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ERASMUS+ KA210-VET SMALL-SCALE PARTNERSHIPS
F.I.R.S.T. – FUTURE INNOVATIONS IN RESILIENT & SAFE TRAINING
PROJECT NUMBER: 2024-2-SK01-KA210-VET-000277108

NEEDS ANALYSIS SURVEY RESULTS REPORT

Digitalisation of OSH/İSG Processes in VET and Work-Based Learning
(Students • Teachers • Sector)

F.I.R.S.T. – Erasmus+ KA210-VET
June 2025

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Reporting date	June 2025
Data collection window (included in this report)	18 April 2025 – 11 June 2025
Scope	Teachers, Students, Sector representatives (3 questionnaires; 3 languages)

1. Executive summary

This needs analysis was conducted at the start of the project to identify current gaps and priorities in occupational safety and health (OSH/İSG) education in vocational education and training (VET) and work-based learning contexts. Three online questionnaires (teachers, students, sector) were developed in Slovak, Portuguese and Turkish and disseminated by the three partner countries.

A total of 111 valid responses were included in this June 2025 report (Teachers: n=20; Students: n=85; Sector: n=6). Results indicate a strong perceived importance of OSH education, but also a clear need to strengthen risk awareness, correct use of personal protective equipment (PPE), and consistent behavioural application during internships. Both teachers and students show readiness to use digital content; however, digital OSH training tools are not yet widely used in companies.

The evidence supports the project's rationale: digitalisation (e-learning modules, interactive simulations, gamified practice and assessment, and analytics) is both necessary and feasible to standardise OSH learning outcomes, improve engagement, and provide auditable proof of training completion across countries and languages.

Table 1. Sample size by target group

Target group	Number of respondents (n)	Data source
Teachers	20	Teachers needs analysis survey
Students	85	Student needs analysis survey
Sector representatives	6	Sector needs analysis survey
TOTAL	111	Combined (deduplicated by timestamp rows)

2. Methodology

• Design: Descriptive cross-sectional needs analysis using three structured questionnaires (teachers, students, sector).

• Language: Each questionnaire was provided in three languages (Slovak, Portuguese, Turkish) to ensure accessibility in all partner countries.

• Data collection: Online administration (Google Forms) via partner networks. Responses were voluntary and anonymised at the point of collection.

• Timeframe: Responses submitted between 18 April 2025 and 11 June 2025 were included in this report (June 2025 cut-off).

• Analysis: Descriptive statistics (frequencies, percentages, means) for closed questions; multiple-response analysis for 'select all that apply' items; light thematic coding for open-ended answers to identify recurring needs and expectations.

• Limitations: Sector sample size is small (n=6) and results should be interpreted cautiously; responses were anonymous and therefore cannot be fully disaggregated by country without additional identifiers.

3. Respondent profile (June 2025 cut-off)

3.1 Teachers (n=20)

Teachers represent diverse vocational and general education subjects and are largely experienced. Most reported moderate-to-high digital tool competency and prior use of digital tools in teaching.

Table 2. Teachers – years of teaching experience

Experience (years)	n	%
31+	7	35.0%
21–30	5	25.0%
11–15	3	15.0%
6–10	2	10.0%
16–20	2	10.0%
0–5	1	5.0%

3.2 Students (n=85)

Students are predominantly in the typical VET age range (15–20) and most were currently in work-based learning placements at the time of response. Fields are automotive-oriented (e.g., autotronik, auto mechanics, bodywork/painting, vehicle sales & service).

• Gender: Male 80 (94.1%), Female 3 (3.5%), Other/Prefer not to say 2 (2.4%).

• Age: mean 17.2 (range 15–20).

3.3 Sector representatives (n=6)

Sector respondents represent companies hosting VET interns (automotive sales/service and related areas). Most companies currently provide OSH training through external trainers, and the use of digital tools for OSH training remains limited.

