Entrepreneurship Education and Student Empowerment

Innovation in the EU

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First published 2026

ISBN: 978-1-032-98740-8 (hbk)
ISBN: 978-1-003-86420-2 (pbk)
ISBN: 978-1-003-60764-9 (ebk)

Chapter 4

Collaborative strategies for student entrepreneurship

From mentoring to venture building

DOI: 10.4324/9781003607649-5

The funder for this chapter is Divisione Luiss Business School.

Routledge
Taylor & Francis Group
NEW YORK AND LONDON

4 Collaborative strategies for student entrepreneurship

From mentoring to venture building

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4.1 Addressing regional innovation disparities in the EU

Entrepreneurs in regions with emerging or moderate innovation levels often face distinctive barriers, such as restricted access to resources, inadequate support networks, and a less established entrepreneurial culture (European Union 2023).

Investing in entrepreneurial education in less innovative regions can transform local economies by fostering self-reliance and promoting homegrown innovation. Access to high-quality programs equips students and aspiring entrepreneurs with the skills and confidence to start businesses, generating local employment and diversifying economic activities. This reduces dependence on external markets and builds resilience against economic shocks.

These strategies are essential in order to bridge uneven distribution of entrepreneurial education and resources across Europe; actually, there are significant innovation gaps among European regions (Xie 2024). In fact, while some areas benefit from thriving ecosystems with access to cutting-edge education, mentorship, and funding, others struggle to provide even the foundational tools for entrepreneurial success. These differences can be seen on the European Innovation Scoreboard where innovation performance among regions varies.[1] Countries classified as "innovation leaders," such as Germany, Sweden, and Finland, are home to well-developed ecosystems that offer comprehensive entrepreneurial education and access to funding. These regions also boast strong networks connecting universities, businesses, and government entities, creating fertile ground for entrepreneurship to flourish. In contrast, "modest" and "moderate" innovators, such as Bulgaria,

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Greece, and Italy, have weaknesses in terms of attractiveness of their research systems and in terms of the level of investments in R&D. This is tied with a lack of guidance for student entrepreneurs to navigate the complexities of building and scaling a business.

Funding opportunities are another major hurdle. Entrepreneurs in less innovative regions frequently encounter challenges in securing capital because investors tend to be concentrated in established innovation regions. This creates a vicious cycle: without sufficient resources, start-ups struggle to grow, discouraging further investment and limiting the development of local entrepreneurial ecosystems. As a result, talented individuals in underdeveloped regions are often forced to seek opportunities elsewhere, contributing to a "brain drain" that further weakens these areas (Kaufmann and Miki, 2015).

Addressing these disparities is essential not only for regional development but also for fostering a more cohesive and resilient European innovation landscape. Creating equal opportunities in entrepreneurial education and resources is a critical step in addressing regional disparities. Efforts to bridge this divide by promoting inclusive entrepreneurship opportunities can unlock significant benefits, fostering the creation of an environment that improves resilience and innovation across all regions of Europe (Henry et al., 2024).

Research by Autio et al. (2014) highlights the critical role that regional innovation ecosystems play in the success of entrepreneurial ventures. Furthermore, literature suggests that mentoring is most effective when adapted to the specific needs and contexts of individuals (Mouammer and Bazan 2021). Promoting cross-border collaboration and leveraging the strengths of different regions help create shared knowledge and the creation of entrepreneurial ecosystems providing the spread of value creation at regional level, innovation leaders with fresh perspectives and opportunities to address untapped markets and create new ventures (Stam and van de Ven, 2021).

Further, strengthening regional entrepreneurial ecosystems can create the conditions for enhancing innovation spillover and creating a supportive environment for start-ups, which can contribute to enhancing the competitiveness of the European Union internal market (Content et al., 2020).

The role of academia is paramount for the creation of effective entrepreneurial ecosystems across European regions. By implementing new pedagogical approaches rooted in experiential learning, academia can offer targeted programs that expose students to practical

entrepreneurial challenges while fostering collaboration between academia and industry. This cross-pollination creates an environment where innovative ideas can be tested, refined, and transformed into viable ventures. Ultimately, such initiatives contribute to a more equitable distribution of resources and opportunities (Mazzarol et al., 2016).

In addition to the mobility, professional development, and interuniversity exchange activities established at the European level as part of Erasmus +, mentorship and venture-building programs in universities are also important in fostering entrepreneurial ecosystems. This is demonstrated by the experience of the ENTREPRENEDU[2] project, which has developed a comprehensive set of programs to address gaps in entrepreneurship education. In the next section, we will explore how ENTREPRENEDU integrates mentorship and skills development into a venture-building program to equip students with the tools they need to create and grow impactful ventures, accelerate the growth of start-ups, and build a foundation for the sustainable success of student-led ventures.

