ENTREPRENEDU

Enhancing entrepreneurial ecosystems for education

D6.2 PUBLICATION OF THREE GUIDELINES AND STANDARD OPERATING PROCEDURES IN LINE WITH THOSE ADOPTED IN THE CONSIDERED ENTREPRENEDU COUNTRIES WITH LOW AND MEDIUM INNOVATION CAPACITIES.

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Abstract	This deliverable presents the implementation of the ENTREPRENEDU project's three core components—Hackathons, Tailored Mentoring Modules, and a Venture Building Program—across Italy, Greece, and Bulgaria. It offers practical guidelines for students, mentors, and policymakers to replicate and adapt these entrepreneurship education tools to support startup development and innovation in low-capacity regions.

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EXECUTIVE SUMMARY

The Deliverable 6.2 considers the ENTREPRENEDU project's integrated model for entrepreneurship education through its three interconnected components: **Hackathons**, **Tailored Mentoring Modules**, and a **Venture Building Program**.

1. **Hackathons -** Hackathons within the ENTREPRENEDU framework serve as entry points for young entrepreneurs to explore real-world challenges in a dynamic, hands-on format. These regional, themed events bring together diverse participants—students, mentors, experts and policymakers in structured two-day sprints. Activities include matchmaking, mentorship, pitching and awards, designed to guide teams from idea generation to business creation.

2. **Mentoring -** The ENTREPRENEDU mentoring program provides tailored support to early-stage entrepreneurs through structured, needs-based guidance. Built around key entrepreneurial dimensions—including product readiness, business goals, and innovation awareness—it accelerates learning, supports resilience, and bridges the gap between theory and practice.

3. **Venture Building Program -** The Venture Building Program is the core educational outcome of ENTREPRENEDU, translating entrepreneurial ideas into viable business ventures through modular, interactive learning program. Developed and delivered by the project's universities and VET partner, it provides students with structured, experiential education, supplemented by mentorship and cross-institutional resources.

This deliverable provides a comprehensive overview of how the 3 components were implemented during the project, as well as **guidelines for the three target groups of the project (students, mentors, and policy makers)** on how to implement them in the most beneficial way for their needs.

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ABBREVIATIONS

- LoS - Letters of Support
- MoU - Memoranda of Understanding
- M&E - monitoring and evaluation
- SOPs – Standard Operating Procedures

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1 Best practices and core elements of "Hack the business" Hackathons for entrepreneurs

1.1 Introduction

This section outlines the guidelines and standard operating procedures for conducting hackathons aimed at fostering innovation and entrepreneurship. It focuses on three key target groups:

- students/young entrepreneurs;
- mentors;
- policy makers.

The ENTREPRENEDU project emphasizes on the implementation of hackathons as a strategic tool to create a scalable education model (Venture Building Program) that bridges business and educational systems, helping ideas evolve into practical solutions. Three "Hack the Business" editions were organized during the project, in Italy, Greece, and Bulgaria, targeting countries with low and medium innovation capacities.

A hackathon is an intensive, time-bound event—usually lasting for more than one day—where individuals collaborate to creatively solve problems, explore new ideas, and rapidly develop prototypes or proof-of-concept solutions in a fast-paced, team-driven environment. Hackathons can vary widely in format and scale. They can be local, national, or international. Local hackathons focus on participants from a specific area or region, while national ones involve participants from across a country. International hackathons bring together local or national events under a unified framework, sometimes with geographic restrictions such as being limited to certain regions like the Balkans or EU member states or being open to global participation. Hackathons can also be internal or external—internal hackathons focus on a specific organization's community, while external ones are open to the broader public. The events can be themed, with challenges that participants must address, or non-themed, where any idea can be pursued. A hackathon may be an attempt to attract aspiring entrepreneurs, innovators, programs, etc. Hackathons usually can last between 1 and 2 days.

For ENTREPRENEDU's "Hack the Business" format, the hackathons were regional, external, and themed, focusing on specific challenges for participants to tackle. Their organizational structure was of a two-day event and included matchmaking sessions for the individual participants to find teams, training workshops in the form of presentations from the mentors, mentorship and guidance 1 to 1 session between the mentors and the teams, pitch session, jury assessment, and an award ceremony. This type of structure provided a step-by-step guide for the teams to develop their business ideas.

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1.2 Guidelines per target groups

1.2.1 Students/Young entrepreneurs

This section outlines models for student and young entrepreneur participation in hackathons, based on approaches implemented during the ENTREPRENEDU project. It highlights how these models support skill development and business innovation, emphasizing the low-entry threshold of the ENTREPRENEDU hackathon that encourages broad engagement across experience levels. The event should be interactive, allowing participants to contribute to projects, even without opening a laptop. This encourages involvement from both tech experts and newcomers, fostering a more inclusive and diverse environment by welcoming individuals from non-technical backgrounds, different disciplines, and underrepresented groups to share their unique perspectives and skills—and work together to create the best possible solutions by leveraging the strengths of every participant.

