Companies Needs
Portugal National Report | March 2024

STEAM BOSS

boosting soft skills

# Evaluation with Companies

National Report | January 2026

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# 1. Introduction

**Purpose of the report**

- The purpose of this report is to document and analyze the results obtained from a strategic survey conducted among Spanish companies within the framework of the STEAM Bo.SS project. The central objective of this research is to understand the business sector's perception regarding the importance of soft skills in the current labor market, as well as to evaluate the effectiveness of existing collaboration models between Vocational Education and Training (VET) centers and the private sector.
- In an increasingly digitalized and automated economic environment, the gap between academic competencies and the real needs of the industry has become a critical challenge. Therefore, this study seeks to identify which skills companies consider decisive for the employability of young people and to what extent the synergy between schools and companies can mitigate the talent mismatch. Specific objectives include: (a) mapping the needs for transversal competencies in technological sectors, (b) analyzing the willingness of companies to engage in dual training processes, and (c) evaluating the impact that continuous collaboration has on both business competitiveness and regional development.
- This report is based on responses from five organizations whose vision allows for the identification of common patterns and areas for improvement in the transition from the educational system to the professional world. Through this analysis, we aim to offer recommendations that strengthen the STEAM ecosystem, ensuring that technical training is complemented by a solid foundation of interpersonal and management skills, which are essential for success in Industry 4.0.

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## 2. Company Profile

- The sample analyzed in this national report consists of five organizations with a strong technological and service component. Four of the companies belong to the **Engineering** sector, featuring entities such as **Robottions SL**, **CFZ COBOTS SL**, **Istner Technology SL**, and **Unlimited Design and Engineering SL**. The remaining one is represented by the **Retail** sector, offering a complementary view of skill requirements in direct customer service and commercial management environments.
- Regarding their degree of involvement with the STEAM Bo.SS project, there is a diverse distribution that enriches the analysis. One of the companies (Robottions) has maintained very active participation since the beginning, while the other engineering organizations have participated occasionally. On its part, the retail sector company had no prior direct involvement, allowing for a contrast between the views of those already familiar with the project and those approaching it for the first time.
- Concerning previous experience in collaborating with VET centers, the data reveals a mixed scenario. Two of the companies (40%) maintain regular or occasional collaborations with schools, integrating students into internships or participating in training activities. However, 60% of respondents indicated that they had not previously collaborated with VET centers, although they emphasized a high interest in initiating such relationships. This data is crucial, as it points to a "latent" collaboration market that the STEAM Bo.SS project can have activated. Most of these companies are small or medium-sized enterprises with an agile structure, where incorporating young talent with updated technical training is vital for their competitiveness in designing robotics and automation solutions.

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## 3. Soft skills and Labour Market Needs

- The analysis of labor market needs reveals a clear trend towards valuing transversal profiles. Despite being technology-based companies where technical competencies (hard skills) are indispensable, the importance given to soft skills for employability is high, with an average rating of 3.4 out of 5. Companies agree that an excellent technician may fail in the real world if they lack the interpersonal skills necessary to work on complex projects.
- When asked about the most critical skills for professional performance, **Pro-activity** emerges as the most demanded competence, selected by 80% of respondents. For companies like CFZ COBOTS or Robottions, which work in environments of constant innovation, it is not enough to follow instructions; they require staff capable of anticipating problems and proposing solutions autonomously. In second place, **Flexibility** and **Problem-solving** capacity were highlighted by 60% of the sample. In sectors such as design engineering or technological consulting, client requirements change rapidly, and the ability to adapt to new tools or methodologies is a strategic asset.
- Other mentioned skills include **Analytical Thinking**, **Creativity**, and **Decision Making**. It is interesting to note that while engineering companies prioritize technical resolution and pro-activity, the retail company places greater emphasis on creativity and organizational flexibility. There is a general perception that recent graduates usually have a good technical base but show deficiencies in time management and effective communication within multidisciplinary teams.
- The mismatch between talent supply and demand is not only due to a lack of specific knowledge about robotics or software but also the difficulty of finding young people with a "growth mindset." The surveyed companies suggest that the current labor market requires a combination of analytical rigor and social skills. Critical thinking is seen as the engine of innovation, especially in engineering projects where process optimization is the daily goal. In conclusion, for the participating companies, soft skills are not an "add-on" but the glue that allows technical knowledge to translate into productivity and commercial value. The identified talent gap is therefore located at this intersection: the need for "T-shaped" professionals who master their technical discipline but also know how to navigate uncertainty and collaborative work.

