ENTER.MODE – AN INTERNSHIP MODEL FOR DEVELOPING ENTREPRENEURIAL SKILLS IN THE STUDENTS

Francesca URAS, eucen, Belgium
Natassa KAZANTZIDOU, IDEC, Greece
on behalf of the EnterMode consortium

ABSTRACT

Competitiveness of the European economy requires citizens and particularly young people to be innovative, creative and flexible in order to face the challenges posed by a dynamic and constantly changing economy. Young people need to become ‘entrepreneurs’: they should be able to turn ideas into action, successfully develop new commercial and social ventures and be innovators in the organisations where they work. Entrepreneurship skills include creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives.

The entrepreneurial mind-set and skills, however, are not personal characteristics: they can be developed through learning and experience and achieved within the education system. The European Union has set a strategic objective to enhance creativity and innovation, including entrepreneurship, at all levels of education and training (Education and Training 2020).

EnterMode aims to foster partnerships between higher education institutions (HEIs) and companies in order to promote entrepreneurial education and develop an internship model for the acquisition of entrepreneurship skills that includes different levels of learning, using an online ‘serious game’.

BACKGROUND

Entrepreneurs play an important role in the economic and social well-being of Europe and European citizens (European Commission, 2016). Entrepreneurial mind-set and skills are among the key competences for lifelong learning, and are key assets in developing a European knowledge economy, fostering innovation and competitiveness in European society and addressing the current challenges produced by globalisation (European Union, 2018).

Research has shown that an entrepreneurial mind-set and skills can be developed through learning and experience, rather than being a given, personal characteristic (European Union, 2015). The European Union has in fact set as one of its strategic objectives the enhancement of creativity and innovation at all levels of education and training, and has proposed the EntreComp: the Entrepreneurship Competence Framework (European Commission, 2016).

However, the level of progress towards entrepreneurship education in Europe is still very low and highly variable. Only a minority of European countries have well developed strategies. Some EU countries, such as Germany and Ireland, have progressed very well in the past few years, while others, such as member states from Eastern and South Eastern Europe, still lag behind EU targets for entrepreneurship (Eurostat, 2017).
In many European countries, entrepreneurship education offered within non-business studies courses is not sufficiently integrated into the curriculum. Entrepreneurship courses are often offered as separate or optional courses and tend to focus more on technical knowledge and skills around how to set up a business, rather than building an entrepreneurial mind-set and soft skills (OECD, 2008; Florea, 2013).

THE ENTERMODE PROJECT

The EnterMode consortium, consisting of 14 organisations from 8 countries\(^1\), undertook to take European entrepreneurship education a step further by developing and testing an innovative model of entrepreneurship education, which embeds different levels of learning.

The project aims at stimulating entrepreneurship and enhancing entrepreneurial skills among higher education teachers and company staff on the one hand, and higher education students on the other. The project seeks to develop an integrated approach and model for entrepreneurship education that can be adapted and applied throughout Europe.

The EnterMode integrated approach is based on six pillars, which together cover different levels of learning:

1. In-company internships that involve HE students and embed the use of serious games based on constructivist pedagogy and rich learning tools, allowing for an authentic experience of entrepreneurial roles and tasks as well as for developing problem-solving strategies towards real entrepreneurial challenges
2. Capacity-building addressed to teachers and trainers to facilitate the incubation of an entrepreneurship spirit and culture and the development of the knowledge, competences and skills needed to put entrepreneurship into practice, supporting the application of the internship model
3. Building up of a community of practice that supports the development, sharing and critical reflection of entrepreneurship practice as well as the socialisation of newcomers into the world of business
4. Strong Open Educational Resources (OER) knowledge base, providing both teachers and the community with case studies of real world entrepreneurship
5. Use of learning analytics, allowing learning progress to be tracked on both personal and collective levels and creating feedback loops by which the EnterMode model can be adapted to personal and organisational needs
6. Creation of HEI-company partnerships, with a view to experiment and validate the internship model, and ensure its sustainability

BACKGROUND STUDY ON “ENTREPRENEURIAL EDUCATION AND INTERNSHIPS IN HIGHER EDUCATION IN PARTNER COUNTRIES”.

EnterMode’s first output was a Background Study on entrepreneurial education and internships in Higher Education (HE) in the countries of the participating partners (EnterMode Consortium, 2019a). The background study was elaborated through a combination of desk research, interviews and surveys, carried out in Germany, Greece, Hungary, Italy and Slovakia, and resulting in the development of five national reports. An executive summary contains key recommendations which influence the development of the internship model for the acquisition of entrepreneurial skills and competences by higher education students.