It's essential to define the target groups and characteristics of participants (such as background, skills, etc.), as these will align with the hackathon's goals and theme. While hackathons have traditionally been technical, they offer unique opportunities for interdisciplinary collaboration, requiring skills from programming to marketing, through business development and graphic design. Teams should be encouraged to combine diverse expertise to best address challenges.

Preparation and Expectations:

Students should familiarize themselves with the hackathon theme beforehand, review any pre-event materials or resources provided, and prepare necessary tools (e.g., laptop, software) beforehand. Clear expectations about the event's nature, time commitment, and challenges will help participants feel prepared and confident.

Another important thing that the participant should consider is that when forming a team, it is crucial to have members with diverse expertise and skills—such as programming, design, business strategy, or communication. Encouraging interdisciplinary collaboration will not only enhance the quality of the projects but also enrich the learning experience. This should be communicated to the students in advance to allow them enough time to network and form balanced teams.

Indicative eligibility criteria for the ENTREPRENEDU hackathon students include:

- Individuals (natural persons)
- can participate.
- Participation with an already formed team

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- Teams can be formed during the hackathon itself by teaming up with other individual participants
- Participants must be residents of an EU Member State.
- Participants must be between 18 and 30 years old at the time of registration.
- All participants are welcome regardless of race, ethnicity, gender, sexual orientation, disability, or other status.
- Participants can include students, professionals from industry or academia, government workers, and non-profit employees, with a focus on those with technological experience and an entrepreneurial mindset.
- Registration is required in order to secure a spot at the event.
- Participation is free.

It is also important to communicate the benefits of joining the hackathon. Reasons to participate may include:

- Contributing to meaningful solutions for global challenges.
- Applying their technical or business expertise in a practical setting.
- Learning new business creation skills.
- Networking with innovators and professionals in the innovation and entrepreneurship sectors.
- Exploring opportunities to start their own business or join a start-up.
- To get guidance and support on the development of their proposed solution.
- Competing for unique prizes, such as post-hackathon mentorship.
- Having fun and connecting with like-minded individuals.

To effectively communicate these benefits, organizers can use communication channels such as email campaigns, social media campaigns, webinars, local media coverage, and information sessions. Sharing these can make the hackathon's value more tangible and motivate students to get involved.

1.2.2 Mentors

Mentors play a pivotal role in guiding and supporting the teams throughout the hackathon. During a hackathon, mentors usually are experienced professionals or experts on the hackathon topic, who advise hackathon participants, help define their ideas, and provide

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guidance on technical, business, or strategic challenges. Their expertise is essential to the participants' success, as they help facilitate creative thinking, provide feedback, and offer technical and business insights. Mentors are expected to engage with teams not only during the main hackathon event but also in pre-hackathon activities (such as training sessions or workshops), and in post-hackathon follow-ups—particularly for the winning teams. They may be assigned to specific teams and are encouraged to closely monitor and support their progress throughout the process. Typical mentor profiles may include:

- Entrepreneurs or start-up founders
- Industry experts in fields related to the hackathon theme
- Software developers, engineers, and data scientists
- Business development and marketing professionals
- Academics or researchers with domain-specific knowledge
- Investors or incubator/accelerator representatives

Pre-hackathon engagement:

- As a first step, aligning with the organising team is vital for the mentor to understand the planned vision for the specific event organisation.
- Before the hackathon, mentors should familiarize themselves with the event's theme, goals and expectations. This can include reviewing any pre-hackathon training materials if available and resources corresponding to the event's theme.
- Leading an online webinar(s) before the hackathon, presumably one week prior, will provide mentors with the opportunity to connect with participants , clarify their role, and align on expectations regarding the event.

Providing Guidance During the Hackathon:

- Mentors should create an environment where teams feel comfortable sharing ideas and brainstorming solutions. Encouraging out-of-the-box thinking and risk-taking is key to fostering innovation. This can be facilitated better through 1 on 1 discussions with each team.
- While it's important to guide teams, mentors should avoid dictating solutions. Instead, they should ask probing questions that help participants reflect on their approach and solutions.
- Each mentor should have a different expertise relating to business development, market fit, pitching, and funding sources.
- Mentors should encourage collaboration and ensure that team members are communicating effectively. If a team is struggling with interpersonal issues, mentors can step in to mediate or suggest strategies to improve collaboration.
- Mentors, if needed, can take the role of jury members (in case no external experts are available to take this role). As experts on the business development topics

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themselves, mentors have the knowledge and expertise to evaluate the ideas during the pitching competition at the end of each hackathon. Any kind of Conflict of Interest between jury members and the competing teams should be avoided and be reported immediately after being recognized.

