Playing to start: EGIDEV and the power of simulation in entrepreneurial education

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Abstract. This article autoethnographically explores the development and implementation of EGIDEV- the Educational Game in Digital Entrepreneurship for VET Students - through the eyes of one of its partners. EGIDEV is not merely a game; it is a journey that empowers learners to test ideas, confront real-life business dilemmas, and build a foundation for entrepreneurial action. Grounded in experiential learning, the project encourages aspiring entrepreneurs to validate and verify their ideas before entering the marketplace. This reflection situates EGIDEV within the wider European context of the entrepreneurial intention-action gap and argues for a more immersive, skill-based approach to entrepreneurship education.

Keywords: Entrepreneurship, experiential learning, educational games, VET, validation, startup mindset, EU trends, intention-action gap

Why EGIDEV?

Entrepreneurship in Europe faces a paradox. On one hand, there is no shortage of interest in launching new ventures. According to the Global Entrepreneurship Monitor (GEM, 2023), 19% of individuals in Europe express an intention to start a business within the next three years. Yet the actual rate of early-stage entrepreneurial activity (TEA) lags far behind, at just 9.2%.

This discrepancy — the intention-action gap — is especially evident among young people and students. Although 50% of European students report interest in becoming entrepreneurs (European Commission, 2020), only 6% follow through after graduation. Even more tellingly, Eurostat data shows that while 33% of youth aged 18–34 are drawn to entrepreneurship, only 10–15% ever take concrete steps like registering a business (Eurostat, 2023).

What causes this gap? Key barriers include:

- Fear of failure, affecting one in three young entrepreneurs.
- Limited access to funding and mentorship.
- Lack of practical business skills, especially among STEM graduates.
- Cultural risk aversion and bureaucratic complexity (GUESS, 2023)

As a response, EGIDEV was created not just to inspire, but to equip. Its purpose is to simulate the entrepreneurial journey from idea to execution — and help learners bridge the critical gap between intention and action.

In a nutshell, the goal of the game is to choose an industry and a set of problems for that industry. Ten industries are listed, which are among the EU's top 10 digital startup domains, then develop an entrepreneurial initiative based on the solutions to these problems and prepare an investment proposal to

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Tech Sprout Capital. In the game, Tech Sprout is a venture company that invests in cutting edge digital technologies. Tech Sprout has identified promising areas of development and defined Data Base of problems to solve. Young entrepreneurs can choose area and problems and apply to Tech Sprout to fund a startup which solves these problems (EGIDEV, 2025).

EGIDEV's design and pedagogical strategy align closely with established experiential and constructivist learning theories, particularly Kolb's Experiential Learning Cycle (1984), which emphasizes learning as a process whereby knowledge is created through the transformation of experience. The four stages of the EGIDEV simulation — THINK!, IMPLEMENT, MONEY TALKS, and NOW OR NEVER — mirror Kolb's model: concrete experience, reflective observation, abstract conceptualization, and active experimentation. For instance, students begin with role definition and idea exploration (concrete experience), reflect on market needs and validation (reflective observation), design business models and forecasts (abstract conceptualization), and finally pitch their ideas (active experimentation). This cyclical and iterative model fosters deep learning by engaging students in a process of doing, reflecting, and adapting.
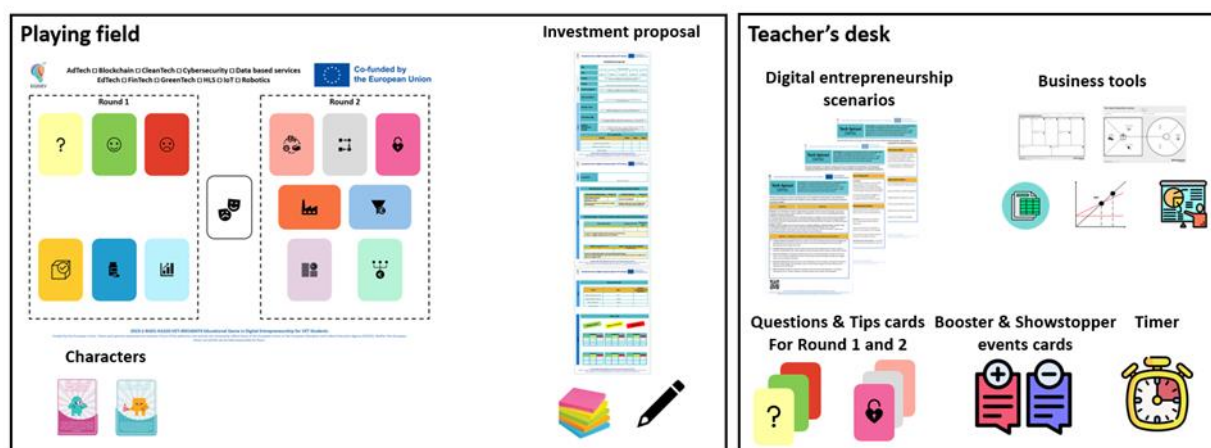
Moreover, EGIDEV is underpinned by principles of constructivist learning, where knowledge is actively constructed rather than passively absorbed. Vygotsky's (1978) theory of social constructivism is especially relevant, as EGIDEV encourages collaborative, team-based learning in which students co-construct meaning through dialogue, feedback, and shared problem-solving. The game environment facilitates what Vygotsky termed the "Zone of Proximal Development" by offering scaffolding through booster cards, facilitator guidance, and peer feedback, enabling students to achieve higher levels of entrepreneurial thinking than they might individually.

