



Co-funded by the
Erasmus+ Programme
of the European Union

Pilot project:

ENTREPRENEURSHIP EDUCATION FOR UNIVERSITY STUDENTS

No. 2016-1-CZ01-KA203-023873

METHODOLOGY OF TEACHING ENTREPRENEURSHIP AT UNIVERSITIES

Authors:

Tomas Bata University in Zlín

JA Czech

JA Europe asbl

The Danish Foundation for Entrepreneurship

„To build up a great business, you have to build yourself up first.“
Tomáš Bata

Contents

Contents.....	3
Foreword.....	4
1. Education in business and entrepreneurship	5
1.1 Definitions and aims.....	5
1.2 Target audience for entrepreneurial education.....	6
1.3 Definition of prerequisites – (academic requirements) for completing the course.....	7
1.4 Technical realization of the education process	7
2. Basic course parameters.....	9
2.1 Aims of the course	9
2.2 Target audience of the course and students' personal qualifications.....	9
2.3 Recommended partners of the course.....	11
2.4 Promotion of the course and selection of students.....	12
2.5 Forms of education.....	13
2.6 Definition of educational outputs.....	14
2.7 Student evaluation process	15
3. Course procedure	20
3.1 Topic 1 – Introduction to the course.....	21
3.2 Topic 2 – Start-ups.....	22
3.3 Topic 3 – business stories (excursions).....	25
3.4 Topic 4 – Roles, teams, projects.....	26
3.5 Topic 5 – Legal aspects of entrepreneurship (I)	29
3.6 Topic 6 – Comparison of regional entrepreneurial determinants and value for customers 30	
3.7 Topic 7 – Financial aspects of entrepreneurship (I)	31
3.8 Topic 8 – Lean Canvas	32
3.9 Topic 9 – Investment forum	35
3.10 Topic 10 – Business plan	37
3.11 Topic 11 – Legal aspects of entrepreneurship (II)	39
3.12 Topic 12 – Marketing.....	40
3.13 Topic 13 – Communication	42
3.14 Topic 14 – Financial resources	43
3.15 Topic 15 – Financial aspects of entrepreneurship (II)	46
3.16 Topic 16 – Business Process Model for the new entrepreneur	47
3.17 Topic 17 – Final presentation.....	48

Foreword

This publication includes a comprehensive methodology for entrepreneurial education at universities. It was created as the output of an ERASMUS+ project entitled “Pilot project: Entrepreneurship education for university students”. It encompassed the years 2016 - 2018 under supervision by members of the Faculty of Management and Economics in Zlín, together with the following organizations: Junior Achievement Czech, Junior Achievement Europe, and Fonden for Entreprenorskab – Young Enterprise.

Prior to the release of the project’s solution and elaboration of the methodology for entrepreneurial education, the authors devised the following two paradigms: 1. The current global trend generally focuses on the entrepreneurial knowledge of students, including any business ventures they enter into, as well as implementation of various inter-organizational projects of an entrepreneurial nature already in place at corporations; this necessitates deep knowledge and specific entrepreneurial education at all levels of tuition; 2. a course of entrepreneurial education differs greatly from a traditional one at university, due to the attention paid in the former to soft-skills, entrepreneurial motivation, personal competencies, and other factors.

The objective of the team behind this project and the entrepreneurial methodology itself is to cover all aspects of education relating to entrepreneurship, including the matters outlined above. The methodology proposed goes beyond dealing with course curriculum to tackle all methodological questions on studying entrepreneurial education at university. It is necessary to bear in mind that said methodology does not represent a prescribed plan for instruction on running a business; instead, adaptation to the specific circumstances of the educational institution is required.

In the first part of the methodology, it was deemed necessary to describe general matters pertaining to entrepreneurial education. Therein, the authors define the objectives of such education, in line with differences from traditional university courses. A crucial issue relates to defining the target audience for entrepreneurial education, since a course in it cannot be perceived as generally applicable to most university students. Preconditions for a curriculum in entrepreneurial instruction are also delimited. The outcome of this part of the methodology comprises our proposal for personal testing of prerequisites for the course (self-assessment).

