



## XRinVET

Enhancing Digital Innovation (Web 4.0) and Attractiveness of VET Through  
Extended Reality (VR/AR) Training for better skills-match

**WP2: Digital Transformation in VET schools for work-  
based learning**

**Activity 2: Open Consultation with the labour market and  
VET actors**

**Authors:** Partner names



Co-funded by  
the European Union



This publication has been developed with the financial support from the European Commission in the framework of Erasmus+ programme. The information and views set out in this publication are those of the authors. The European Commission and the Hellenic National agency may not be held responsible for the use, which may be made of the information contained herein. Project number: 2024-1-EL01-KA220-VET-000250876

## CONTEXT

Grant agreement	2024-1-EL01-KA220-VET-000250876
Programme	Erasmus+
Action	Cooperation Partnerships in Vocational Education and Training
Project acronym	XRinVET
Project title	Enhancing Digital Innovation (Web 4.0) and Attractiveness of VET Through Extended Reality (VR/AR) Training for better skills-match
Project starting date	01/11/2024
Project duration	30 months
Project end date	30/04/2027

## WEBSITE:

<https://xrinvet.eu/>

## CONSORTIUM: PARTNER LIST

- University of Crete (UoC) - Greece
- CONFEDERACION ESPANOLA DE CENTROS DE ENSEANZA ASOCIACION C.E.C.E. (CECE) - Spain
- DIRECTORATE OF SECONDARY EDUCATION OF PELLA (RSEP) - Greece
- CHAMBRE DE COMMERCE BELGO-ITALIENNE ASBL (CCBI) – Belgium
- National Center for Scientific Research “Demokritos” (NCSR) - Greece
- CODEARRAYS Ltd (CODE) – Cyprus

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## Questionnaires

### VET Teachers' Questionnaire

- **Your country**

- Greece
- Spain
- Belgium
- Cyprus

- **What subject(s) or vocational field(s) do you teach?**

- Science**

(natural sciences, mathematics, physics, chemistry, biology, earth and space sciences, environmental science, agriculture/horticulture/forestry)

- Technology**

(orientation in technology, including information technology, computer studies, electronics, graphics and design, etc)

- Engineering & Mechanics**

(mechanical engineering, electrical engineering, other technical vocational skills, construction, etc)

- Other** (please specify)
- 

- **How many years of experience do you have in Vocational Education and Training (VET)?**

- Less than 2 years
- 2 - 5 years
- 6 - 10 years
- More than 10 years

- **How do you currently deliver practical, hands-on training?**

- Real-world labs/practical training
- Apprenticeships/internships
- Demonstrations
- With the support of technological tools
- Audio/video tutorials
- With paper-based materials

- Presentations
  - Online collaborative tools
  - Other (please specify)
- 

• **Do you think that the use of technological tools during teaching hours is useful?**

- Yes    No

• **Have you ever used VR/AR in your classroom?**

- Yes    No

• **What resources do you think are necessary to effectively implement VR/AR in VET?**

- Teacher training and professional development
  - Technical support staff
  - VR/AR hardware (headsets, controllers)
  - High-speed internet
  - Custom curriculum integration or modifications to the current curriculum
  - Student accessibility tools
  - Other (please specify)
- 

• **Does your school have VR/AR equipment?**

- Yes    No

• **How confident are you in your ability to use VR/AR tools effectively in the classroom?**

- Very confident
- Somewhat confident
- Neutral
- Somewhat unconfident
- Very unconfident

• **In what areas of your curriculum do you think VR/AR could enhance learning?**

- Equipment simulation
- Theory visualization (e.g., internal machine workings)
- Skills practice
- Remote collaboration
- Assessment and feedback
- Safety training

- **What VR/AR teaching methods interest you the most?**
  - Virtual simulations
  - Interactive AR
  - Game-based learning
  - 360° videos
  - Remote VR classrooms
  - Other (please specify)

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- **Which of the following potential benefits do you associate with VR/AR in VET?**
  - Improved student engagement
  - Enhanced retention of knowledge
  - Safer practice environments
  - Accessibility for remote learners
  - Real-time feedback and assessment
  - Cost-effective in the long term
  - Customizable learning experiences
  