By grounding the simulation in these frameworks, EGIDEV not only delivers content knowledge but also fosters metacognitive skills, resilience, and adaptive expertise essential for real-world entrepreneurship.

**From Idea to Action: The four rounds of EGIDEV**

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EGIDEV transforms entrepreneurship education into an immersive, team-based simulation structured around four progressive stages:

Round 1 THINK!

Form a team and decide who you are within that team, i.e. pick a role. Then the teams define their venture's concept by selecting and developing an idea from the suggested scenarios in digital entrepreneurship or by proposing a business idea of their own.
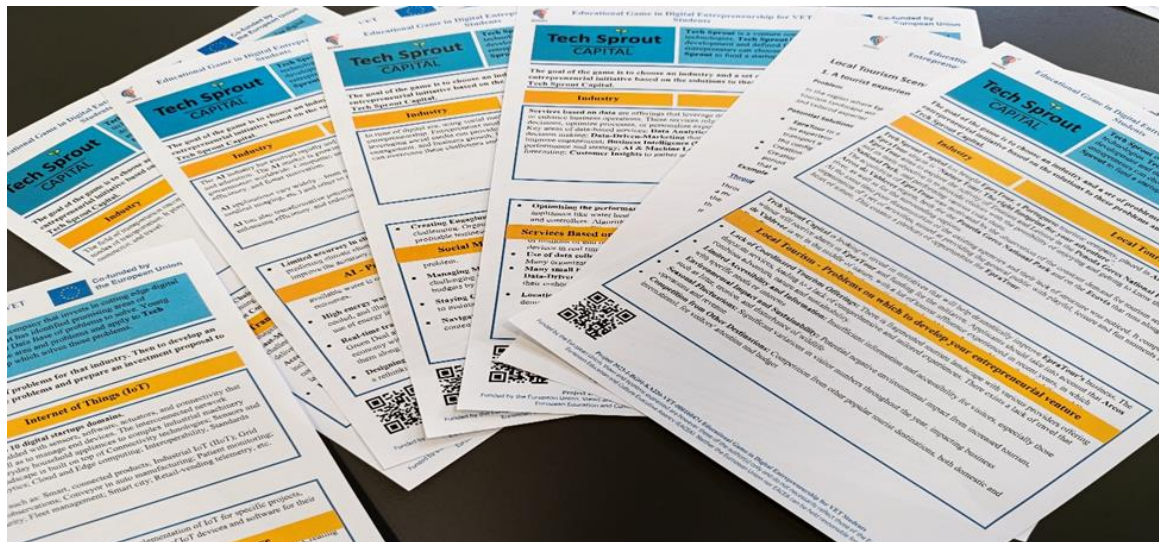
Round 2 IMPLEMENT