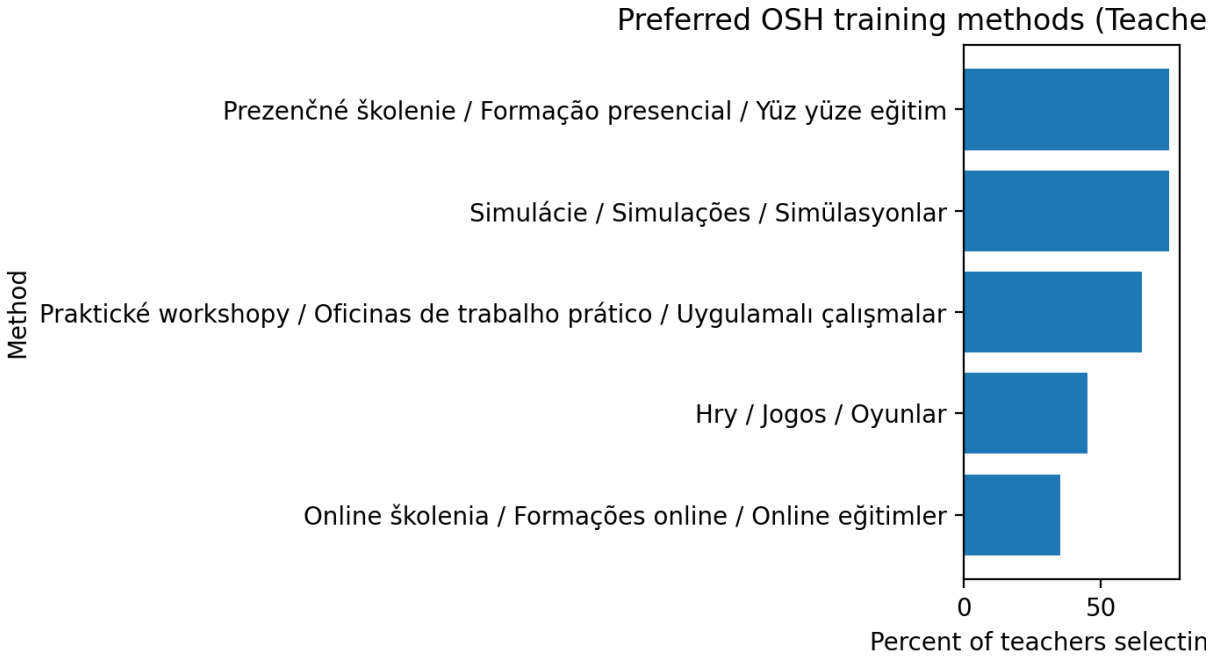
4. Key findings

4.1 Teachers – readiness and needs

- Digital tool competency: mean 3.80 / 5.
- OSH importance in VET: mean 4.70 / 5 (very high perceived importance).
- Erasmus+/international project experience: 5/20 teachers (25.0%).
- Prior use of simulations/games for educational purposes: 70.0%.
- Perceived student OSH knowledge: 65.0% ‘partially sufficient’, 15.0% ‘not sufficient’ (indicating a learning gap).

- Interest in training to develop digital OSH materials: 65.0%.

Figure 1. Teachers – preferred OSH training methods (multiple response)