---

\(^1\) Of these organisations, 5 are universities, 5 are companies, 2 are research organisations, one is an association of companies and one is a European network of higher education institutions.
The study analysed the context in the partners’ countries with regards to the following issues:

- Entrepreneurial education in HE for students of non-business studies courses
- HE framework for internships
- Views of stakeholders (students, HEI staff and companies) on required characteristics of internship programmes
- Views of internship stakeholders (HEI staff and companies) on needed entrepreneurial competences
- Views of internship stakeholders (students, HEI staff and companies) on gamification as a learning tool for entrepreneurial education

The study was co-ordinated by the University of Ioannina (UoI) with the collaboration and participation of the Ludwig-Maximilians Universität (LMU), the Sommelweis University (SOTE), the Università Telematica PEGASO and the Technická Univerzta v Košiciach (TUKE).

Conclusions and suggestions based on the findings of this background study have fed into the development of the internship model, which is the key output of the project. The background study can be consulted and downloaded for free on the EnterMode project website: http://entermode.eu/

**ENTERMODE INTERNSHIP MODEL FOR THE ACQUISITION OF ENTREPRENEURIAL MIND-SET AND COMPETENCES**

Within higher education, internships are work-placements, aiming mainly to acquire professional experience in the specific field of study and soft employment skills. In this type of internship there is often a lack of coordination between the sending HEI and the hosting company on the specific objectives, activities and expected results of the internship (Narayanan et al., 2010).

As well as giving students a real-life experience of the workplace, the internship model proposed by EnterMode (EnterMode Consortium, 2019b) is meant to be used for the acquisition of entrepreneurial skills and competences by students in higher education, using a challenge-based approach with gamification elements. This model aims to support students in higher education to:

- develop personal attributes and skills that form the basis of an entrepreneurial mind-set and behaviour, such as creativity, sense of initiative, risk-taking, autonomy, self-confidence, leadership, and team spirit
- raise awareness about self-employment and entrepreneurship as possible career options
- work on concrete enterprise projects and activities
- acquire specific business skills and knowledge of how to start a company and run it successfully

To acquire these entrepreneurial skills, the EnterMode model proposes the implementation of challenge-based learning and gamification elements which will facilitate the acquisition of entrepreneurial skills and competences as well as their advancement to the next progression level. The internship model uses the Entrepreneurship Competence Framework, also known as EntreComp framework (European Commission, 2016) as reference, by promoting specific challenges that target entrepreneurial competences identified by the framework.
These challenges are going to be identified by the internship trainers and will also be supported by the use of learning analytics, incubation services and a serious game.

**Challenge based learning**

The EnterMode model is based on the use of the challenge-based learning method (Nichols *et al*, 2016) which, as the name suggests, uses challenges to frame learning experiences. This method proposes a collaborative framework, where students gain in-depth knowledge and develop employability skills and entrepreneurial competences while trying to discover and solve challenges. When faced with a challenge, groups or individuals leverage experience, harness internal and external resources, develop a plan and push forward to find the best solution. This student-centred approach allows interns to enact problems usually faced in the workplace and real world, whilst enhancing transferable skills such as teamwork, problem solving, risk assumption, public speaking, confidence, self-motivation, and creativity. According to Nichols *et al* (2016), the challenge-based learning framework divides into three interconnected phases: Engage, Investigate and Act. Each phase includes activities that prepare the learners to move to the next stage.

Based on the above framework, the EnterMode internship model is divided into three phases.

**Phase 1: Engagement**

In this phase, tutors and mentors set the challenge to be addressed by the interns. The concept should be open-ended and represent a real need, a real problem, a project or anything within the interests of the company. Following the establishment of the main challenge, the learners will need to contextualise and personalise the concept, by developing the final concrete challenge which needs a solution. Based on the final description of the challenge, the trainers will define the entrepreneurial competence that will be cultivated, based in the EntreComp framework.

**Phase 2: Investigation**

In this second phase, the trainers will need to define the concrete actions which will lead to the development of the entrepreneurial competences and the completion of the challenge, while students will develop the solution to the challenge. During this phase, the available resources will also have to be defined. Resources could be of several types: provided by the company, mobilised by the student or gained from the serious game developed by the EnterMode project (see later in this paper).

**Phase 3: Action**

During this phase students select, develop and implement solutions which lead to the completion of the challenge. The amount of time and resources available guide the depth and influence the implementation of the solutions. During this phase learning is independent and self-regulated, although trainers should offer guidance and support to the interns.

An essential part of this phase is also the monitoring and evaluation of the progress of the students, according to goals set at the previous stages. Assessment is part of the monitoring process and can be implemented through different sources: assessment by the trainers, assessment by peers, self-assessment.
**EnterMode serious game**

In the EnterMode model, the challenge-based learning methodology is enhanced with gamification elements, which are designed to support the acquisition of entrepreneurial skills and competencies.

Gamification (Huotari & Hamari, 2012) is a learning approach which helps advance knowledge and engage students in the learning process (de Sousa Borges et al., 2014). As a learning practice, gamification can be used to enhance the motivation and active engagement of students. Specifically, it consists of the use of game elements, including constraints (limited resources, time); rewards (achievement badges, extra resources); ownership (autonomy, choices); and luck (new opportunities and obstacles). All these elements serve as tools to implement specific activities in the framework of the internship, engaging students and helping them reach their final goal, i.e. the acquisition of entrepreneurial competences and skills.