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## 4. Role of VET-Company synergy in soft skills development

- Collaboration between educational centers and the business sector is perceived as an essential factor for the success of the educational model. The results show a solid level of agreement (3.4/5) on the need for this collaboration to be active and bidirectional. Companies no longer see themselves as mere recipients of graduates but as active training agents.
- Regarding the responsibility for developing these skills, 80% of respondents advocate for a **shared responsibility** approach. They believe that soft skills should be introduced in the classroom through active methodologies and later reinforced in the real work environment. Only one of the surveyed companies opined that these skills should be the exclusive responsibility of the corporate context, arguing that company culture is difficult to simulate in a school. However, most agree that the school should plant the "seed" (communication, work ethics, critical thinking) so that the company can cultivate it through professional practice.
- The impact of this synergy is valued very positively (4/5) in aspects such as the alignment between training and the real needs of the market. Companies believe that if they participate in the educational process, they can help reduce the technological lag that academic curricula sometimes suffer. Furthermore, they consider that this continuous collaboration increases the employability of young people, as they enter the market with a better understanding of business dynamics, reducing adaptation time and increasing their value from day one.

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## 5. Key areas and timing of collaboration

- Identifying when and how to collaborate is vital for the VET-Company relationship to be sustainable. According to the responses obtained, the collaboration formats with the greatest impact are **Workplace Internships** and **Practical projects based on real challenges**. Engineering companies show a particular interest in having students work on real company problems during their training, which allows for the evaluation of not only their technical prowess but also their responsiveness under pressure.
- Other valued formats include the participation of company professionals in training activities within the school (masterclasses or workshops) and the co-creation of educational materials. Regarding the ideal time to start this collaboration, 60% of respondents prefer the relationship to begin **from the start of the training program**, under models that alternate time in the educational center and time in the company. They argue that waiting until the end of training to carry out short internships is not enough for the student to develop deep transversal competencies. Early immersion allows the young person to understand the relevance of what they are studying and immediately apply the necessary interpersonal skills in the workshop or office. Conversely, 20% suggest that collaboration be continuous but flexible, while another company considers that the traditional internship context is sufficient if well-structured.

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## 6. Perceived impact of collaboration

- Companies that have had contact with the STEAM Bo.SS project or similar initiatives report a positive impact on their organizational culture. The overall assessment of the experience stands at 3.6 out of 5. One of the most tangible benefits pointed out by 60% of respondents is that collaboration has helped them **clarify which skills are truly critical** for their industry. By interacting with students and VET centers, companies are forced to define their performance and communication standards.
- Additionally, organizations perceive that their participation directly contributes to the improvement of young people's skills, feeling part of the engine of regional development. For companies like Istner Technology or Robottions, seeing students improve their pro-activity and problem-solving after passing through their facilities is a sign of success. Although some companies mention that the process requires time and supervision resources, they consider the investment worthwhile if it guarantees a better-prepared talent pool. The impact is not only external (for the student) but also internal, as it fosters the mentoring capacity of their own employees and keeps the company connected with new generations and their ways of understanding technology and teamwork.

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## 7. Potential for future collaboration

- The potential for future collaborations is extremely high. 100% of the participating companies expressed their willingness to continue collaborating with VET centers (80% responded "Yes" emphatically and 20% "Maybe"). There is a total openness toward more integrated training models. Preferred formats for the future center on **practical action**: participation in challenge-based projects, professional testimonial sessions, and mentoring.
- Companies seek relationships that go beyond signing an internship agreement. They desire open communication channels where they can provide feedback on the curriculum and participate in creating tasks that use current technologies, such as collaborative robots or advanced design software. The willingness to collaborate is motivated by the desire to improve the quality of future workers and by the social responsibility to strengthen the local industrial fabric. The message is clear: companies are open and waiting for structured proposals that allow them to contribute their practical knowledge to the educational system.