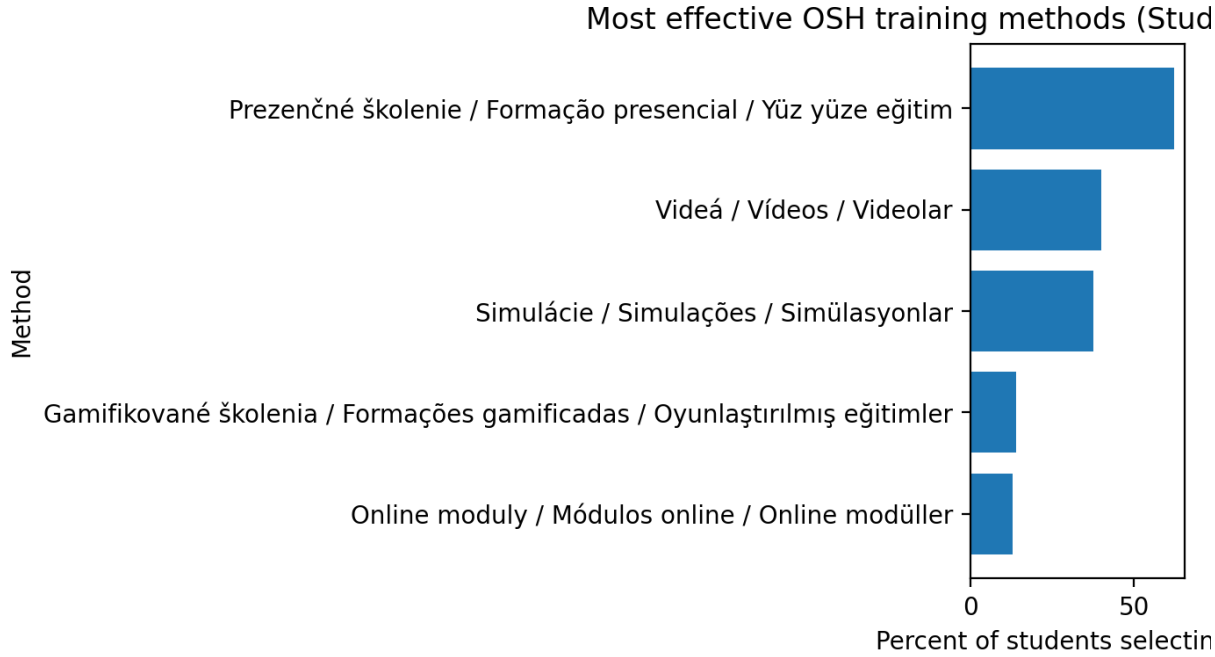
Commonly used digital tools mentioned by teachers include Kahoot, Canva, Zoom/Microsoft Teams, Mentimeter and school LMS/communication platforms.

Open-ended needs highlight demand for upskilling in: digital content creation, AI-supported tools, cybersecurity, and interactive learning design (including app creation and classroom implementation of Moodle/Zoom).

4.2 Students – learning preferences and OSH gap

- Currently in internship/work-based learning: 97.6%.
- Received OSH training: 92.9% (high coverage).
- Self-rated OSH knowledge: mean 3.73 / 5 (room for improvement).
- Self-reported attention to safety measures during internship: mean 4.02 / 5.
- Digital device competency: mean 3.82 / 5.
- Prior use of simulations/digital games for learning: 61.2%.
- Interest in OSH learning through digital games and simulations: 58.8% (plus 23.5% unsure).

Figure 2. Students – most effective OSH training methods (multiple response)



Open-ended topic suggestions most frequently mention first aid, general workplace safety rules, correct use of PPE, accident examples and prevention, and safe use of electrical tools. A notable share of responses indicate uncertainty (e.g., 'I don't know'), which reinforces the need for structured and engaging learning pathways.

4.3 Sector – current practice and expectations

- Companies currently accepting interns: 83.3%.
- OSH training delivery: 66.7% external trainer; 33.3% internal training.
- Use of digital tools for OSH training: 33.3% yes; 66.7% no.
- Perceived impact of digital simulations/gamification: 66.7% 'definitely improves', 16.7% 'somewhat improves', 16.7% 'no impact'.
- Support for developing digital OSH materials for students: 50.0% yes; 50.0% no.