The EnterMode consortium partners will develop a serious game, which materialises the training methodology and supports the entrepreneurial skills during internships. The serious game will be offered online, be accessible to students undertaking their internships and provide gamification elements to the whole process.

The online game will be designed in a way that can be parameterized for different contexts and situations, thus it can be applied during different internship programmes. It will also incorporate learning analytics mechanisms, which aim at a better understanding and improvement of the learning environment, such as through social network analysis, interaction patterns, information flows or user modelling. Learning analytics will allow the selection of data both at individual level and at institutional level, thus allowing both HEIs and companies to effectively match learning offers with the real needs of students.

The serious game combines entertainment with knowledge transfer and its purpose is to train the interns to improve their competences and understand the concept of entrepreneurship. The virtual environment allows the students to increase their experience and discover skills and knowledge. The research each student undertakes to complete a quest leads him or her to overcome certain difficulties which could not be resolved in the real world. Meanwhile, mistakes made by students are not seen as failures but opportunities to receive feedback and learn, while players have the ability to track the consequences of their decisions.

**Incubation**

The companies which will implement the entrepreneurial internship will act as “incubators” to students and will help them develop their own ideas, based on a given challenge.

Higher education tutors and companies’ mentors will create a friendly incubation environment for students in the company, which will respond to learners' interests and needs. Companies will offer resources to the students, such as office space, equipment, administrative support, etc. They will also offer training and educational support, while contributing to the networking of students. They will help students complete activities connected to entrepreneurship like formulating a business plan, developing an initial idea, mobilising resources, mobilising others, and many more activities to develop their skills and learning. Most importantly, they will provide vital information to the students such as financial risks connected with businesses, market potentials, risks, legal complications, insurance options, etc. The main role of the companies is to increase the experience and the competences of the young entrepreneurs.
Another aspect that will nurture the entrepreneurial spirit of students will be the opportunity to build and expand their network. During their internship, students will be employed in a company in their interest area, chosen by themselves, where they will get to know people with vast experience in the field. Those people will provide information and guidance to the students, and help them to explore the ups and downs of the sector they chose, as well as the opportunities and threats they will encounter in the future. Networking is an essential part of entrepreneurship which will help students expand their circles of acquaintances, find out about job opportunities, and increase their awareness of news and trends in their chosen employment area. In this context, students will have the opportunity to develop relationships with people and companies they may do business with in the future.

**EnterMode Community of practice**

The development of the EnterMode model entails the setting up of a Community of Practice (Wenger, 1998) of higher education teachers and company trainers that will offer a wide range of learning tools and collaboration tools to its members. The Community is hosted on the DISCUSS Communities of Practice platform² and capitalizes on previous and ongoing initiatives. It will include elements such as personal space, forums, YouTube videos and open educational resources that will provide both the community and teachers with articles, handouts, supporting materials, etc., which can be used for challenge-based learning and reflection.

The objective of the Community of Practice (CoP) is to provide a space for learning and collaboration between higher education teachers and company-based trainers who are tasked with developing entrepreneurial skills in students, adopting the EnterMode model and organising students’ internships. The CoP will be a central element of the project that will connect the staff involved in the project with other interested parties in a Community and will integrate the different elements of the project, i.e. the model, the online game, the partnerships and the capacity building for the teachers and trainers.

Last but not least, the CoP will use learning analytics in order to track and direct learning progress. Collected data on activities, such as contributions to the community of practice or achievements in the EnterMode serious game can be used for the evaluation and control of knowledge-based processes.

**Impact and sustainability of the model**

The pilot experimentation of the model will involve a total of 40 students from the five universities partners in the project who will go for both national internships and transnational work-placements. The results of the experimentation will be used for the finalisation of all project outputs. After the finalisation of the model, the partners plan to incorporate it into their regular services and activities.

The adoption of the EnterMode internship model as a new scheme for the organisation of internships does not require additional financial and human resources. The internship model can be integrated in the services that the career offices, internship offices and international relations offices are already offering to students at no additional cost.

The EnterMode internship model aims to be comprehensive and to offer a tool that can be adapted to different needs. It is not prescriptive, and it does not suggest that all learners should acquire the highest level of proficiency in the competences, or that they should reach the same proficiency across all the competences.

² [https://www.discuss-community.eu/](https://www.discuss-community.eu/)
REFERENCES AND RESOURCES

Website of the project: http://entermode.eu/


EnterMode Consortium (2019a) Background Study: Entrepreneurial education in HE in partners countries, entrepreneurial skills required by HE students, framework for internships.


OECD (2008). Entrepreneurship and Higher Education. Local Economic and Employment Development (LEED)


Xiang Li (2009) Entrepreneurial competences as an entrepreneurial distinctive: an examination of the competency approach in defining entrepreneurs, Singapore Management University.