Post-Hackathon Support:

- For winning teams or particularly promising projects, mentors may continue to provide support after the hackathon, guiding them through the next steps of development or helping them refine their business ideas. This post-event mentorship can be pivotal in transitioning from an idea to an actual business or product.

1.2.3 Policy makers

Policymakers play a crucial role in creating an environment that nurtures innovation and entrepreneurship. In the context of hackathons, policymakers are individuals from governmental or institutional bodies who shape regulations, allocate resources, and influence strategic priorities that affect innovation ecosystems. Their involvement can lend credibility to the event and help align its outcomes with broader societal and economic goals.

One of the ways they can contribute is by facilitating and popularizing innovative events such as hackathons. These events are powerful tools for addressing societal challenges, fostering creativity, and driving economic growth. However, their success depends heavily on the policy and institutional frameworks that support them. Policymakers can design supportive environments by providing the necessary infrastructure, incentives, and funding, as well as fostering collaboration between the public and private sectors. Nevertheless, supporting hackathons is not just about funding individual events. Policymakers need to create an ecosystem that fosters collaboration, creativity, and entrepreneurship. By offering financial incentives, infrastructure, and post-event support, policymakers can help ensure that hackathons lead to long-term innovation and entrepreneurial success. Relevant policymaker profiles may include:

- local, regional, or national government officials focused on innovation, education, or economic development
- representatives from ministries or departments relevant for the hackathon's theme
- education policy advisors or higher education regulators
- Members of innovation councils or public funding agencies
- Elected officials championing youth entrepreneurship or tech-driven growth

Before the Hackathon – creating an enabling environment:

- **Design Funding Models**: At all levels—national, regional, national, and European—Policymakers can encourage private companies, universities, and local communities to host hackathons by providing financial support, such as direct grants,

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tax incentives, or match-funding programs. This reduces the financial burden on event organizers and motivates participation.

- **Create Formal Recognition Systems**: National and European policymakers, in particular, can develop a formal recognition system for successful projects, that can incentivize participation and raise awareness. The government could spotlight successful startups and entrepreneurs, giving visibility to their ideas and helping them launch in the market.

- **Incorporate Local Events into Government Initiatives**: national and regional hackathons can be strategically aligned with national or European innovation agendas, such as digital transformation, the green transition, or health resilience. Policymakers can integrate local hackathons into broader strategies for innovation, which will foster better networking opportunities for participants and attract more talent and resources.

During the Hackathon – supporting implementation:

- **Address National Challenges**: Hackathons can be aligned with national priorities such as digital transformation, sustainability, or public health. On the European level, priorities can include topics such as climate action and circular economy. Policymakers can support thematic hackathons to foster solutions to relevant societal issues.

After the Hackathon - enabling continuity and growth:

- **Support Post-Hackathon Funding**: Specific funding streams or grant programs should be created for projects that emerge from hackathons. A post-hackathon funding initiative could help transform winning ideas into viable products or businesses. National innovation agencies and European funding programs (e.g., Horizon Europe or Erasmus+) are well-positioned to offer structured post-hackathon funding streams. Regional and local authorities can provide early-stage seed funding or help connect teams with relevant local investors or innovation hubs.

- **Encourage Accelerator Programs**: Regional and national governments should encourage the creation of accelerator or incubation programs for winning hackathon teams. These programs can provide mentorship, funding, and resources to help young entrepreneurs bring their ideas to market. These could be implemented through public-private partnerships with universities, research centers, or business incubators.

Hackathons are more than short-term innovation challenges—they are strategic tools for fostering entrepreneurship, interdisciplinary collaboration, and solutions to real-world challenges. To maximize their impact, support must extend beyond the event itself. This includes structured involvement from mentors, tailored preparation for participants, and—critically—engagement from policymakers who can shape the broader innovation landscape. By aligning local, regional, national, and European-level policies to support

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hackathons through funding, infrastructure, and follow-up opportunities, these events can become a catalyst for sustainable innovation, talent development, and economic growth.

1.3 Conclusion

In conclusion, hackathons serve as a powerful tool for fostering entrepreneurship and innovation, particularly in regions with lower innovation capacities. By providing a collaborative and dynamic environment, hackathons enable participants to tackle real-world challenges, develop practical solutions, and cultivate essential skills such as problem-solving, teamwork, and creativity. The ENTREPRENEDU project exemplifies the success of this model through its regional hackathons in Italy, Greece, and Bulgaria. Policymakers, mentors, and students all play vital roles in ensuring the success of these events. While policymakers can create supportive frameworks that encourage innovation through funding and incentives, mentors provide essential guidance and expertise to help participants refine their ideas. Students, as participants, contribute their enthusiasm and creativity, driving the development of new solutions.