The next part of the methodology investigates incorporating the course into the curricula of the university, which might entail various organizational matters, depending on the specifics of the course. Said matters are complicated by the course’s schedule over two semesters; the first largely intended for students interested in entrepreneurial issues, while the second focuses on developing selected business plans devised by students.

The subsequent section covers the study curriculum and scheduling of lectures. The course contains every element relating to this type of education. However, it cannot be organized in the traditional manner of lectures and seminars, but must reflect the self-study activity of the students and greater consulting role of the tutor.

The independent part of the methodology pertains to verifying the knowledge imparted at two levels, as follows: 1) evaluation of students; 2) general evaluation of participants’ entrepreneurial abilities and competencies by applying the international OCTOSKILL tool. A Czech language version has been created within this project. In the final part, the procedure for certification of learners is described.

We believe that this methodology shall prove to be useful to university lecturers, whatever their involvement in education, or those implementing elements of entrepreneurship into curricula.

Some sections of this paper constitute examples of practical application of the methodology at the TBU in Zlín; these are always depicted in italics.

1. Education in business and entrepreneurship

It has become apparent to the authors that there has been a greater awareness in recent years that entrepreneurial skills, knowledge, and attitudes can be taught. Such education instigates immense development in reasoning and culture from the perspective of commerce, proving beneficial to individuals and society as a whole. Entrepreneurship as a competence pertains to all aspects of life. It enables people to develop personally, permitting them to actively contribute to social advancement, enter the labor market as a freelancer and employer, and further or expand businesses, with the motive to promote trade, culture and society. Entrepreneurial education, as it is termed in this document, thus focuses on transference between the academic and entrepreneurial spheres as a competence. In this context, studies have revealed that only a very small percentage of students actually realize the potential of their business notions by making them real. As a survey referred to herein indicates, this is impacted by the weak support shown toward entrepreneurship by schools (Hovorkova, 2013; Guesss, 2016). Many findings also have confirmed the importance of entrepreneurial education at universities across all departments and faculties, thereby contributing to a business-like mindset in students, no matter what their chosen field of study is.

1.1 Definitions and aims

This project deals with a methodology for teaching entrepreneurial skills, attitudes and values to university students. Any potential success is reliant upon both intensive interaction among universities and the real world of commerce. The know-how of entrepreneurs and lecturers can be imparted in a practical manner that enables students to gain essential entrepreneurial competencies and expert knowledge. Herein, the authors propose a framework with the capacity to validate the extent of what students can learn about entrepreneurship, thus increasing the value of experience.

Apart from devising a methodology for education on entrepreneurship, this project is geared toward encouraging students to start a business themselves. We aim to teach them essential entrepreneurial skills that they later apply in their start-ups; i.e. entrepreneurial competencies. Additionally, the approach we propose is one that communicates knowledge and experience in a cool and fun way, further motivating individuals and strengthening their attitudes toward entrepreneurship. We also endeavor to provide opportunities for students to become visionaries, utilizing the unique skills, thinking and creativity they possess. Ultimately, our desire is that they comprehend the regional and global circumstances they find themselves in (environments), and seek assistance from experienced entrepreneurs. Combining these core competencies raises the chances of success for students in their future careers and in starting a business.

A prime motivation for supporting business activities is that entrepreneurs directly contribute to economic and social development and regional prosperity. Progress in business positively affects local residents and advances regional structures. It is our primary aim to educate future generations of skillful employees and entrepreneurs, who shall go on to stimulate their economic environments.

Aim 1 – ACTION

According to a nationally conducted GUESSS survey in 2016 (Czech Republic), just 28% of students considered the possibility of starting a business, including those already engaged in business during their studies at university (10%). From this, approximately 18% thought about entering into business on their own. Regional surveys carried out by the authors closely mirror these findings (Papadaki, 2017), wherein only 10% of students entertained the notion of running a business. The majority pursue opportunities primarily in the business and public sectors. Since the largest companies and organizations tend to operate out of big cities, such as Prague and Brno (from a Czech perspective), students are often forced to leave their provincial hometowns, negatively affecting regional development; for example, through decline in the number of job seekers. With this in mind, a primary aim of entrepreneurial education is to encourage and motivate young people to begin a business venture, not just to seek employment at a corporation.