- **Would you be willing to pilot a VR/AR application in your school?**
  - Yes
  - No
  - Maybe (depending on available support/resources)
  
- **What are the major challenges or barriers you foresee in integrating VR/AR into your VET subject?**
  - Lack of funding or budget
  - Insufficient hardware or technical infrastructure
  - Limited teacher training
  - Limited availability of VR/AR content specific to my subject
  - Student access or equity concerns
  - Technical issues or maintenance concerns
  - Resistance to new technologies from teachers and/or students
  - Curriculum or accreditation limitations
  - Other (please specify)

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- **What kind of support or training would you need to start using VR/AR in your classes?**
  - Hands-on training or workshops on using VR/AR tools
  - Access to implemented VR/AR content relevant to my field
  - Technical support for setup and troubleshooting
  - Guidelines on how to align VR/AR with curriculum goals
  - Other (please specify)

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- **In your opinion, could VR/AR improve student learning outcomes in vocational training?**

Yes    No

- **Do you have any additional thoughts, comments, suggestions, ideas, or concerns regarding the integration of VR/AR in your vocational teaching practice? (open question)**

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## VET Students' Questionnaire

- **Your age**
  - 12-14
  - 15-17
  - 18+
  
- **Your gender**
  - Male
  - Female
  - Other
  - Prefer not to say
  
- **Your country**
  - Greece
  - Spain
  - Belgium
  - Cyprus
  
- **What is your preferred vocational field of study?**
  - Science education (physics, chemistry, biology and ecology)
  - Engineering (mechanical/electrical/ship/aeronautics)
  - Electronics
  - Mechanics
  - Aesthetic education
  - Health professional
  - Information and communication technologies
  - Economic education
  - Language education and communication
  - Humanity and social education
  - Specific vocational education
  
- **How do you rate your knowledge of Virtual Reality (VR) and Augmented Reality (AR)?**  
(from 1-“poor” to 5- “excellent”)
  - 1  2  3  4  5
  
- **Have you ever used VR or AR in your classroom?**
  - Yes
  - No
  
- **Have you ever used VR/AR outside the classroom before?**
  - Yes, both
  - Only VR
  - Only AR
  - No, I haven't used either

- **Does your school have VR/AR equipment available?**

- Yes    No    I don't know

- **Do you have access to any of the following at home or in school?**

- VR headset  
 AR-enabled devices (e.g., smartphone or tablet)  
 High-speed internet  
 A quiet space suitable for immersive learning  
 I don't have access to any of the above

- **How do you prefer learning practical skills?**

- Watching videos or demonstrations  
 Doing hands-on tasks in workshops/labs  
 Using simulations or virtual environments  
 Reading textbooks or manuals  
 Group projects and discussions  
 Other (please specify)
- 

- **In which of these areas do you think VR or AR could help you learn better?**

- Practicing hands-on skills in a safe environment  
 Understanding how machines/equipment work internally  
 Preparing for real-life scenarios (e.g., emergencies, technical faults)  
 Repeating complex tasks without using real materials  
 Visualizing abstract or hard-to-imagine concepts  
 Other (please specify)
- 

- **What type of VR/AR content would be most useful for your training?**

- Virtual field trips or workplace tours  
 Simulated tasks or skill assessments  
 Interactive 3D models of tools/machines  
 Augmented reality overlays for physical equipment  
 I'm not sure  
 Other (please specify)
-

- **Do you think using VR/AR would make your training more interesting and engaging?**
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
  
- **What benefits do you think VR/AR could bring to your learning?**
  - Makes learning more fun and interactive
  - Helps me practice without fear of making costly mistakes
  - Gives access to tools/environments not available in real life
  - Helps me learn at my own pace
  - Prepares me better for real-world jobs
  - None / I'm not sure yet
  - Other (please specify)

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- **Would you like to have VR/AR-based lessons in your VET school?**
  - Yes, definitely
  - Maybe, depending on the topic
  - Not really
  - No
  
