able to motivate and empower the students are also two important key skills. Finally, one expert said how important it is to keep a student's attention focused when teaching online (Cy).

5. Technology and digital educational resources to enrich teaching and learning process (e.g., providing teacher-directed live-streamed lessons, recorded instruction, facilitate learning activities and communication with students, receiving and returning assignments, providing resources, and learning materials);

The experts agreed that technology and digital educational resources such as facilitation of learning activities and receiving and returning feedback by the students are to enrich the teaching and learning process. All the above digital educational resources can for sure be supportive to both VET educators and students as both could engage in a more hands on manner when on a hybrid educational learning environment (Cy)

6. Knowledge bank for VET teachers to support hybrid education (teaching aids for the instruction and for designing learning activities to provoke higher order and critical thinking skills).

The participants suggested that VET teachers would benefit by teaching aids and specifically for the instruction and for designing learning activities to provoke higher order and critical thinking skills to their students. VET educators will have a supportive teaching format for activities, and this would help them when teaching in a hybrid setting as they will be able to both keep students' focus on and develop their critical thinking. For instance, this would be beneficial for some students but on the other hand other students might feel or be excluded. Therefore, it is of outmost importance to also consider the students who might have learning difficulties or hearing/ vision impairment (Cy).

7. Online collaboration of VET teachers

As mentioned above, experts believe that collaboration between the VET teachers is crucial. By collaborating and communicating with each other they are able to share their ideas and thoughts on an educational course and at the same time gain knowledge on a teaching subject that they might not be that familiar. Also, exchanging ideas can also lead to sharing concerns and worries when it comes to teaching and learning.

Global appreciations about the preliminary course content of the hybrid VET educational model:

- Some participants mentioned that the previous content approaches the specificities of the hybrid learning and did not present further contributes. Others remarked that the hybrid teaching is suitable for older students – namely working students - and to avoid dislocations to the school, if it is not needed (Pt).
- As far as teachers are concerned, you must divide the course into beginners and advanced learners. Teachers can use most of the tools and platforms. But some of them are at the beginning of their teaching career. Schools work with different platforms, e.g., Google, Microsoft, etc. - It's about matching who the training is aimed at." (Pl)
- "Technical advice, but not too much to read. I would like to choose what I need. I would like to know how to run the equipment without calling an IT specialist." (Pl)
- "How to prepare a student technically? e.g., the student is ill, has poor housing conditions." (Pl)
- "Available resources - from where, how to download a photo so no one accuses me of stealing it". (Pl)
- "I would be very interested in the area of career management, understood broadly as lifelong personal development (in the area of professional, personal and social development), in terms of the ongoing building of one's own career". (Pl)
- All of the above are really supportive as long as they take place in real life and with a roadmap easy to understand. (Gr)
- When it comes to remote work in apprentices or practical training things have to be covered in terms of programming and measurement. (Gr)
- An analytical approach to this model from VET environment as well as Companied environment is essential. (Gr)
- IT infrastructure with full technical support if and when needed so as to become a teacher savvy of the online tools and procedures of implementation. (Gr)