Aim 2 – ENTREPRENEURIAL COMPETENCIES

Entrepreneurship as a competence applies to all spheres of life. It enables all citizens, including students, to nurture their personal development, actively contribute to social development, enter the job market as an employee or in a self-employed capacity, and start or scale up ventures with a motive that may be cultural, social or commercial (Bacigalupo et al.). However, if students wish to enter into commerce themselves, they have to possess sufficient knowledge to do so, in other words, entrepreneurial competencies. In this context, an aim of providing entrepreneurial education at university is to impart such necessary knowledge and skills. Furthermore, students are in need of sufficient hard skills, i.e. knowledge of economics, management, and finance, which prove important to founding a start-up of their own. Additionally, they should have possession of soft skills based on vision, valuing ideas, creativity, communication, leadership, teamwork, analytical thought, learning through experience, and other skill-sets. These are essential for discerning the intent of the company, compiling feasibility studies, and bringing the business plan into reality.

Aim 3 – MOTIVATION AND ATTITUDES

The vast majority of university students seek out careers in corporations as an employee, since they view such a path as more comfortable and stable. They fear that starting a business would lead to failure, financial insecurity and other associated risks. To this end, one of the most important aims of entrepreneurial education is to **attract and motivate students to enter into entrepreneurial activities**. Nurturing such motivation is possible by making continual reference to further options to achieve success. In our experience, it is necessary to force university students to step out of their comfort zones and demonstrate instances of good practice, indicating that success can be achieved through other means than becoming more than an ordinary employee.

Aim 4 – ENVIRONMENT

How successful an idea proves for a company and its intent depends highly on the specific local environment and market analysis of it. Fundamental to entrepreneurial education is **teaching students to carry out analysis of the market and economic environment correctly, analyzing factors pertaining to the region, the potential purchasing power of customers, and so on. Absence of such aspects has caused trouble for numerous entrepreneurs, who may close their businesses at an early stage.**

1.2 Target audience for entrepreneurial education

The course is targeted at those who have a little experience of entrepreneurial matters at university, i.e. students considering a start-up or actively founding a business, or those who have already done so and wish to progress in their venture. That effectively means shifting students from a position of thought to a level of action, by applying their existing knowledge and skills. The course provides

high school graduates (between the ages of 19 to 30), who are registered in the university system, with an opportunity to “test the waters” by trying to forge their own company, affording them an overview of how best to utilize their talents in commerce. It is really intended for students with a sufficient level of interest in the topic and the necessary motivation, these representing the two most essential prerequisites.

The target audience for entrepreneurial education is determined with the following criteria:

- they are 19 – 30 years in age
- they are students on university study programs
- they have an interest in entrepreneurship and are motivated

Although such tuition is suitable for all university students, regardless of their studies or chosen field, it is necessary to differentiate from students studying business or those on financial courses. These should possess hard skills related to running a business as well as the capacity for managing it, in areas such as law, taxation, basic finances, and accounting. However, there are students on other study programs that do not require such hard skills.

Consequently, it is appropriate to adapt the methodology for entrepreneurial education so that it caters for the needs of both groups of learners.

1.3 Definition of prerequisites – (academic requirements) for completing the course

The basic prerequisites for completing such an educational course may be set out as follows:

- Students must be registered on a university study program.
- Education in entrepreneurship should be partially included in all fields of study offered by the institution, including combinations of subjects, in order to meet the interdepartmental approach.
- One of the basic prerequisites is students’ motivation to enter into business.

Students on this educational program will obtain real-world experience in business, gained through processing their own ideas and notions. These could take the form of products, services, or an idea that might change and improve existing practice in a specific field.

The intention is that they will also cultivate the attitudes and skills necessary for personal growth, seeking employment, and understanding how business works. They shall gain an overview of self-employment, starting a company, taking risks, managing difficulties, and overcoming obstacles, all with the input of consultants – young and experienced entrepreneurs alike, or experts in the given sector. In the course of the program, students also work under the supervision of coaches and experienced mentors. An external mentor from business is involved, and their support constitutes an essential part of the process of self-development.