4.2 The role of mentoring for innovative practice in regions with a lower concentration of start-ups

Academic research has acknowledged the relevance of mentoring to bridge disparities across regions. Effective mentoring programs can help spread innovative practices to mid-tier and less innovative regions by fostering strategic goal-setting, leveraging local networks, adapting to feedback, prioritizing inclusive business models, and equipping entrepreneurs with practical skills and a proactive mindset. Specifically, tailored mentorship programs that are customized to the needs of a particular institutional setting—integrating local and global insights—can empower entrepreneurs in less innovative or resource-constrained environments to achieve sustainable growth and innovation.

Lingelbach et al. (2005) observed that entrepreneurs in less innovative areas who capitalize on informal networks and local community assets tend to secure the resources and support necessary for business expansion (Lingelbach, 2005). Similarly, Miller and Wedell-Wedellsborg (2013) identified that entrepreneurs who continuously assess and adjust their products or services based on feedback are more likely to achieve product-market fit, which is crucial in resource-limited

settings (Miller and Wendell-Wedellsborg, 2013). Moreover, Naudé (2013) stressed that entrepreneurship training programs tailored to the practical and contextual needs of entrepreneurs in emerging regions tend to be more impactful in addressing the specific challenges within these areas (Naudé 2013).

4.3 Designing mentoring programs to foster entrepreneurship

Mentoring has to do with a reciprocal relationship that is established between a mentor and a mentee with the goal of providing support, counseling, and role modelling that benefits participants in terms of direction and support for career development (Eby & Robertson, 2021).

4.3.1 The role of mentoring to support entrepreneurship

Mentoring plays a crucial role in terms of the competency development of entrepreneurs for the creation and success of new start-ups, as it guides founders through the complexities of building a business from the ground up (Rechter and Avnimelech, 2024). In fact, in a fast-paced, innovation-driven world, mentors provide not only knowledge and experience but also socio-emotional support, helping new entrepreneurs navigate challenges and avoid common pitfalls (Nabi et al., 2021). Mentoring for entrepreneurs provides a structured framework in which novice entrepreneurs, or mentees, receive guidance from seasoned business practitioners.

Assenova (2020) showed that mentoring for early-stage entrepreneurs led to an increase in revenue, profit, and employment growth for underprivileged entrepreneurs. Furthermore, mentoring influences the culture within start-ups, promoting adherence to foundational principles and cultivating an environment conducive to constructive problem-solving (Brodie et al. 2017).

Mentors often offer their services in specific programs that are pivotal in developing vital entrepreneurial skills and advancing business growth. Furthermore, research by Cope and Watts (2000) underscored the significance of these tailored programs in offering support that is critically aligned with the mentees' specific business development stages. Such individualized support not only addresses the immediate needs of entrepreneurs but also profoundly impacts their self-efficacy,

enhancing their belief in their capabilities to succeed (St-Jean et al. 2018).

4.3.2 From online mentoring to hybrid mentoring

The recent literature has begun to focus on mentorship in digital settings, highlighting its benefits, particularly the strengthening of the relationship between mentor and mentee and the increase in opportunities for interaction. Following the development of online mentoring, Kakouris (2017) introduced a transformative pedagogical approach in Greek entrepreneurship education through the TeleCC online platform (Kakouris, 2017). This constructivist model emphasizes cognitive development through interactive and reflective learning experiences. By fostering critical thinking and meta-learning, it represents a substantial shift from traditional mentoring to a dynamic, participant-driven educational practice, potentially enriching lifelong and inclusive learning in entrepreneurship. Kakouris (2009) further emphasizes the importance of specialized online platforms to support experiential entrepreneurial learning effectively in European higher education. These platforms are crucial for facilitating action learning and supporting working groups beyond traditional classroom settings (Kakouris, 2009).

Despite the relevant benefits of mentoring in digital settings, the shift towards online mentoring programs introduces new challenges, particularly in establishing the depth of connection that face-to-face interactions facilitate. Online platforms, while providing wide-reaching access, lack the nonverbal communication cues, such as body language and eye contact, that are essential in building trust and rapport between mentors and mentees (Lall et al., 2022). The asynchronous nature of many online interactions also impedes the flow of real-time feedback, which is important for timely guidance and adjustment in the learning process (Hooley et al. 2016; Walsh 2016).

To address these mentoring challenges, a hybrid approach that combines the strengths of both asynchronous and synchronous learning methods can be applied. Asynchronous learning allows mentees the flexibility to engage with the material at their own pace, which can make the mentoring more accessible and inclusive, accommodating various learning styles and personal schedules (Chang et al. 2014). In fact, synchronous learning, through real-time interactions such as video conferences, mimics the immediacy and engagement

of traditional classroom settings. This method enhances the engagement and allows for dynamic discussions and immediate feedback, which are vital for an effective learning experience (Mullen 2021). By incorporating both asynchronous and synchronous learning formats into the curriculum, mentees can benefit from a blended approach that combines the advantages of self-paced learning with real-time engagement. This hybrid model can offer a comprehensive learning experience, cater to different learning preferences, and maximize the effectiveness of mentoring programs (Dada et al., 2019).