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## 8. Conclusions and Recommendations

The analysis confirms that collaboration between VET schools and companies is not only desirable but indispensable for the competitiveness of the technological sector in Spain. **Pro-activity** and **flexibility** are consolidated as the key competencies that the educational system must foster to align with an Industry 4.0 that values both "know-how" and "know-how-to-be."

As main conclusions, it is highlighted that there is a consensus on **shared responsibility** in the training of soft skills. Companies value their previous experience positively and show an almost unanimous willingness to expand their participation in the future, especially in real project-based learning formats.

**Recommendations:**

1. **Promote co-creation:** It is necessary to establish working groups where companies and teachers together design practical challenges that integrate technical and soft skills.
2. **Early immersion:** It is recommended to move toward dual training models that allow the student to have contact with the company from the first year.
3. **Continuous communication:** Implement structured feedback channels to ensure that the center's training objectives and the company's needs are always aligned.
4. **Use of real technology:** Facilitate that training in schools uses the same technologies as companies (e.g., cobots), eliminating the tool gap between the classroom and industry.

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# 9. Appendix

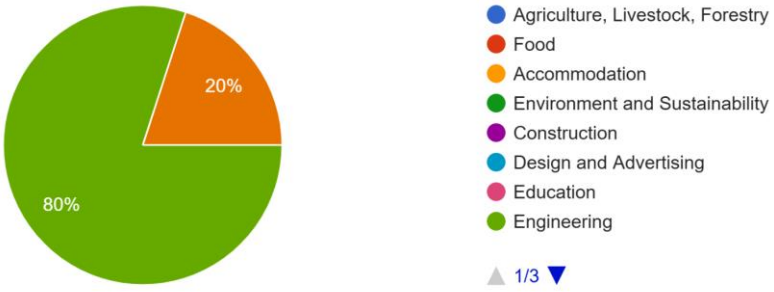
- Survey questionnaire

[STEAM Bo.SS - Company Survey_SP - Formularios de Google]

- Detailed tables and charts

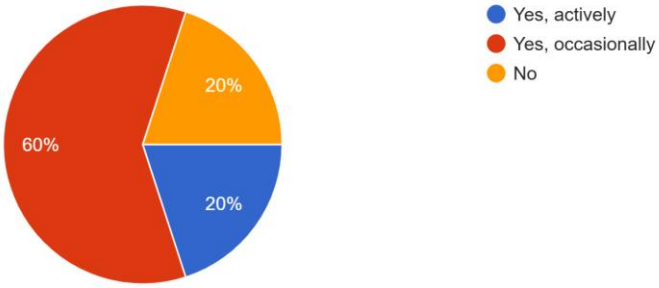
2. Sector

5 respuestas




3. Was your company directly involved in the STEAM Boss project?

5 respuestas

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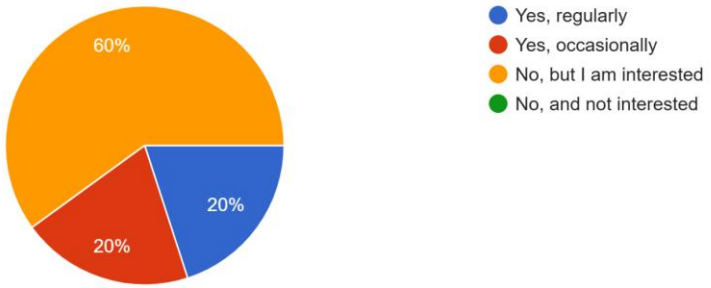
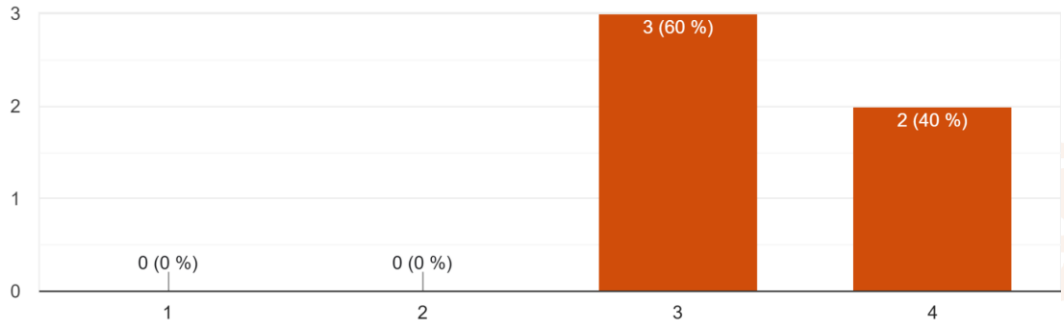
4. Regardless of the project, has your company ever collaborated with schools or VET centres?