Figure 3. Sector – use of digital tools for OSH training

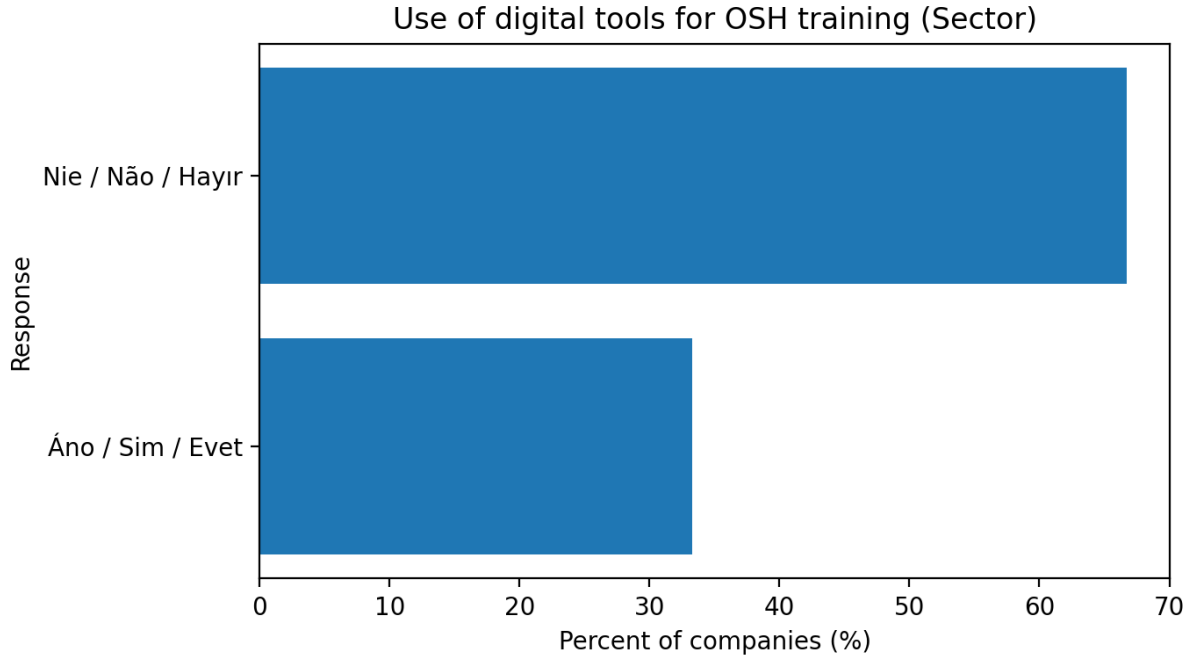
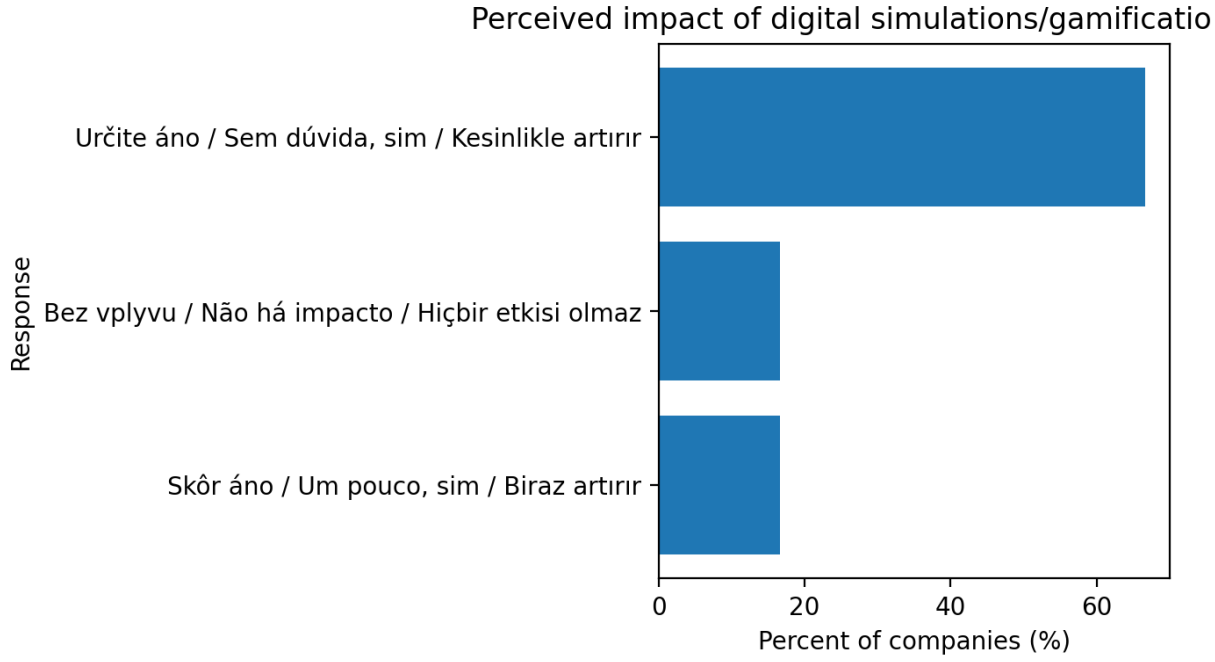