1.4 Technical realization of the education process

It is advisable to conduct this type of education beyond the confines of standard classrooms, as described in later chapters. The aim of this is to situate students within a business environment to the greatest degree possible. A highly suitable option appears to association with the infrastructure of a commercial ecosystem; for example, cooperation with business incubators, science and

research parks, or other similar technology and investment infrastructure. Consequently, links are made more easily to potential mentors, coaches, investors, and start-ups.

As mentioned above, the ideal scenario is to integrate entrepreneurial education throughout a university, i.e. in every faculty. As a result, links are made between students on various courses, and multi-departmental teams are created, wherein every individual finds a role and fulfills it when carrying out the chosen business project. To work effectively with teams and facilitate teaching and mentoring at an individual level, we recommend that a group comprises a maximum of 25 students, who are split up into teams of four or five members.

Every course has to be overseen by a responsible guarantor as well as a lecturer from the university who is in charge of the subject. We believe that the course should be offered across all faculties of the university, meaning that the study areas of students are represented and multidisciplinary teams are formed. Clearly, the circumstances of each university and its faculties shall inform how this is done, which would ideally lead to offering a course within the curricula of all programs. Mentors would provide insight on the given topics, in cooperation with the business partners involved, which each educational establishment should seek to build on continuously, e.g. by getting postgraduates of the university who have started firms to participate.

In terms of human resources, the list below contains definitions of the course's primary positions and the responsibilities of their holders:

- **Professional guarantor of the course** - a person responsible for theoretical and practical lessons and the course's content.
- **Facilitator** - a person responsible for overall realization, coordination, and management of the course; also for seeking out and presenting lecturers and mentors, providing relevant information to them for preparations for classes, organizing and managing discussions, arranging the processing of relevant outputs from discussions, and consultation. The same coordinates the outputs of project teams in cooperation with mentors, performs evaluations, communicates with the course guarantor, and proposes advancements and adjustments to the course. Such a person could be the academician responsible for the course.
- **Mentor** - usually a person with long-term experience in a corporate environment or in running a firm. They assist students in developing business ideas, suggesting responses to individual tasks, recommending and making links with other contacts pertinent to the crux of a business idea, giving feedback, participating in evaluations, advising on (but not solving) issues, discerning shifts in abilities of students and their business notions, providing inspiration, giving constructive criticism, and so on.

Regarding the basic setting of the course and its integration into the accredited study plans, the question remains as to whether it should be implemented across one semester or two. In light of past experience, our recommendation is that it encompasses two semesters, since more time is then available for mastering the various areas of entrepreneurial education and broadening the extent of practical experience. This has been confirmed by findings from an ICEE project, which stated a wider scope of teaching was desirable (up to 100+ hours), as also evidenced by the results of another project (JA Europe, 2018). We also suggest assigning a relatively low number of credits to these courses within the ECTS credit system. This is because the main motivation of students should not be about getting credits, but acquiring business knowledge, skills, and experience from young and experienced entrepreneurs alike.

Naturally, entering into business is not something that appeals to everyone, since they may not be inclined toward starting a firm or possess sufficient courage to do so. Hence, it is crucial to address

students correctly when offering the provision of education in commerce. However, fundamental entrepreneurial skills can be taught that benefit everybody. Thus, it is up to the organizers of any course in entrepreneurship to target students that would be optimal and suitably motivated with the offer to engage in this process and advance their business skills. In order to promote it to students properly, a proactive approach is necessary. For example, attending educational events with the aim of raising awareness of similar activities inherent to a course of education in entrepreneurship.

2. Basic course parameters

This study course would be ideal as a module for rounding off and following up on economically and financially centered courses, primarily those where actual application of prior tuition is desirable. Nevertheless, it might also be employed as a practical tool for students from other non-financial fields (e.g. those on technical, IT, or healthcare programs). As an example, numerous start-ups are built around developing mobile apps as their core product, usually run by people with technological backgrounds who lack any knowledge of economics. Therefore, it would benefit such individuals to obtain basic theoretical comprehension of areas like economics and law, so they possess the necessary skills for venturing into business afterward. Since the potential exists for teamwork and forging links between technically and economically focused students, any such course should adhere to a practical approach wherein common sense and one's own creativity are applied.