To maximize long-term impact, it is essential that hackathons are not treated as isolated events, but as stepping stones within a broader innovation journey. Post-hackathon support, such as mentorship, incubation opportunities, and funding pathways, is crucial to help promising ideas evolve into sustainable ventures. Additionally, early alignment between the hackathon's goals and regional or national innovation strategies can further enhance their relevance, scale, and effectiveness.

Ultimately, the success of hackathons goes beyond the event itself; they contribute to the broader goal of building sustainable entrepreneurial ecosystems, empowering individuals, and driving economic growth in target regions.

2 Fostering entrepreneurship through tailored Mentoring

2.1 Introduction

Mentoring is a powerful tool for fostering entrepreneurial mindsets and guiding early-stage ventures through the complexities of innovation and business development. In regions with low or medium innovation capacity, such as many ENTREPRENEDU target countries, structured mentoring can fill critical gaps in experience, networks, and practical business knowledge. An especially valuable approach is cross-innovation mentoring, where experienced mentors from high-innovation regions engage with entrepreneurs in lower-capacity ecosystems. This type of mentoring not only helps bridge the knowledge gap but also facilitates the flow of best practices, advanced strategies, and global perspectives that might otherwise be inaccessible. By connecting unequal innovation ecosystems,

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cross-innovation mentoring fosters greater collaboration, enriches local knowledge, and promotes inclusive economic growth. It encourages diverse regions to learn from each other, creating an environment where talent and ideas can thrive regardless of geographic or infrastructural disparities.

The ENTREPRENEDU mentoring program was designed using a demand-driven, research-based approach that emphasized understanding the unique needs of hackathon participants. Through qualitative interviews and thematic analysis, key areas of focus were identified and used to create a mentoring model that is adaptable, relevant, and impactful. Relevant questions such as "How relevant were the topics of the workshops?", regarding the topics presented during the hackathon workshops, and "How satisfied were you with your developed concepts/prototype?", regarding the participant's perception of how they view the work on their product.

The following section outlines tailored guidelines and standard operating procedures (SOPs) for the three core stakeholder groups in the ENTREPRENEDU mentoring ecosystem: students, mentors, and policy makers.

Based on the results from the thematic analysis presented above, the following mentoring modules have been selected:

- Mentoring Module 1: Business Model Development
- Mentoring Module 2: Crafting a Unique and Competitive Value Proposition
- Mentoring Module 3: Your Idea Pitch: from Tech Feasibility to Product Development
- Mentoring Module 4: Investment Pitch and Quantifying Your Funding Needs
- Mentoring Module 5: Entrepreneurial Business Planning
- Mentoring Module 6: Access to Finance and Related Funding

2.2 Guidelines per target groups

2.2.1 Students/Young entrepreneurs

In the case of ENTREPRENEDU, students of a mentoring program included the winners from the Hackathons, chosen by the jury to continue their entrepreneurship education in the next phases of the project. Those students included individuals and/or teams with a business idea. For students and aspiring entrepreneurs, mentoring is not just a support mechanism — it's an opportunity to accelerate learning, gain practical insights, and strengthen entrepreneurial confidence. Tailored mentoring helps students refine their ideas, navigate uncertainty, and transition from theory to practice, by instructions shaped to their own needs.

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The mentoring program is built to respond to the real challenges students/young entrepreneurs face when turning ideas into viable ventures. This needs analysis, conducted through a combination of interviews and thematic surveys, offered both qualitative and quantitative insights into each team's context, challenges, and potential. The eight dimensions included:

1. **Business Objectives and Goals**: To determine the teams' aspirations and their feasibility.

2. **Resources & Support**: To ascertain the support and resources the teams currently have at their disposal and what they anticipate needing throughout their entrepreneurial journey

3. **Product or Service Evaluation**: To evaluate the teams' existing products or services and discuss potential areas of improvement or development.

4. **Target Group**: To understand the team's client base, composition, and preferences.

5. **Challenges & Problems**: To uncover the main difficulties and hurdles the teams are currently facing or anticipate encountering in the future.

6. **Trends & Innovation**: To gain insights into the teams' awareness and understanding of industry trends and innovative practices relevant to their business ideas.

7. **Knowledge, Know-How & Attitude**: To assess the existing skill sets, knowledge, and attitudes within the teams, as well as identify potential gaps or areas for further development.

8. **Learning Objectives**: To identify the teams' aspirations and goals for the mentoring programme.

Based on this foundation, mentoring sessions were then designed around the specific needs of each team. Topics ranged from validating business models and improving product-market fit, to crafting investment pitches and planning financing strategies. The sessions combined practical coaching with reflective discussions, ensuring students remained active participants in their own development.