Participants build a full business model and explore revenue strategies, competitors, and go-to-market plans — all while dealing with real-life surprises through "booster" and "show stopper" event cards. The business model should describe how your venture will create and deliver value to customer segments, society, and your company.
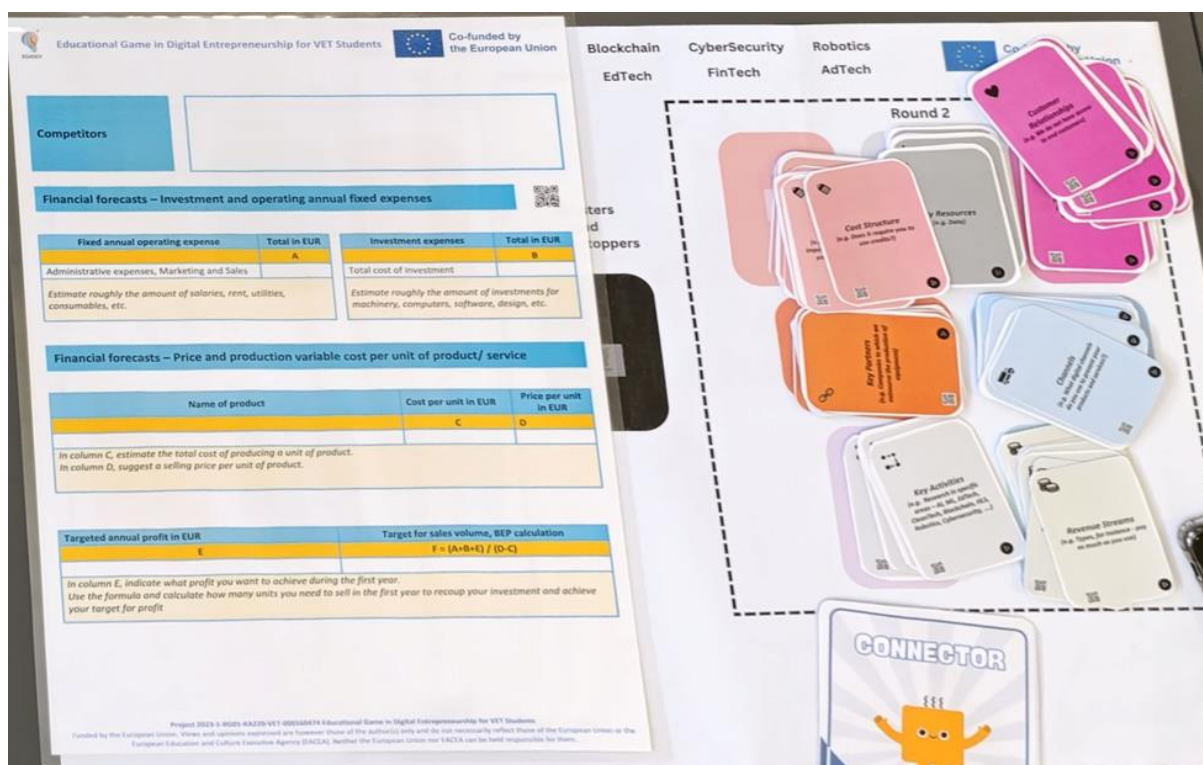
Round 3 MONEY TALKS

Financial forecasting becomes the centerpiece, as students confront cost structures, break-even points, and investment requirements.

Financial forecasts – Investment and operating annual fixed expenses

Fixed annual operating expense	Total in EUR A
Administrative expenses, Marketing and Sales	
Estimate roughly the amount of salaries, rent, utilities, consumables, etc.	

Investment expenses	Total in EUR B
Total cost of investment	
Estimate roughly the amount of investments for machinery, computers, software, design, etc.	

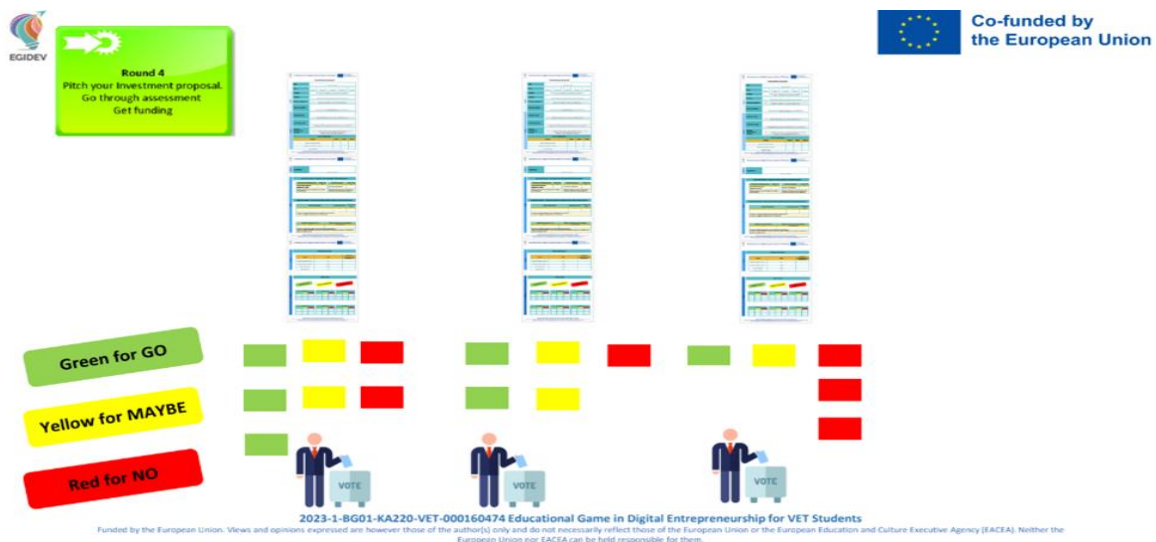### Financial forecasts – Price and production variable cost per unit of product/ service