4.3.3 Building mentoring programs

The structure of mentoring programs is pivotal in creating successful mentorship initiatives. The program should embrace progressive learning, which involves designing a curriculum that gradually transitions from basic to more complex entrepreneurial concepts and practices. This approach allows participants to build on their knowledge base and skills systematically, ensuring a solid foundation of understanding before advancing to more challenging topics (DuBois et al., 2011).

To effectively support mentees through progressive stages of learning, mentoring support should be adaptable and responsive to the changing needs of the participants as they advance through the program. This support includes tailored guidance and feedback that align with the mentees' evolving levels of expertise and challenges (Rigg and O'Dwyer, 2012; Russell, 2007).

Additionally, fostering autonomy and self-efficacy is crucial in these programs. As mentees progress, they should be encouraged to gradually take on more responsibility in decision-making and problem-solving, thus empowering them to take ownership of their learning journey and business development (Sarri 2011; Seet et al. 2018). Incorporating opportunities for reflection and self-assessment at each stage of the program can further aid mentees in consolidating their learning, identifying areas for improvement, and setting realistic goals for future development (Garcia-Molsosa et al. 2021).

Finally, conducting a demand analysis for entrepreneurial mentoring is critical in understanding the specific needs and psychological resources of entrepreneurs, such as self-efficacy and optimism. Such an analysis can guide the development of mentoring programs that effectively address these needs, enhancing entrepreneurial intentions and outcomes (Ayodele et al., 2022; Baluku et al., 2020; Nabi et al., 2021).

4.4 Case study: The ENTREPRENEDU mentoring program

4.4.1 Program objective and delivery

As part of the ENTREPRENEDU[3] project, an online mentoring program was designed with the objective of equipping young entrepreneurs from the emerging and moderately innovative countries of Italy, Greece, and Bulgaria with the necessary skills to create successful start-ups or improve the performance of an already existing start-up (Singer-Coudoux, Buxmann, Will, 2024). A demand analysis was carried out as an initial step in order to examine the needs and experiences of the participants through semistructured interviews led by two Fraunhofer IPK researchers and one research assistant to ensure consistency in data collection and interpretation (Buxmann et al., 2024). Each of these hour-long sessions followed a structured guideline, aiming to identify the unique entrepreneurial needs of the participating teams. A thematic analysis of the interview data uncovered clusters of key needs across the teams, which formed the basis for defining six core mentoring topics. The idea was also to shape the program's curriculum in order to directly address participants' specific needs. The six key areas addressed by the ENTREPRENEDU mentoring program included:

1 Business model development
2 Crafting value propositions
3 Technical feasibility and product development
4 Investment readiness
5 Comprehensive business planning
6 Access to finance

Each demand was transformed into one mentoring module, with one of the project's mentoring partners responsible for each. Then, each module was crafted to support the overall objectives of the program, with clear learning outcomes specified to guide participants on what they could expect to achieve in each module. Additionally, the program's curriculum detailed the sequence in which topics would be introduced, the timeline for the program, and the approach for assessing progress and delivering feedback to participants.

This also helped form the foundation for the modules in the venture-building program. Results for interviews showed that participating teams and start-ups had varying skill levels and experiences.