5 respuestas



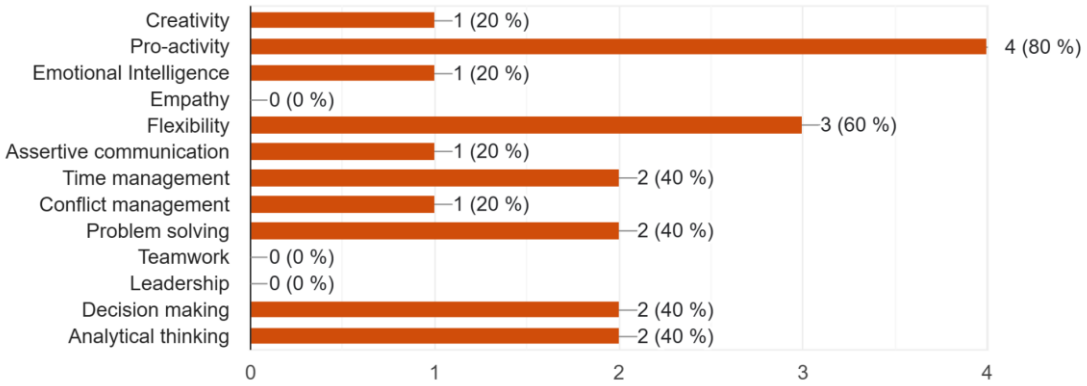

5. To what extent do you consider soft skills to be decisive for the employability of young people?

5 respuestas




6. Which of the following soft skills do you consider most critical for professional performance in your company? (max. 3 options)

5 respuestas

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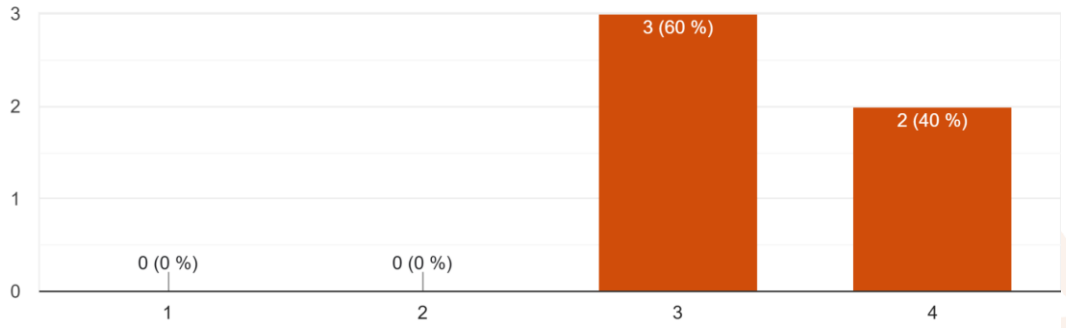
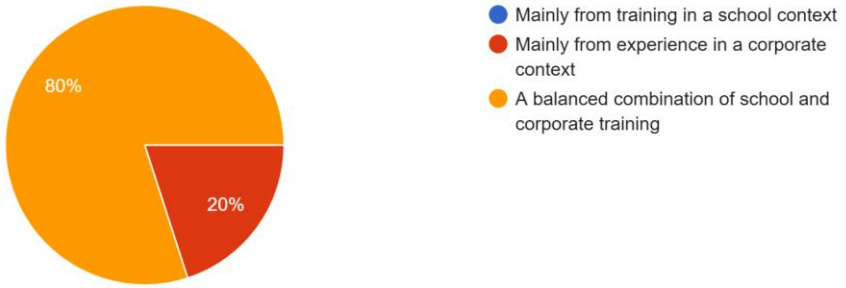
7. To what extent do you agree that active collaboration between VET schools and companies is essential for the effective development of soft skills in future workers?