- **What challenges do you think might make it hard to use VR/AR in your classes?**
  - Expensive equipment
  - Not enough time in the schedule
  - Not knowing how to use the technology
  - Getting motion sickness or discomfort
  - Poor internet or technical issues
  - Other (please specify)

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- **If VR/AR were used in your training, what would help you the most?**
  - Easy-to-use apps or tools
  - Clear instructions and guidance
  - Practice time before assessments
  - Technical support if something goes wrong
  - Being able to access VR/AR from home as well

Other (please specify)

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- Do you have any additional thoughts, comments, suggestions, ideas, or concerns regarding the integration of VR/AR in your vocational learning experience? (open question)

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## Labour Market Actors and Enterprises Questionnaire

- **What is the size of your organization?**
  - Micro (1–9 employees)
  - Small (10–49 employees)
  - Medium (50–249 employees)
  - Large (250+ employees)
  
- **What sector does your organization operate in?**
  - Manufacturing
  - Construction
  - Healthcare
  - Automotive
  - Hospitality & Tourism
  - ICT / Technology
  - Other (please specify)

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- **Does your organization currently provide vocational training, apprenticeships, or internships?**
  - Yes
  - No
  - Planning to in the future
  
- **Have you used or explored VR or AR tools in your company (e.g., for training, onboarding, simulation)?**
  - Yes, we actively use them
  - Yes, we explored or piloted
  - No, but interested
  - No, and not currently interested
  
- **What do you think is necessary to integrate VR/AR in vocational training programs effectively?**
  - Affordable and scalable hardware/software

- Industry-relevant VR/AR content
  - Close collaboration between educators and businesses
  - Standards and certifications for VR/AR-based skills
  - Technical support and maintenance
  - Other (please specify)
- 

• **What challenges do you foresee in adopting VR/AR technologies in vocational education or workplace training? (Select all that apply)**

- High initial investment
  - Lack of skilled staff to implement or maintain the technology
  - Difficulty in aligning VR/AR content with industry standards
  - Concerns about the realism or effectiveness of simulations
  - Resistance to new training methods
  - Other (please specify)
- 

• **In your opinion, which of these VET training areas could benefit most from VR/AR?**

- Safety training and risk simulation
  - Equipment handling and technical procedures
  - Soft skills and customer interaction scenarios
  - Onboarding and orientation
  - Remote or distributed workforce training
  - Other (please specify)
- 

• **What VR/AR training methods do you believe are most effective or promising?**

- Immersive simulations and scenario-based learning
- Augmented overlays on real machinery or environments
- Gamified learning and skill assessments
- Virtual site walkthroughs or workplace tours
- Blended training (combining VR/AR with traditional methods)

- **Would your company consider collaborating with vocational institutions to co-develop VR/AR training modules?**
  - Yes, definitely
  - Maybe, if relevant to our field
  - Not at the moment
  
- **What benefits do you associate with the use of VR/AR in vocational training?**
  - Faster onboarding and training cycles
  - Reduced workplace accidents through simulated practice
  - Improved employee confidence and readiness
  - Standardized training across sites
  - Reduced material/equipment usage during training
  - Access to training for remote or rural employees
  - Other (please specify)

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- **Do you believe VR/AR-trained students would be more job-ready for your industry?**
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
  
- **Would you be interested in hiring students or trainees who have been trained using VR/AR methods?**
  - Yes
  - Maybe
  - No
  
- **In your opinion, what steps should be taken to better align VR/AR training tools with real-world job needs?**
  - Involve industry experts in the design of VR/AR training content

- Regularly update VR/AR content to reflect current technologies and practices
  - Align VR/AR modules with recognized industry standards and certifications
  - Increase collaboration between vocational institutions and enterprises
  - Include real-world scenarios and case studies in simulations
  - Pilot VR/AR programs with employee feedback before full rollout
  - Provide trainers with industry experience and technical training
  - Other (please specify)
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- **Do you have any additional comments or ideas regarding the use of VR/AR in workforce development and vocational education?**

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