Figure 4. Sector – perceived impact of digital simulations and gamification



Sector respondents report common weaknesses among interns: inconsistent use of PPE, lack of attention/seriousness, low risk awareness, and general inexperience. Requested platform features include: structured theoretical content, mandatory legal training modules, scenario libraries,

assessments/tests, and high-impact visual materials (including real accident/risk videos), with content updated through close school–industry collaboration.

5. Cross-group synthesis: why digitalisation is necessary and feasible

- High importance but persistent gaps: Teachers rate OSH education as very important and still perceive student knowledge as only partially sufficient; companies observe practical behaviour gaps (PPE/risk awareness).
- Readiness for digital learning: Both teachers and students report moderate-to-high digital competence and prior exposure to digital learning/simulations.
- Need for standardisation and traceability: Digital OSH modules can standardise learning outcomes, provide multilingual consistency, and generate auditable proof of completion (logs, certificates, analytics).
- Demand for scenario-based learning: Preference patterns (teachers: simulations + workshops; students: face-to-face + videos + simulations; sector: scenario library + tests) support an approach combining interactive simulations with guided instruction.

6. Recommendations for project implementation (based on needs analysis)

1. Develop a multilingual (SK/PT/TR) OSH learning pathway for VET and internships combining: micro-learning modules, interactive simulations, short videos, and scenario-based assessments.
2. Embed gamified practice with immediate feedback (hazard identification, PPE selection, emergency response) to strengthen risk awareness and behavioural transfer.
3. Provide a teacher capacity-building package: training on creating digital OSH materials, using simulation tools, and designing assessments aligned to workplace risks.
4. Co-design content with sector partners and include a compliance-friendly 'evidence output': attendance/assessment reports, certificates, and exportable logs.
5. Pilot and evaluate using pre/post knowledge tests, behaviour checklists during internships, and platform analytics; iterate content based on feedback.
6. Ensure GDPR compliance and safe publishing practices for any photos/videos; use anonymised data for reporting.

7. Conclusion

The June 2025 needs analysis confirms that digitalisation of OSH/İSG training is both necessary and realistic in the partner VET context. Stakeholders recognise OSH as critical, identify practical gaps in intern behaviour and risk awareness, and show clear preference for interactive, scenario-based learning. The F.I.R.S.T. project is therefore well-positioned to deliver a digital platform and simulation-based content that improves learning outcomes and provides auditable evidence for quality assurance.

Annex A. Key indicator tables (June 2025 cut-off)

Table A1. Selected key indicators by target group

Group	Summary
Teachers	Digital tool ability mean 3.80/5; OSH importance mean 4.70/5; 65.0% want training to create digital OSH materials.
Students	Digital device skill mean 3.82/5; OSH knowledge mean 3.73/5; 58.8% want OSH via games/sims.
Sector	66.7% do not use digital OSH tools yet; 66.7% believe simulations/gamification definitely improve OSH skills; key gap: PPE use and risk awareness.

Annex B. Survey links and evidence

Teachers survey link: https://forms.gle/DqsayeBmfXfZW49t7

Students survey link: https://forms.gle/yvohUdgqGbF2b3TR9

Sector survey link: https://forms.gle/z3qDVwUGY2tadwuD9

Data evidence: This report is based on the Excel exports of the three survey response sheets stored in the project documentation folder. Personal data (names) were not used in reporting; any accidental identifiers found in raw entries should be removed or masked in shared evidence files before submission.