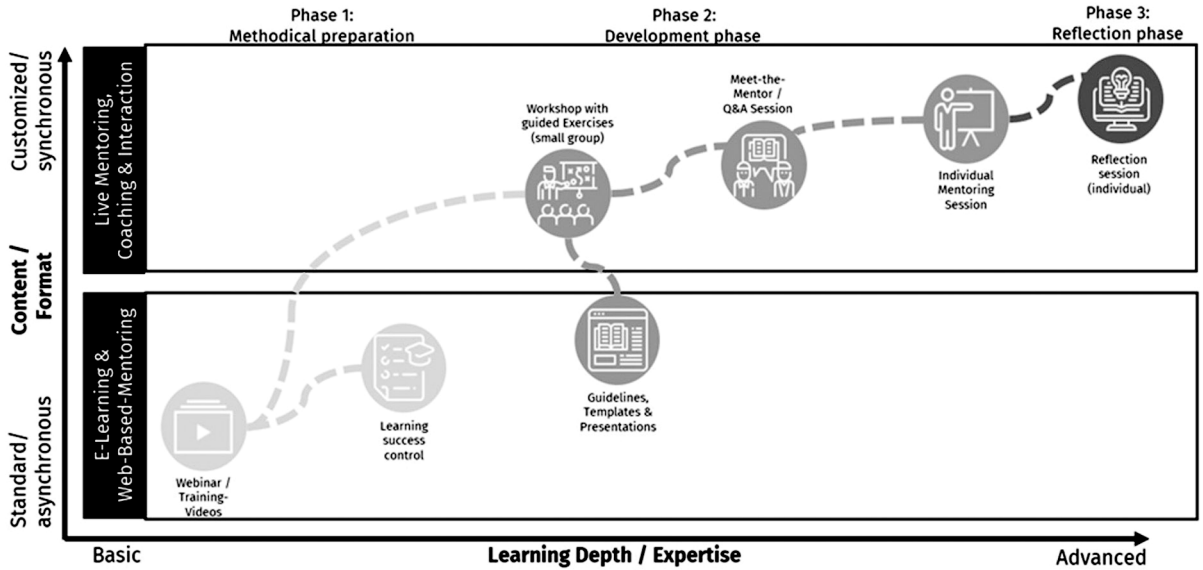

Figure 4.1 ENTREPRENEDU mentoring program structure.

This was taken into consideration, leading to the adoption of a blended learning approach that combined both asynchronous and synchronous components of increasing complexity. This structure allowed participants to engage with material suited to their skill levels while benefiting from the flexibility of online participation from wherever they were located. Figure 4.1 illustrates the program's three distinct phases, outlining the mentoring units, content structure, and depth of learning.

Phase one focused on foundational knowledge, with standardized content delivery through online formats like webinars and training videos. This introductory content was the same for all participants and included a 1-hour, knowledge-assessment quiz. Each mentoring module contained three training videos, each approximately 1 hour in length, with the complexity of the content increasing progressively through the sequence.

The second phase, centered around skill development, offered more tailored learning experiences aligned with participants' specific needs. Delivered in a live-mentoring format, this phase incorporated workshops, Q&A sessions, and individualized mentoring. Each mentoring partner conducted a 2-hour workshop for cohort participants, utilizing tools like Concept and Miro boards to facilitate peer feedback and interactive learning. After the workshop, a 1-hour Q&A session allowed participants to review and discuss the material, followed by 2 hours of personalized mentoring from each partner to focus on individual needs and circumstances.

The final phase emphasized reflection and feedback, providing a 1-hour session with each mentoring partner. In these sessions, participants evaluated their progress, reviewed achievements, and set future goals with their mentors' guidance.

In total, the mentoring program offered each participant 10 hours of mentorship across all phases, aimed at maximizing team potential and promoting long-term success. With six mentoring organizations involved, each start-up in the first cohort received a combined 60 hours of mentorship support.

4.4.2 Results of the ENTREPRENEDU mentoring program

To assess the mentoring program's impact, feedback was collected through structured interviews. This qualitative approach allowed participants to reflect deeply on their experiences, addressing key

areas, such as skill development, business-model refinement, and goal-setting. Moreover, the semi-structured interviewing technique allowed for a detailed and dynamic exchange that highlighted both the program's strengths and areas for improvement. Overall, mentees found the program transformative, noting substantial progress in refining business ideas, setting measurable goals, and building essential entrepreneurial skills. While mentor guidance and the collaborative learning environment were both highly valued, some participants found peer interactions less beneficial due to diverse business backgrounds. Feedback on individual modules was largely positive, particularly for those focused on business models, value propositions, and funding, although participants suggested refining module sequencing and providing additional support in areas like human resources and leadership.

The program's technical aspects were generally well-received, though scheduling challenges and prompted suggestions for a more streamlined process. Across cohorts, participants expressed high satisfaction and recommended further module depth, extended timelines, and more flexible content access to enhance learning. The feedback further highlighted the ENTREPRENEDU mentoring program's positive impact on entrepreneurial development, with participants showing appreciation for its structured guidance and the opportunity to advance their business ideas. Mentees reported growth in strategic planning, goal-setting, and entrepreneurial skills, finding the program to be transformative overall.

The ENTREPRENEDU mentoring program case further demonstrates the transformative potential of mentorship and its pivotal role in fostering entrepreneurial competencies. It also serves as a guide for the implementation of further programs to support student entrepreneurship.

Furthermore, its findings underscored the value of tailored guidance, progressive learning, and hybrid educational models. Leveraging these insights, the venture-building program extended the scope of mentorship to reach a wider audience, ensuring alignment with both regional and individual needs.

4.5 The ENTREPRENEDU venture-building program

4.5.1 From mentoring to venture-building

The findings and success of the ENTREPRENEDU mentoring program directly informed the design of the venture-building

program, allowing for a natural progression from guided mentoring to a more comprehensive entrepreneurial education model. In fact, the ENTREPRENEDU mentoring experience served as the basis for the development of a structured, comprehensive framework designed to empower students with the skills, tools, and knowledge necessary to create a sustainable and innovative program for venture building.