2.1 Aims of the course

The primary aims of the course are to:

- nurture a mindset of commerce in students
- identify and support active students interested in entrepreneurship
- encourage the development of business ideas
- investigate ideas for business and promote their realization
- engage students in the start-up ecosystem that exists locally
- cultivate the concept of an entrepreneurial university

Within the course, students work on fictional business projects with the aim of developing an idea for a company, following all the necessary steps from the initial notion through to its realization. Added value is possible if students choose to work on an actual entrepreneurial objective, since they are able to utilize the time and expertise available to them. To this end, organizers should encourage students with such an idea or project that is at an initial stage, since the point is to usher in the next wave of entrepreneurs who will enrich the commercial standing of their locality. In such a case, any intent behind it would no longer be fictional.

2.2 Target audience of the course and students' personal qualifications

The course is intended for university students interested in pursuing a career in business, or who are already engaged in such a venture of their own and wish to develop it. The course should be open to anyone from any faculty and year. Each individual will bring something different to the table in terms of knowledge, which is then applied in teamwork, triggering synergistic effects.

Students sit a personality test that pertains to various roles in a team, thereby informing their placement within it.

Self-evaluation tools are invaluable in this respect, and our recommendation is that students utilize one to evaluate themselves at the beginning, middle and end of the course. Herein, we shall discuss

an example of such a tool - the Octoskills mobile app, a pedagogical tool which gauges students' self-perceived competencies and self-confidence in entrepreneurship. The app is ideal for illuminating soft skills and abilities that ordinary tests and examinations do not pick up on.

However, OctoSkills is not a test as no right or wrong answers exist to its questions. It is essentially a barometer for measuring students' progress in entrepreneurial skill sets and capacities, highlighting any strengths and weaknesses in these.

OctoSkills presents users with a questionnaire, requesting them to rate their competencies, skills, and attitudes on a 7-point scale. It contains questions that assess the most common entrepreneurial capacities, skill sets, and personal attitudes, e.g. creativity, managing ambiguity, and marshaling resources.

It commences by asking about demographic matters relating to age and family background. It goes on to inquire about the user's study background at university (faculty, year, etc.), while the remainder of questions pertain to entrepreneurial skills and attitudes. The entire questionnaire was devised to suit the conditions of universities.

Creativity	The ability to come up with new and inventive ideas and solutions.
Managing Ambiguity	The ability to manage and handle ambiguity and uncertainty.
Marshaling Resources	The ability to retrieve and mobilize resources in order to achieve goals.
Finance	The ability to understand and interpret financial information and documents.
Leadership	The extent to which the respondent perceives themselves as capable of leading a group or activity.
Entrepreneurial Self-efficacy	The respondent's confidence in his or her own ability to start up a new company or organization.
Entrepreneurial Intentions	The user's intentions and willingness to pursue a career in a self-employed capacity.
Planning	The ability to structure tasks in order to achieve goals.
Teamwork	The ability to actively participate in collaborative team efforts to solve problems.
Enterprising Skills	The extent to which the respondent perceives that teaching focuses on fostering the enterprising and action-oriented skills of a non-cognitive character.
Business Skills	The extent to which the respondent perceives that teaching focuses on fostering the business and management-oriented skills of a cognitive character.
Proactivity	The extent to which the respondent's acts are proactive, e.g. taking the initiative.
Persistence	The extent to which the respondent perceives themselves as persistent.
Conscientiousness	The extent to which the respondent perceives themselves as conscientious and diligent with a strong sense of responsibility.
Locus of Control	The extent to which the respondent perceives that they control the outcome of events in their life.
Intrinsic Motivation	The extent to which the respondent performs school work and learning activities out of curiosity and interest.

Extrinsic Motivation	The extent to which the respondent performs school work and learning activities based on expectations of external rewards, such as grades and praise.
Entrepreneurial Attitudes	General perception of entrepreneurship as either positive or negative.
Innovative Employee	The user's intentions and willingness to work on innovative and/or entrepreneurial assignments at established organizations.
Networking	The extent to which the respondent perceives themselves as capable of networking, i.e. making contact with others.