Name of the product	Cost per unit in EUR C	Price per unit in EUR D

In column C, estimate the total cost of producing a unit of product.
In column D, suggest a selling price per unit of product.

Targeted annual profit in EUR E	Target for sales volume, BEP calculation F = (A+B+E) / (D-C)

In column E, indicate what profit you want to achieve during the first year.
Use the formula and calculate how many units you need to sell in the first year to recoup your investment and achieve your target for profit

Round 4 NOW OR NEVER

Teams pitch their projects to their peers acting as Tech Sprout Capital investors, receiving feedback and ratings through a simple red-yellow-green assessment system.

The entire process mirrors real-world startup life — iterative, unpredictable, and highly collaborative. Unlike traditional business planning exercises, EGIDEV forces learners to think critically, act fast, and adapt.

Learning Through Failure: My Startup, Your Case Study

My connection to the EGIDEV project isn't just professional — it's deeply personal.

Years before participating in this project, my husband and I had founded a startup in Bulgaria. Inspired by what worked in his native Ireland, also in the US, and the UK, we believed that if we imported this healthy lifestyle trend and the related to it food products into our market, success will replicate itself.

We were wrong.

We failed to check whether local consumers truly wanted what we offered. We assumed immediate interest, ignored cultural preferences, and failed to chech customer need and desire. While our products were high-quality, introducing the trendy healthy lifestyle, they felt foreign and detached from everyday eating habits in our region. We did the mistake so many people do- we liked our idea, those close to us liked our idea, we created that optimistic bubble and got too emotionally attached. In hindsight, we skipped the "Round 1" of the EGIDEV game: validating the problem, profiling customers, understanding needs, behaviors. We assumed people would adapt to our product — when, in fact, we needed to adapt to them. Just assuming is not enough. Just assuming is painful and expensive.

This is the very trap EGIDEV helps to prevent. It encourages learners to ask: "Is this idea truly viable?" "Do you solve anyone's problem?", "Do you fulfill someone's need?", "Do you provide much needed solution?" Not in theory — but in a tangible, context-aware way.

Empowering Action: Closing the Education and Confidence Gap

Another driver behind EGIDEV's design is the educational readiness gap across Europe. Only 23% of surveyed graduates feel prepared for entrepreneurship, and many innovators struggle to monetize their knowledge due to weak business strategy skills (OECD, 2021). EGIDEV helps fill this space by:

- Translating intangible talents into marketable propositions;
- Allowing students to fail safely, reflect, and iterate;
- Making the entrepreneurial process accessible, interactive, and fun.

Additionally, research shows that only 12% of EU students plan to launch a business immediately after graduation (compared to a global average of 17.8%). Through EGIDEV, participants can rehearse entrepreneurship before high stakes are involved. This reduces fear of failure, increases self-confidence, and reveals entrepreneurial potential they might never have discovered otherwise.

A Game That Teaches Reality

I witnessed firsthand how EGIDEV changed learners. Participants began to see themselves as capable entrepreneurs, not just students. The polls after the game sessions have shown that over 80% of the participants showed confidence that they could be entrepreneurs. They shifted from passive listeners to active creators. We have students, people who's played the game reaching out with feedback how the game helped them, also with additional questions about the tools they can use. This is one of the additional perks of the EGIDEV project- on the website you can find business tools to support your business venture all the way through.

Educators, too, transformed. No longer lecturers, they became facilitators — setting the stage, triggering disruptions, and guiding teams through decision-making.

Our transnational team of partners brought different strengths: game design, pedagogy, technology, evaluation. Together, we co-created a tool that lives beyond the classroom.

EGIDEV isn't about winning. It's about rehearsing. It bridges the space between "I have an idea" and "I'm making it happen", in other words- bridges the intention- action gap.

Games as Bridges to Action

If entrepreneurship is a mindset, then EGIDEV is a mindset trainer. It gives learners tools and structure to move from vague aspirations to clear decisions.