Specifically, the mentoring program revealed the importance of aligning educational content with the specific needs of aspiring entrepreneurs. This was achieved through a detailed demand analysis, which identified the unique challenges faced by participants in each region. These findings directly influenced the design of the venture-building program, ensuring that each module was tailored to address real-world entrepreneurial challenges.

Following the phases of the mentoring program, the venture-building program adopted a three-phase approach:

- **Foundational knowledge:** Standardized learning materials introduced participants to key entrepreneurial concepts.
- **Skill development:** Interactive workshops and individualized mentoring helped participants apply their knowledge to practical scenarios.
- **Reflective growth:** Mentorship focused on evaluating progress, refining strategies, and setting future goals.

This three-pronged framework ensured that participants progressed systematically, building their capabilities while receiving continuous support.

The hybrid approach of the mentoring program was applied to the venture-building program to accommodate a larger, more diverse audience. Hence the venture-building program envisaged:

- **Asynchronous learning:** Participants accessed webinars, quizzes, and other digital resources to engage with the content at their own pace.
- **Synchronous Engagement:** Real-time workshops, Q&A sessions, and personalized mentoring sessions provided opportunities for deeper interaction and immediate feedback.

Moreover, one of the most important peculiarities of the venture-building program was its transition from a focused mentoring initiative to a scalable educational framework.

4.6 The ENTREPRENEDU venture-building program

The **ENTREPRENEDU venture-building program** serves as a cornerstone of entrepreneurial education, offering a structured, multi-phase approach to nurturing the entrepreneurial potential of students across Europe. This section outlines the program's key components, focusing on its modular structure, blended learning approach, and integration of practical tools and mentorship. Developed collaboratively under the scheme of the ENTREPRENEDU project and led by the European Business Angel Network (EBAN), involving LUISS University, the University of Thessaly, and CleanTech Bulgaria as academic partners, the program aimed to bridge the gap between academic theory and the practical demands of entrepreneurship, equipping students with essential knowledge, skills, and experiences to succeed in the innovation-driven global economy. Table 4.1. shows the structure of the venture-building program designed by ENTREPRENEDU"

The program was designed to:

1 **Provide comprehensive learning:** Equip students with the tools and methodologies to navigate the entrepreneurial journey, from ideation to scaling a business.
2 **Foster practical application:** Emphasize real-world problem-solving through case studies, mentoring, and project-based learning.
3 **Encourage regional adaptation:** Tailor content to reflect the diverse innovation capacities of participating countries, ensuring inclusivity and relevance.
4 **Support sustainability and growth:** Incorporate modules that align with the sustainable development goals (SDGs) and encourage green business practices.

The venture-building program envisaged the creation of a "venture-building syllabus." The syllabus is a comprehensive educational framework that outlines the tasks that universities and educators can follow in order to equip students with the skills and knowledge necessary to successfully navigate the entrepreneurial journey. The venture-building syllabus is a practical guide that aims to provide students with a pathway not only to increase their resilience in the face of the challenges associated with starting a business but also to enhance their ability to create scalable and sustainable ventures in the long term. The structure of the curriculum is comprehensive and adaptable, yet

Table 4.1 Structure of the venture-building program

Module 2: Solution Development and Validation, Crafting Value Proposition

- **Objective:** Enable students to design and validate solutions that effectively address identified problems.
  - **Content:** Frameworks such as the **Value Proposition Canvas** to ensure product-market fit.
  - Techniques for prototyping, A/B testing, and pilot studies.
  - Incorporation of design thinking to iterate on solutions.
- **Activities:**
  - Practical exercises in crafting compelling value propositions.
  - Collaborative prototyping workshops to refine solutions.
  - Real-world case studies of start-ups that successfully validated their ideas.

Module 3: Market Discovery

- **Objective:** Equip students with skills to conduct market research, understand customer segmentation, and identify growth opportunities.
- **Content:**
  - Fundamentals of market research and tools like SWOT analysis.
  - Techniques for leveraging digital tools for data collection and analysis.
  - Strategies for identifying and targeting niche markets.
- **Activities:**
  - Hands-on market research projects, including competitor analysis and customer profiling.
  - Role-playing exercises to simulate customer interactions.
  - Use of tools like the **Market Opportunity Navigator** to assess viability.

Module 4: Business Model Development

- **Objective:** Help students build scalable and sustainable business models.
- **Content:**
  - Use of the **Business Model Canvas** to map out business components.
  - Exploration of revenue streams, value delivery mechanisms, and customer engagement strategies.
  - Emphasis on sustainable business practices and aligning with ESG (Environmental, Social, and Governance) criteria.
- **Activities:**
  - Group projects to design business models for hypothetical or real ventures.
  - Analysis of case studies demonstrating innovative business models.
  - Interactive sessions on the importance of adaptability and resilience in business planning.