To fully benefit from tailored mentoring, students are encouraged to:

- **Set clear goals**: Know what they want to achieve and be honest about their starting point.
- **Be open to feedback**: Constructive criticism is part of growth. It is important to embrace insights from mentors and apply them directly to the project.
- **Track progress**: Using a learning journal or shared document to capture outcomes, setting new goals, and maintaining momentum.
- **Be proactive**: Preparing questions, sharing updates, and engaging actively with the mentors.

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- **Document progress**: Keeping track of what they are learning and how it connects to their goals.
- Students should see the **mentoring process as a collaboration.** It should not be just about receiving advice but about co-creating solutions, growing personally and professionally, and developing an entrepreneurial mindset that lasts beyond the project.

Benefits of mentoring for students include:

- Gaining practical, real-world insights that complement academic learning
- Expanding their professional network and increasing exposure to industry practices
- Improving communication, problem-solving, and decision-making skills
- Building confidence in their business ideas and leadership potential
- Accelerating their entrepreneurial journey through informed guidance and early validation
- Developing resilience and adaptability—key traits for long-term success in any entrepreneurial path

2.2.2 Mentors

Mentors play a central role in the ENTREPRENEDU mentorship framework, acting as both subject-matter experts and learning facilitators. Their ability to deliver customized guidance is critical to the success of students navigating early-stage entrepreneurship. To ensure mentoring is not only effective but also consistent across different contexts, ENTREPRENEDU developed a structured approach grounded in real participant needs.

To design this approach, the project conducted one-hour online interviews with representatives from each of the four student teams selected during the first hackathon — forming the pilot cohort of the mentoring program. These interviews were designed to capture an in-depth understanding of the students' experiences, challenges, and expectations. Through both qualitative and quantitative analysis of the responses, common patterns were identified and categorized into broader thematic areas.

These themes were carefully mapped to a set of predefined mentoring topics. Each topic was then translated into practical guidance, structured around measurable learning outcomes and aligned with mentee needs. Preparing the mentoring themes sets out the cornerstones of the mentor's role. For successful mentoring, in addition to preparing their modules' topic, mentors are advised to:

Before the mentoring:

- **Start with the mentee's context**: Review their team's profile and needs assessment, through the lens of their expertise. Use these to tailor your mentoring sessions from the outset.

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During the mentoring:

- **Leverage the structured curriculum**: Each mentoring partner within the project provides a clear curriculum that defines core subjects, learning outcomes, content, methods, and sequencing. Mentors should align their input with this structure.
- **Deliver content flexibly, but purposefully**: Sessions should be adapted based on mentee progress but remain anchored in the established program objectives. Applied mentoring methods can include workshops, one-on-one coaching, or peer feedback.
- **Support reflection and action**: Encourage mentees to set short-term goals, reflect on sessions, and apply what they've learned between meetings.
- **Track progress and give feedback**: Regularly evaluate how mentees are progressing through the curriculum and provide constructive, actionable feedback to help them improve and iterate.

2.2.3 Policy makers

Policy makers, public institutions, and higher education stakeholders play a foundational role in embedding mentoring into the broader entrepreneurship and innovation ecosystem. In countries with low or medium innovation performance, mentoring is not just beneficial — it is essential for equipping the next generation of entrepreneurs with the practical tools and strategic thinking required to succeed.

Effective policy can catalyse the long-term success of mentoring by providing **infrastructure, incentives and institutional commitment**. Based on insights from the ENTREPRENEDU mentoring program's implementation, the following guidelines for policy makers were identified as beneficial for the execution of similar initiatives:

1. Incentivize Participation by Universities and Institutions - Higher education institutions are key implementation hubs for mentoring programs. To ensure mentoring is systematically integrated and not treated as a peripheral activity, policy makers can:

- **Tie mentoring to performance frameworks (on the national-level)**: Embed mentoring as a measurable indicator in university entrepreneurship rankings or funding criteria.
- **Provide funding support (on the regional and national level, but also through European Funding Programmes)**: Offer grants or financial support for universities to develop structured mentoring programs, including training for mentors and digital infrastructure.
- **Encourage cross-departmental involvement (on the national level)**: Incentivize collaboration between faculties (e.g. business, engineering, and design) to foster interdisciplinary mentoring networks.

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- **Support mentor pools (on the regional level)**: Facilitate the creation of university-linked databases of external mentors (e.g. alumni, entrepreneurs-in-residence) through tax incentives or official recognition for their contribution.

2. Promote Regional and Cross-Border Collaboration - Mentoring ecosystems benefit from cross-regional learning, especially in contexts where innovation support structures are still developing. Policy makers can foster collaboration by:

- **Creating regional-level mentor networks**: Encourage institutions and local governments to pool mentors into shared platforms, allowing access to diverse expertise beyond local boundaries.
- **Support joint programs (on the regional and European-level)**: Fund mentoring initiatives that involve two or more universities or incubators in the same region (or across borders), especially between stronger and weaker innovation performers.
- **Facilitate knowledge exchange (on the regional, national, and European levels)**: Organize conferences, regional working groups, and training events for mentors and program coordinators to share best practices, tools, and success stories.