5 respuestas

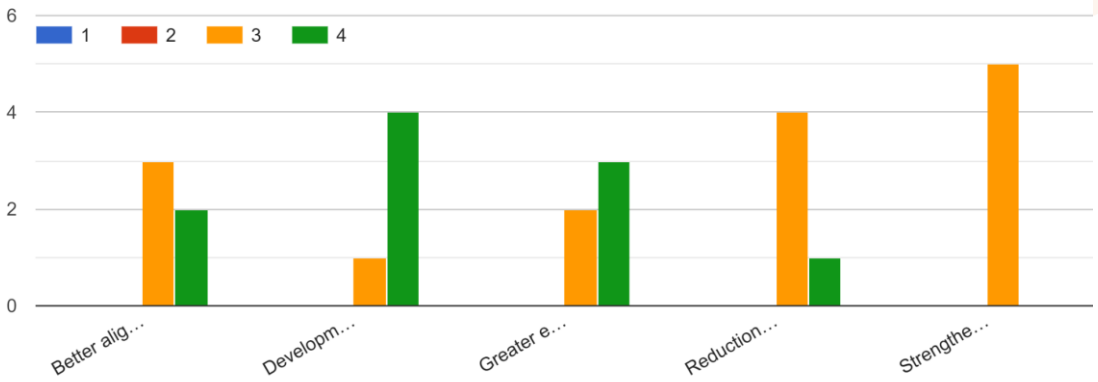



8. In your opinion, the development of soft skills should result from:

5 respuestas




9. To what extent can ongoing collaboration between VET schools and companies contribute to: (1 = Not at all | 5 = Very much)

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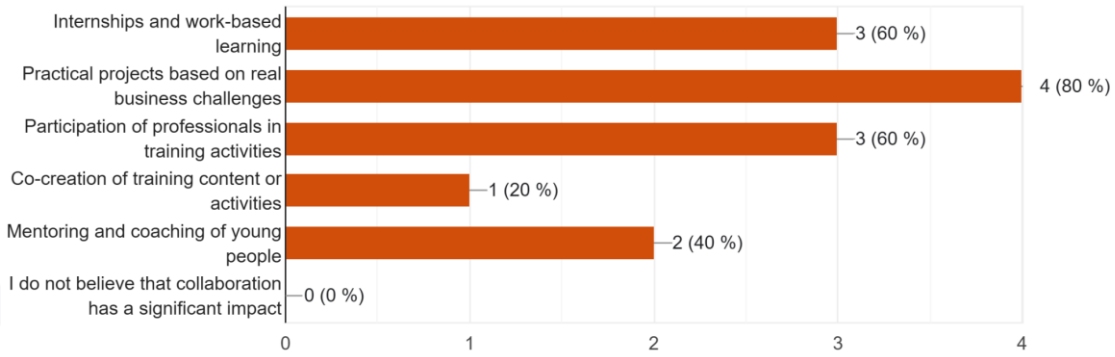
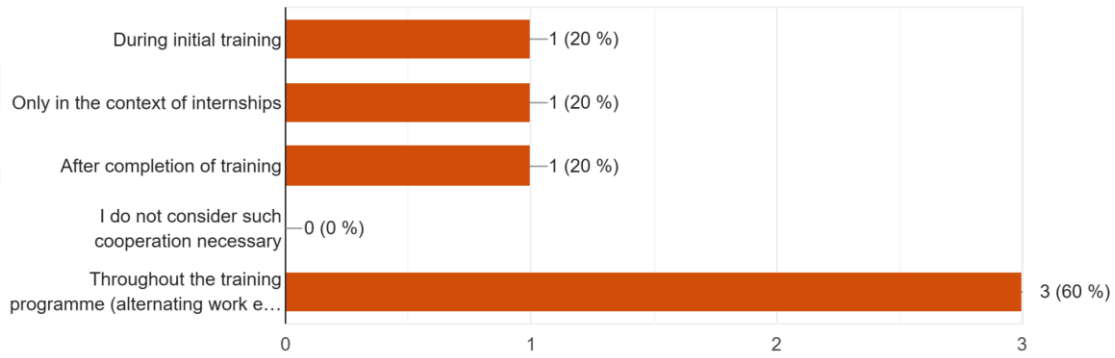
10. What types of collaboration do you consider to have the greatest real impact? (maximum 3 options)