Table 4.1 (Continued)

Module 5: Access to Finance and Funding

- **Objective:** Prepare students to secure funding through effective pitching and financial planning.
- **Content:**
  - Overview of funding sources, including venture capital, angel investment, and crowdfunding.
  - Techniques for crafting compelling investment pitches.
  - Financial planning, including revenue forecasting and cash flow management.
- **Activities:**
  - Pitch simulation exercises, with feedback from mentors and peers.
  - Workshops on financial statement preparation.
  - Guest speaker sessions featuring investors sharing insights on successful funding strategies.

Source: Based on work of the authors.

capable of meeting the diverse needs of students in different academic settings to secure funding and scale a business.

The curriculum included in the syllabus is structured to guide students through the entrepreneurial journey in a logical and practical way, providing them with the tools they need to succeed in real-life scenarios. In addition, the curriculum is a dynamic tool for universities to create their own venture-building programs consistent with regional characteristics, leveraging local case studies, industry connections, and educational traditions.

The venture-building syllabus has already been experimented by three partner institutions as part of the ENTREPRENEDU projects. These educational institutions included LUISS (Italy), University of Thessaly (Greece), and CleanTech Bulgaria (Bulgaria). The participating universities integrated the syllabus of the venture-building program into their university curriculum. More specifically, these experiments were implemented in the context of the early stages of the start-up process, considering that most students have little or no previous experience with the topic.

Further experiments of the syllabus that were held by CleanTech Bulgaria (CTBG) saw the adaptation of the syllabus to a vocational training setting. Hence, a focus that placed more emphasis on practical emphasis training was adopted by putting the emphasis on hands-on exercises, real-world simulations, and project-based learning through

Figure 4.2 QR Code for accessing the venture-building syllabus.

each module, by breaking down the larger modules into smaller, and easily affordable units, to make the course more engaging and accessible. Vocational program students benefited from shorter, modular units that allowed them for immediate implementation of the knowledge acquired during the venture-building program.

These experimentations allowed for three key features of the academic model to be identified. In particular, the importance of **localized content:** Modules were adapted to reflect the unique entrepreneurial ecosystems of each region, addressing specific barriers such as funding gaps and limited networks.

Another feature was **collaborative learning:** Students engaged in peer-to-peer feedback activities, fostering a collaborative environment that enriched their learning experience; and lastly **sustainability and growth:** The program emphasized sustainable business practices, preparing participants to align their ventures with broader societal and environmental goals.

4.7 Conclusions

Mentoring and incubator programs emerge as fundamental infrastructure for entrepreneurial development, providing students with structured pathways to transform theoretical understanding into tangible business opportunities. These platforms do more than transfer knowledge; they create transformative experiences that shape

entrepreneurial mindsets, build confidence, and provide critical networks that can support student entrepreneurs throughout their venture-building journey. It also demonstrates the effectiveness of structured and collaborative approaches in addressing the uneven distribution of entrepreneurial education and resources. By targeting underserved regions, fostering inclusive ecosystems, and emphasizing cross-border collaboration, such initiatives highlight the potential to unlock untapped talent and drive regional development. These efforts not only prepare individuals to thrive as entrepreneurs but also catalyze economic and social progress in areas traditionally left behind.

The ENTREPRENDU experience showed the importance of adopting tailored approaches to venture-building programs and mentoring that should be able to adapt to the contexts of the higher education institutions in which they are implemented in order to better address regional disparities in entrepreneurial education through customized content and practical support. The cases also show the relevance of **feedback mechanisms,** such as surveys and evaluations in refining the program, ensuring its ongoing relevance and effectiveness.

Finally, the ENTREPRENEDU experience acknowledges the relevance of **integrating digital tools in mentoring and venture-building programs** not only to broaden their accessibility, especially for entrepreneurs in remote or underserved areas but also to consider in the course structure themes related to sustainability and social entrepreneurship to prepare young entrepreneurs to address contemporary and future challenges, in line with global trends in innovation and responsible business practices.

Notes

1 European Commission. https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en

2 ENTREPRENEDU is an initiative funded by the European Innovation Council and the SMEs Executive Agency (EISMEA) with an aim of enhancing entrepreneurial ecosystems for education. The ENTREPRENEDU consortium brings together different innovation stakeholders and educational entities from six different European countries—Italy, Bulgaria, Greece, Belgium, Germany, and Ireland. The ENTREPRENEDU initiative will support the 12 most viable and promising ideas and concepts from the early stages to the commercialization of their solutions. In this

way, ENTREPRENEDU will enable a highly replicable model to provide business know-how for young Europeans to be deployed in European universities.