3. Monitor and Evaluate Impact - To ensure mentoring programs are effective and continuously improving, robust monitoring and evaluation (M&E) systems are essential. Policy makers should:

- **Define clear metrics (on the national level)**: Encourage institutions to track both quantitative (e.g. number of mentoring hours, participant satisfaction, startup survival rates) and qualitative indicators (e.g. confidence, business planning capabilities).
- **Standardize reporting formats (on the national and European level)**: Provide templates and tools to facilitate consistent data collection across institutions or programs.
- **Encourage formative evaluation (on the regional and national levels)**: Promote ongoing reflection and adaptation during the program, not just at the end — using mentor/mentee feedback loops to refine delivery in real time.
- **Fund independent reviews (on the national and European levels)**: Support third-party evaluations of larger-scale mentoring initiatives to identify systemic bottlenecks or opportunities for scaling.
- **Link impact to funding renewal (on the national level)**: Tie continued public support to the effectiveness and adaptability of mentoring programs based on evidence.

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2.3 Conclusion

Mentoring plays a pivotal role in bridging the gap between academic knowledge and the real-world challenges entrepreneurs face. By providing tailored support, mentoring helps individuals refine their ideas, develop practical skills, and navigate the complexities of starting and growing a business. For students, it's an opportunity to learn from experienced mentors and build the confidence needed to succeed. For mentors, it's a chance to give back, sharing knowledge while continuously learning from fresh perspectives. For policy makers, creating supportive frameworks that incentivize mentoring, foster regional collaboration, and ensure effective evaluation is key to developing strong entrepreneurial ecosystems. Different policy frameworks must be designed and implemented across multiple geographical levels: regional authorities can pilot grassroots mentor networks and provide localized support; national governments can establish formal metrics, funding incentives, and institutional mandates; and European-level actors can enable cross-border collaboration, standardization, and scaling through strategic programs like Erasmus+ and Horizon Europe.

As the ENTREPRENEDU project showed, effective mentoring programs can be powerful tools in fostering innovation and entrepreneurship, particularly in regions with low or medium innovation capacity. By continuously adapting these programs to the evolving needs of participants, investing in mentor development, and maintaining strong cross-sector partnerships, we can build a sustainable foundation for future entrepreneurs, helping them thrive in an increasingly competitive global market.

3 Venture Building Program best practices in entrepreneurship education

3.1 Introduction

A **venture building program** is a structured educational experience that helps entrepreneurs transform their ideas into viable businesses. These programs, which often include incubators and accelerators, provide essential resources, mentorship, and support to guide entrepreneurs through critical stages like idea validation, business model development, and securing funding.

The **Venture Building Program**, developed under the ENTREPRENEDU project, is an example of such a program. Designed and delivered by the **LUISS University** in Italy, **University of Thessaly** in Greece, and the VET center of **Cleantech Bulgaria** in Bulgaria, from the ENTREPRENEDU's "Hack the Business" hackathon and mentoring sessions experience, to teach students with low knowledge of entrepreneurship. The program offers a flexible curriculum tailored to each institution's needs and teaching style. This curriculum includes interactive materials, such as online or in-person lectures, case studies, Q&As and discussions, to ensure that students gain practical knowledge and skills to build their

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ventures, and at the same time have the opportunity to interact with their lecturer. The ENTREPRENEDU Venture Building Program had the following main objectives:

1. Bridge the gap between academia and industry
2. Foster industry-student collaboration
3. Accelerate commercialization of student innovations
4. Provide experiential, real-world learning
5. Strengthen academia-industry ties
6. Promote regional innovation and cross-sectoral learning
7. Deliver a high-quality, flexible curriculum
8. Offer personalized mentoring and expert support
9. Create a scalable and replicable model

Ultimately, the programme engaged 207 students coming from the 3 academic partners involved in the project.

This section will provide **guidelines for students**, **mentors**, and **policy makers** involved in venture-building programs, ensuring they make the most of available resources, mentorship, and support for creating successful startups.

3.2 Guidelines per target groups

3.2.1 Students

Venture building programs offer students a unique, hands-on approach to entrepreneurship education. Unlike traditional lecture-based courses, these programs immerse participants in the process of building a startup from the ground up — covering everything from ideation and market validation to business modelling and investment readiness. For students, this means stepping into the role of a founder and navigating real-world challenges in a structured learning environment, as well as connecting the material with their own personal cases. Venture building helps transform entrepreneurial ambition into concrete, testable ideas. Students can also benefit indirectly from institutional partnerships formed through MoUs or Letters of Support between their university and external accelerators, incubators, or entrepreneurship hubs — giving them access to broader networks, expert sessions, or even pathways into post-program support. In the ENTREPRENEDU project, students followed a modular venture building course where each step built on the last – encouraging continuous reflection and structured progression from idea to execution.