It also gives educators a method to bridge the intention-action gap in Europe — four rounds, one pitch, one simulation at a time.

Most importantly, it validates the learner, not just the idea. It says: "Here's how you can test your voice, your plan, your resilience — and still enjoy the process." And sometimes, the best way to start something serious…is to play.

Conclusion

EGIDEV represents a transformative step in bridging the entrepreneurial intention-action gap among European youth, particularly vocational education and training (VET) students. Through its immersive, experiential learning design, the simulation game offers a dynamic framework for students to test, validate, and refine entrepreneurial ideas in a low-risk environment. The four-stage structure—from ideation to pitching—mirrors real-world entrepreneurial processes, allowing learners to develop key competencies such as critical thinking, financial literacy, and resilience.

The project's strength lies in its dual emphasis on experiential realism and pedagogical innovation. By combining gamified learning with structured business modeling, EGIDEV not only demystifies the entrepreneurial process but also nurtures the confidence and strategic thinking necessary to act on business intentions. Moreover, the inclusion of practical tools and transnational collaboration enhances its accessibility and applicability across diverse European contexts.

Autoethnographic reflection reinforces the importance of validating ideas early and underscores the value of failure as a learning tool. In this light, EGIDEV stands not merely as an educational intervention but as a mindset catalyst—an opportunity for learners to envision themselves as proactive agents of change.

Recommendations

Based on the autoethnographic reflection on the development and implementation of EGIDEV through my eyes, following recommendations can be put forward:

1.Expand EGIDEV Integration Across Curricula

To maximize impact, EGIDEV should be systematically integrated into entrepreneurship and business modules within VET institutions and higher education curricula. Facilitators should be trained to guide reflection and ensure learning outcomes align with national and EU-level entrepreneurial education objectives.

2.Support Post-Game Engagement

Establish follow-up mechanisms such as mentorship programs, idea incubation support, or access to startup toolkits. These additions can help students transition from simulated success to real-world implementation.

3.Facilitate Multilingual and Inclusive Access

To ensure broader adoption, EGIDEV should continue to expand its linguistic and cultural adaptability. Tailoring the platform to reflect local startup ecosystems and regional entrepreneurial challenges will further enhance learner engagement and relevance.

4.Conduct Longitudinal Impact Studies

Future research should investigate the long-term outcomes of EGIDEV participation on students' entrepreneurial trajectories. Tracking participants over time could provide valuable data on how experiential learning influences actual business creation and self-employment rates.

5.Foster Transnational Collaboration and Dissemination

Sharing best practices and student outcomes across participating countries can strengthen EGIDEV's credibility and scalability. Establishing a pan-European network of educators and alumni may sustain momentum and foster continuous improvement of the tool.

EGIDEV proves that simulation can be a powerful pedagogical device to move learners from passive aspiration to confident action. If entrepreneurship begins with mindset, then EGIDEV equips the next generation with the right one — playfully, purposefully, and powerfull

References

EGIDEV. (2025). *EGIDEV project*. Retrieved June 6, 2025, from https://egidev.eu

European Commission. (2020). *Entrepreneurship education: A guide for educators*. Publications Office of the European Union.

Eurostat. (2023). *Youth and entrepreneurship in Europe*. Luxembourg: Eurostat.

GEM. (2023). *Global Entrepreneurship Monitor global report 2023*. London: GEM Consortium.

GUESS. (2023). Global University Entrepreneurial Spirit Students' Survey *2023 Global report*. St. Gallen: University of St. Gallen.

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Prentice-Hall.

OECD (2021). *Entrepreneurship in the digital age*. Paris: OECD Publishing.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

Conflicts of Interest

No conflict of interest has been declared by the author

Author Contribution

Corresponding author Galina Nolan: Conceptualization, data curation, investigation, methodology, writing original draft, review & editing.

Declaration of Competing Interest

This research did not receive any specific grant from funding agencies in the public, commercial or non-profit sectors.

Ethics Approval

In the writing process of the study titled "**Playing to start: EGIDEV and the power of simulation in entrepreneurial education**", the rules of scientific, ethical and citation were followed; it was undertaken by the author of this study that no falsification was made on the collected data. "Journal of Action Qualitative & Mixed Methods Research and Editor" had no responsibility for all ethical violations to be encountered, and all responsibility belongs to the author and that the study was not submitted for evaluation to any other academic publishing environment.

Institutional review board (IRB) approval

Institutional Review Board (IRB) approval of this research is not required.

Data Availability Statement

Anonymized data from this study can be made available on request from galinanolan@gmail.com