5 respuestas



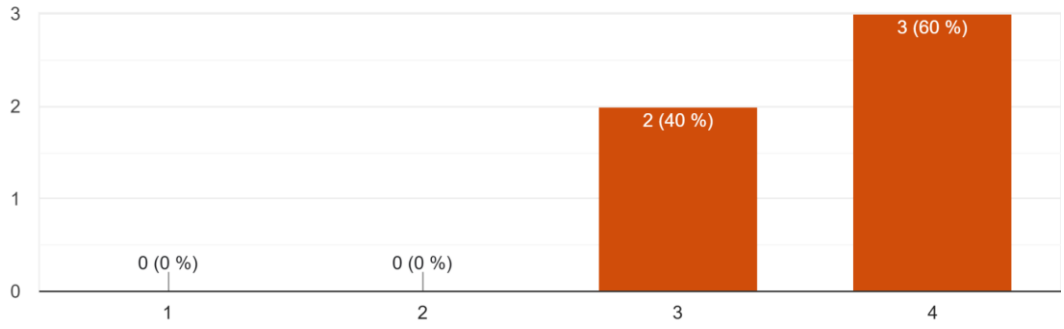

11. In your opinion, at what stage should schools and companies start working together?

5 respuestas




12. How satisfied is your company with the collaboration experience within the STEAM Bo.SS project?

5 respuestas

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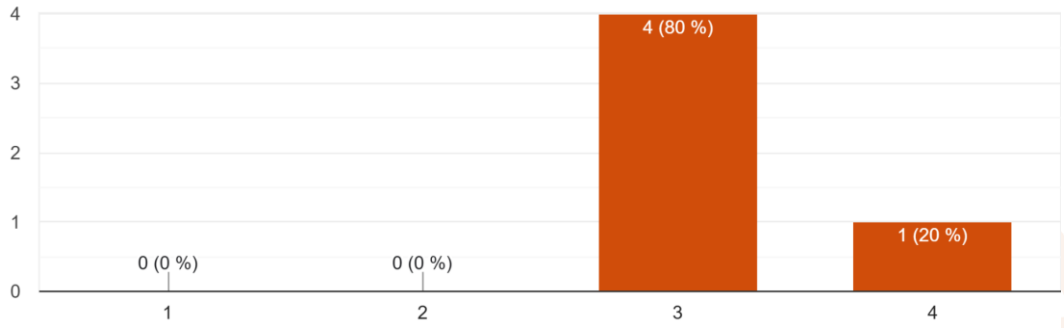
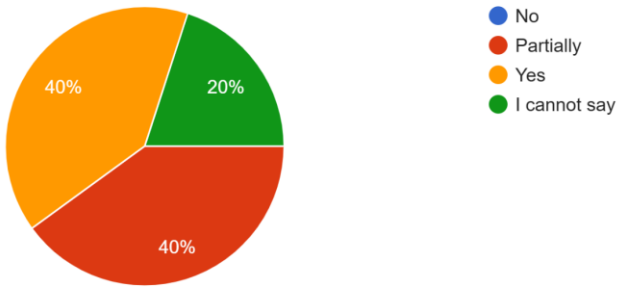
13. Did collaboration in initiatives of this type contribute to a better understanding of the dynamics of VET schools on the part of your company?