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References

Assenova, V.A. (2020). "Early-stage venture incubation and mentoring promote learning, scaling, and profitability among disadvantaged entrepreneurs", *Organization Science*, Vol. 31, No. 6, pp. 1560–1578. doi:10.1287/orsc.2020.1367

Autio, E., Kenney, M., Mustar, P., Siegel, D. and Wright, M. (2014). "Entrepreneurial innovation: The importance of context", *Research Policy*, Vol. 43, No. (7), pp. 1097–1108. doi:10.1016/j.respol.2014.01.015

Ayodele, T.O., Ekemode, B.G., and Kajimo-Shakantu, K. (2022). "Bridging the gap in real estate enterprise: The impact of mentoring on entrepreneurial intentions of real estate students in Nigeria", *Property Management*, Vol. 40, No. 4, pp. 484–509. doi:10.1108/pm-02-2021-0015

Baluku, M.M., Matagi, L. and Otto, K. (2020). "Exploring the link between mentoring and intangible outcomes of entrepreneurship: The mediating role of self-efficacy and moderating effects of gender", *Frontiers in Psychology*, Vol. 11, pp. 1556. doi:10.3389/fpsyg.2020.01556

Brodie, J., van Saane, S.H. and Osowska, R. (2017). "Help wanted". In: *Industry and Higher Education*, Vol. 31, No. 2, pp. 122–131. doi:10.1177/0950422217691666

Buxmann, H., Singer-Coudoux, K. and Houssni, K. (2024). "Tailoring entrepreneurial education: Demand-driven insights for an entrepreneurial online mentoring program", *European Conference on e-Learning*, Vol. 23, pp. 52–59. doi:10.34190/ecel.23.1.2852

Chang, T.P., Pham, P.K., Sobolewski, B., Doughty, C.B., Jamal N., Kwan, K.Y. et al. (2014). "Pediatric emergency medicine asynchronous e-learning: A multicenter randomized controlled Solomon four-group study," *Academic Emergency Medicine*, Vol. 21, No. 8, pp. 912–919. doi:10.1111/acem.12434

Content, J., Bosma, N., Jordaan, J., and Sanders, M. (2020). "Entrepreneurial ecosystems, entrepreneurial activity and economic growth: New evidence from European regions", *Regional Studies*, Vol. 54, No. (8), pp. 1007–1019. doi:10.1080/00343404.2019.1680827

Cope, J. and Watts, G. (2000). Learning by doing – An exploration of experience, critical incidents and reflection in entrepreneurial learning", *International Journal of Entrepreneurial Behavior & Research*, Vol. 6, No. (3), pp. 104–124. doi:10.1108/13552550010346208

Dada, G.E., Alkali, H.A. and Oyewola, D. (2019). "An investigation into the effectiveness of asynchronous and synchronous E-learning mode on students' academic performance in National Open University (NOUN), Maiduguri Centre", *IJMECS*, Vol. 11, No. 5, pp. 54–64. doi:10.5815/ijmecs.2019.05.06

DuBois, D.L., Portillo, N., Rhodes, J.E., Silverthorn, N. and Valentine, J.C. (2011). "How effective are mentoring programs for youth? A systematic assessment of the evidence", *Psychological Science in the Public Interest*, Vol. 12, No. (2), pp. 57–91. doi:10.1177/1529100611414806

Eby, L.T. and Robertson, M.M. (2020). "The psychology of workplace mentoring relationships", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 7, No. 1, pp. 75–100. Available at: https://ssrn.com/abstract=3550371

European Union (Hg.) (2023): European Innovation Scoreboard 2023. Online verfügbar unter https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en#documents-and-media

Garcia-Molsosa, M., Collet-Sabé, J. and Montserrat, C. (2021). "Benefits, positive factors and difficulties perceived by mentors participating in a mentoring program aimed at youth in residential care", *Euro J Education*, Vol. 56, No. 3, pp. 496–510. doi:10.1111/ejed.12460

Henry, C., Wu, W., Moberg, K., Singer, S., Gabriel, B., Valente, R. et al. (2024). "Exploring inclusivity in entrepreneurship education provision: A European study", *Journal of Business Venturing Insights*, Vol. 22, e00494. doi:10.1016/j.jbvi.2024.e00494

Hooley, T., Hutchinson, J. and Neary, S. (2016). "Ensuring quality in online career mentoring", *British Journal of Guidance & Counselling*, Vol. 44, No. (1), pp. 26–41. doi:10.1080/03069885.2014.1002385

Kakouris, A. (2009). Online platforms for entrepreneurship education: An instructional design approach. In: *4th European Conference on Entrepreneurship and Innovation* (230–235) Belgium, September 2009.