Recommendations for Students to consider during the program:

- **Engage fully in interactive learning:** Students should treat the program as more than a class — they should be prepared to iterate and learn from feedback.

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- **Use the tools and materials provided:** Venture building programs often include curated resources such as case studies, templates, pitch decks, and market research guides. These are there to help students think and act like founders.
- **Collaborate and network:** Students should use this opportunity to build meaningful relationships with mentors, instructors, and peers. The connections they make can extend beyond the program and support their future ventures.
- **Set realistic goals:** Students should progress through each phase of the program — from problem discovery to funding strategy — with clear milestones. This helps them maintain focus and track their growth.
- **Be open to feedback:** Students should take advantage of mentorship and peer review to refine their business ideas. Constructive criticism is a critical part of the entrepreneurial journey.

3.2.2 Mentors

Mentors are vital to the success of venture building programs where they take the role of the lecturer or educator and include a more interactive perspective to the teaching process. They provide experience-based insight, guide decision-making, and challenge students to think critically. Unlike traditional advising, mentoring in this context is dynamic and context-sensitive — focused on nurturing problem-solving skills and entrepreneurial resilience rather than delivering predefined answers. A good mentor helps students connect theory to practice and accelerates their learning curve. Encourage mentors to align their input with the standards and opportunities offered through institutional collaborations. During the ENTREPRENEDU local mentors from the partner countries of Italy, Greece and Bulgaria, or members of their teams, took the role of lecturers during the local Venture Building Programs, and gathered local students interested in entrepreneurship.

Recommendations for Mentors to consider during the program:

- **Match the support to the venture stage**: Early on, mentors should focus on understanding the level of knowledge of the student group that they are teaching. In the beginning of the program, the mentors should focus on idea generation and market fit, while in later stages, it should shift toward business models, go-to-market strategies, and fundraising.
- **Promote founder mindset**: It is important for mentors to encourage students to take ownership, make decisions, and learn from missteps. Frame failure as a learning tool.
- **Build from the curriculum**: The mentoring should be aligned with the structure of the course (e.g., follow the modules or phases of development). This supports coherence between instruction and guidance, and avoids overwhelming the students.

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- **Offer targeted, actionable feedback**: Mentors should focus on specific challenges the students are facing. Help them see multiple paths forward rather than giving prescriptive solutions.
- **Encourage iterative thinking**: Mentors should urge students to test ideas early and often, and help them interpret feedback from customers, users, and investors.

3.2.3 Policy makers

Venture building programs can significantly contribute to regional economic development by supporting entrepreneurial ecosystems and increasing startup success rates. For policy makers, the challenge lies in scaling and sustaining these programs through strategic planning, funding, and cross-sector collaboration. Their involvement ensures that such initiatives go beyond pilot projects and become embedded in the broader education and innovation infrastructure. In the ENTREPRENEDU project, collaboration across different institutions in Italy, Greece, and Bulgaria demonstrated how coordinated planning, expert guidance, and shared materials can be used to build replicable models of entrepreneurship education across regions with differing innovation capacities.

Recommendations for Policy Makers:

- **Encourage institutional adoption**:
    - Promote the integration of venture building courses into university curricula, not just as electives but as core components of entrepreneurship education.
    - Offer funding incentives, recognition programs, or capacity-building grants to institutions that develop and sustain these programs.
- **Foster ecosystem collaboration**:
    - Support partnerships between universities, accelerators, incubators, and the private sector.
- **Enable flexible program design**:
    - Promote blended learning models, incorporating other sources of learning, including online, to increase accessibility for rural or underserved populations.
- **Promote regional and cross-institutional collaboration**:
    - Encourage universities and other education providers to sign MoUs with accelerators, VC networks, or innovation hubs — helping scale mentoring opportunities, expand access to expertise, and strengthen the program's ecosystem reach.

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- Use MoUs to streamline joint resource sharing (e.g. case studies, toolkits, guest lectures) between institutions.
- Support the use of Letters of Support in grant applications or as commitment indicators in national innovation strategies. These documents can also reinforce program credibility and attract additional private or international partners.

3.3 Conclusion

Venture building programs represent a critical evolution in entrepreneurship education, shifting the focus from theoretical exploration to applied, hands-on learning. These programs empower students to experience the full entrepreneurial journey — from ideation to market validation, business model creation, and investment readiness — within a structured and supportive environment.

For students, they offer real-world experience and direct access to entrepreneurial networks. For mentors, they serve as dynamic platforms to guide aspiring founders and shape innovation. For policy makers, they are strategic instruments for strengthening startup ecosystems and embedding entrepreneurship within education systems.