5 respuestas



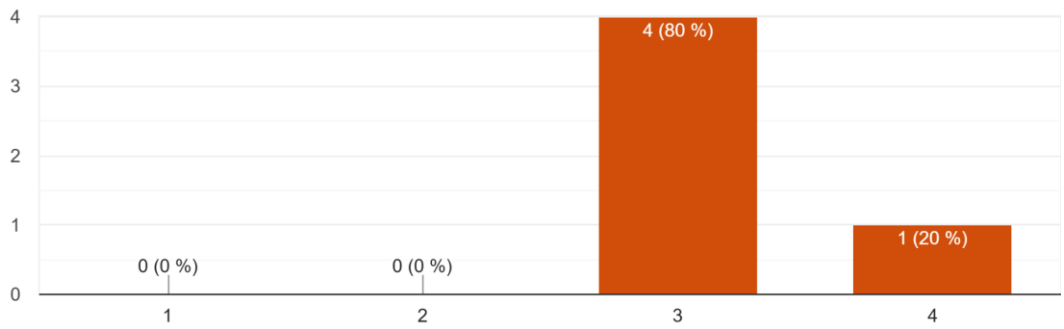

14. Did your participation in school-company collaboration initiatives contribute to the development of soft skills in the young people involved?

5 respuestas




15. Has collaboration enabled your company to clarify which soft skills are most critical for your industry?

5 respuestas

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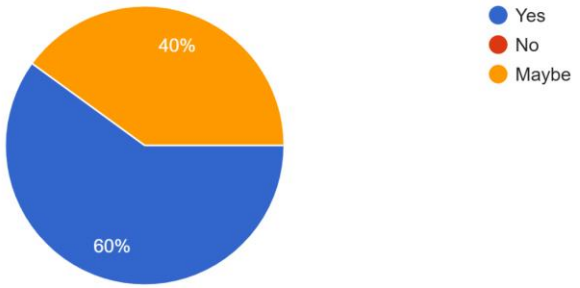
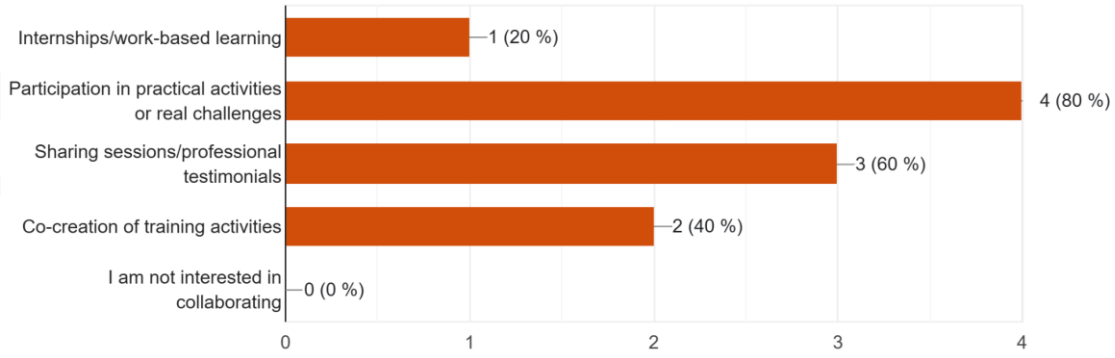
16. Would your company be willing to collaborate with VET schools in the future?

5 respuestas




17. What type of collaboration do you consider most appropriate for your company? (you can select more than one)

5 respuestas

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Open-ended responses (Question 18)

## 18. What factors do you consider essential for effective collaboration between VET schools and companies?

4 answers

Perfect coordination between Companies and Schools

1. Periodic evaluations, meetings, and feedback help track student development and improve the collaboration. 2. A strong partnership based on trust encourages long-term cooperation between education providers and companies. 3. Companies can provide updated knowledge about technologies, practices, and skills required in the labour market.

1.Clear and continuous communication 2. Shared goals 3. Clearly defined roles and responsibilities 4. Structured training plans

Effective collaboration between VET schools and companies requires good communication, practical training, and long-term partnerships. Companies can share real industry needs and technologies, while VET schools prepare students with the right skills. From our experience at CFZ Cobots, giving students hands-on exposure to real automation solutions, such as collaborative robots used in industry, is especially valuable. This kind of collaboration helps students, schools, and companies benefit together.

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STEAM BOSS
boosting soft skills

# THE BOOST THAT MAKES THE DIFFERENCE

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