Kakouris, A. (2017). Constructivist entrepreneurial teaching: The TeleCC online approach in Greece. In: Paul Jones, Gideon Maas und Luke Pittaway (Hg.): Entrepreneurship Education, Bd. 7. Emerald Publishing Limited (Contemporary Issues in Entrepreneurship Research), pp. 235–258.

Kaufmann, D. and Malul, M. (2015). "The dynamic brain drain of entrepreneurs in peripheral regions", *European Planning Studies*, Vol. 23, No. 7, pp. 1345–1356.

Lall, Saurabh A.; Chen, Li-Wei; Mason, Dyana P. (2022). "Digital platforms and entrepreneurial support: A field experiment in online mentoring", *Small Bus Econ*, Vol. 61, No. 4, pp. 631–654. doi:10.1007/s11187-022-00704-8

Lingelbach, D. (2005). The distinctiveness of entrepreneurship in developing countries. *UTSA College of Business Center for Global Entrepreneurship Working Paper No. 1*

Mazzarol, T., Battisti, M. and Clark, D. (2016). The role of universities as catalysts within entrepreneurial ecosystems. In "Rhetoric and reality: Building vibrant and sustainable entrepreneurial ecosystems by Delwyn Clark, Tui McKeown, Martina Battisti (pp.36-68). Tilde University Press

Miller, P. and Wendell-Wedellsborg, T. (2013). "*Innovation as usual: How to help your people bring great ideas to life*". Harvard Business Review Press.

Mouammer, L. and Bazan, C. (2021). "Effect of mentorship on the early entrepreneurial journey of university students". In: PCEEA. doi:10.24908/pceea.vi0.14969

Mullen, C.A. (2021). "Online doctoral mentoring in a pandemic: Help or hindrance to academic progress on dissertations?", *IJMCE*, Vol. 10, No. 2, pp. 139–157. doi:10.1108/ijmce-06-2020-0029

Nabi, G., Walmsley, A., and Akhtar, I. (2021). "Mentoring functions and entrepreneur development in the early years of university", *Studies in Higher Education*, Vol. 46, No. 6, pp. 1159–1174. doi:10.1080/03075079.2019.1665009

Naudé, W. (2013). "Entrepreneurship and economic development: Theory, evidence and policy". IZA Discussion Paper No. 7507. July 2013

Rechter, E. and Avnimelech, G. (2024). "Intensive personal mentoring: Accelerators' secret sauce", *Small Business Economics*, Vol. 64. 1259–1284. https://doi.org/10.1007/s11187-024-00943-x

Rigg, C. and O'Dwyer, B. (2012). "Becoming an entrepreneur: Researching the role of mentors in identity construction", *Education + Training*, Vol. 54, No. 4, pp. 319–329. doi:10.1108/00400911211236181

Russell, L. (2007). "Mentoring is not for you!: Mentee voices on managing their mentoring experience", *Improving Schools*, Vol. 10, No. 1, pp. 41–52. doi:10.1177/1365480207073721

Sarri, K.K. (2011). "Mentoring female entrepreneurs: A mentors' training intervention evaluation", *Journal of European Industrial Training*, Vol. 35, No. 7, pp. 721–741. doi:10.1108/03090591111160814

Seet, P.-S., Jones, J., Oppelaar, L. and Corral de Zubielqui, G. (2018). "Beyond 'know-what' and 'know-how' to 'know-who': Enhancing human capital with social capital in an Australian start-up accelerator",

Asia Pacific Business Review, Vol. 24, No. 2, pp. 233–260. doi:10.1080/13602381.2018.1431250

Singer-Coudoux, K., Buxmann, H. and Will, M. (2024). "Empowering future entrepreneurs: Developing an online entrepreneurial mentoring program across diverse EU regions", *European Conference on Innovation and Entrepreneurship*, Vol. 19, pp. 721–728. doi:10.34190/ecie.19.1.2599

Stam, E. and van de Ven, A. (2021). "Entrepreneurial ecosystem elements", *Small Business Economics*, Vol. 56, No. 2, pp. 809–832. doi:10.1007/s11187-019-00270-6

St-Jean, E., Radu-Lefebvre, M. and Mathieu, C. (2018). "Can less be more? Mentoring functions, learning goal orientation, and novice entrepreneurs' self-efficacy", *International Journal of Entrepreneurial Behavior & Research*, Vol. 24, No. 1, pp. 2–21. doi:10.1108/ijebr-09-2016-0299

Walsh, K. (2016). "Online mentoring in medical education", *South African Family Practice*, Vol. 58 (sup1), pp. S7–S8. doi:10.1080/20786190.2015.1059020

Xie, Y. (2024). "Research On the uneven distribution of educational resources in China", *Journal of Education, Humanities and Social Sciences*, pp. 86–91. doi:10.54097/m2x54q97