Importantly, the long-term success of these programs depends on sustained cooperation among institutions, industry actors, and policymakers. Memoranda of Understanding (MoUs) and Letters of Support (LoS) between universities, accelerators, and innovation actors, enable resource sharing, and ensure long-term program scalability. As demonstrated in the ENTREPRENEDU project, cross-border and cross-sector partnerships are essential to building inclusive, replicable models that foster entrepreneurship in regions with varying levels of innovation capacity.

By aligning efforts across students, mentors, and policymakers, venture building programs can become catalysts for economic growth, innovation, and a new generation of entrepreneurial talent across Europe.

4 Key findings

The ENTREPRENEDU project has piloted and analyzed a comprehensive entrepreneurial education pipeline—from ideation and early-stage support (via hackathons), through tailored mentoring, to structured venture building programs. This approach has uncovered key insights across the core components of entrepreneurial capacity-building in educational

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environments. These findings can inform future initiatives, strengthen entrepreneurship ecosystems, and serve as a practical reference for similar programs in Europe and beyond.

1. Hackathons as Entry Points to Entrepreneurship

Hackathons serve as powerful experiential learning platforms that ignite interest in entrepreneurship. The ENTREPRENEDU regional hackathons demonstrated that:

- **Inclusivity and accessibility** are critical to attract diverse young talent. A low-barrier entry design—welcoming students from various backgrounds—boosted participation and collaboration.
- **Thematic framing** enhances problem-solving focus and enables real-world relevance. Participants responded well to challenges that reflected societal or market needs.
- **Structured support systems** (e.g. matchmaking, workshops, mentorship, and post-event follow-up) were essential to motivate participants and turn creative ideas into viable solutions.
- **The incentive of mentorship before, during, and after** the event substantially increased participant confidence and the likelihood of project continuation.
- Hackathons are most effective when they serve as **entry points into a broader innovation pipeline**, offering continued support (e.g. follow-up mentoring, accelerator placement).

2. Tailored Mentoring as a Bridge Between Theory and Practice

The mentoring component of ENTREPRENEDU demonstrated that strategic, needs-based mentoring can significantly accelerate entrepreneurial learning and increase venture viability:

- **Student needs vary widely**, but common themes emerged: business model development, value proposition refinement, and understanding funding mechanisms were consistent mentoring demands.
- An effective mentoring program requires **alignment between curriculum design and real team needs**. ENTREPRENEDU's needs assessment from the hackathon cohort directly informed the mentoring topics, resulting in higher engagement and impact.
- **Mentor training and guidance** improves the relevance of advice provided, especially when mentors are encouraged to adapt their style to the maturity and goals of each team.
- Organisers of such initiatives should **standardize feedback loops and evaluation processes** for mentorship programs to continuously refine their effectiveness.

3. Venture Building Programs Foster Entrepreneurial Maturity

Structured venture-building courses proved to be a critical next step after ideation and mentoring, providing students with a realistic and systematic path to startup readiness:

- **Curriculum alignment with entrepreneurial phases** (ideation, validation, scaling) was key to guiding students through their learning journey.
- Combining **academic rigor with practical application** (e.g. case studies, pitch training, and quizzes) increased student engagement and real-world preparedness.
- **Customization and adaptability** are essential for implementation across diverse institutional settings. ENTREPRENEDU's flexible syllabus and teaching material design allowed each partner to tailor the content to local needs.
- Faculty collaboration and mentorship integration amplified program value. Experienced professionals and academic staff working together enhanced content delivery and feedback quality.
- **Institutional collaboration through MoUs and Letters of Support** created a foundation for resource sharing, joint delivery, and long-term program scaling with other initiatives. These agreements supported cross-border implementation and positioned the program as a model for replicability.

5 Conclusions

The ENTREPRENEDU project demonstrates how a structured and integrated approach to entrepreneurial education can empower students, foster innovation, and strengthen the broader entrepreneurship ecosystem across Europe. By combining inclusive hackathons, personalized mentoring, and modular venture building programs, the project has created a pipeline that mirrors the real-world entrepreneurial journey — from ideation to commercialization.

A key success factor has been the adaptability of the program across diverse educational and regional contexts, enabled by collaborative partnerships and institutional commitment. The use of tools such as Memoranda of Understanding (MoUs) and Letters of Support (LoS) helped establish scalable frameworks and laid the groundwork for long-term sustainability.

This deliverable consolidates practical insights and guidelines tailored to the needs of students, mentors, and policy makers, with the goal of informing the development of similar initiatives across Europe.

As entrepreneurship continues to evolve in response to societal and technological change, initiatives like ENTREPRENEDU are essential for preparing the next generation of innovators. By ensuring that these programs remain flexible, inclusive, and grounded in real-world experience, educational institutions and policymakers can maximize their impact — turning potential into performance and ideas into ventures.

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