Moreover, the OctoSkills app questions users about their **entrepreneurial behavior**; for example, on the subjects of work experience, prior entrepreneurial activity, and voluntary work.

The user's results are displayed in a personal "spider web" immediately after completing the task; these can be viewed and contrasted with later results. Afterward, the teacher benefits from an aggregated view of students' outcomes from the basic OctoSkills questionnaire. It would then be possible to compare different classes within the same establishment, and even groups at regional or national level.

OctoSkills provides the following functionality:

- Pre- and post- evaluation of entrepreneurial tuition, permitting students and teachers to view how teaching has affected the former and their self-confidence.
- General assessment of students' entrepreneurial competencies on a daily basis.
- Planning of defined educational programs or didactic initiatives to strengthen the competencies of the class or individual student.

OctoSkills was developed by the Danish Foundation for Entrepreneurship, and was based on the results of the ASTEE international research project.

2.3 Recommended partners of the course

As mentioned earlier, the course is highly practical in nature, so we do not recommend adopting a typical teaching method. The subject matter is not, and cannot be based on lectures, since it relies on carrying out activities (exercises) in seminars. For these reasons, it is wise to reach out to a **Business support center** or a form of **Business incubator**. The course should be taught outside of standard teaching rooms, ideally on site at such cooperating business centers or incubators. The intention is to immerse students in a business environment to enhance their experience, reinforcing a sense of entrepreneurial spirit and the correct mindset.

By building bridges with such business entities, the potential exists to forge other connections and bring entrepreneurs and start-ups on board, these serving as models of good practice and practical examples of how to found a company. Engaging such contacts to the great extent is a worthwhile endeavor, because they represent a specific, clear and tangible way to enter into commerce.

Next, it is advisable to seek out agencies that support entrepreneurship and the emergence of new enterprises. Their staff boast a wealth of experience with start-ups, and can impart valuable advice to students.

We see a great advantage in following up the course by getting students to take part in contests dedicated to encouraging the commencement and growth of start-ups, thereby developing students' entrepreneurial endeavors. Such competitions are relatively common internationally, and their goal is usually to find and endorse interesting business ideas and projects. Collaboration is key in this, and links between the business incubators and contests can lead to participation in acceleration programs for stand-out projects, potentially supported by mentors, coaches, experts, angel investors, venture capitalists, or the banking sector.

“While testing out the methodology, we formed a relationship with the Technology Innovation Center in the Zlín region, a science and technology park which acted as a business incubator. In terms of agencies supporting entrepreneurship in the Czech Republic, we went with the CzechInvest agency, a governmental body under the Ministry of Industry and Trade, which oversees investment and entrepreneurship. From an educational and practical perspective, a breadth of potential partners were open to us as mentors, and we elected to cooperate with a non-profit organization that supported entrepreneurship – Junior Achievement Czech (JA Czech). A representative of JA Czech acted as a mentor on the course, who shared his experiences and gave practical advice on numerous topics, presenting options to students for dealing with specific issues which arise when starting out and developing a business. When devising the concept and testing the two-semester course, we forged links between students' activities and the “My First Million” contest, organized by a support business center – Zlín Technology Innovation Center, affording the opportunity for interesting projects to participate in the contest.”

A quote from the authors about the test course they ran in the Zlín region of the Czech Republic.

2.4 Promotion of the course and selection of students

The course has been designed for students with an interest in entrepreneurship. Upon introducing it at a university, it is necessary to propagate detailed information about it to students. Naturally, the complexity of promoting it is directly proportionate to the size of the educational establishment. Since the aim is to attract students motivated to become entrepreneurs or in business already, utilization of as many communication channels as possible is advised. Traditional forms such as posters and fliers describing the course could be distributed in highly frequently sites (the canteen, corridors, relaxation zones, and so on). However, social networks are now important means of dissemination, e.g. Facebook, Twitter, and Instagram. Naturally, the more interesting the form of promotion, the more students become engaged and learn about the course. Videos or text accompanied by an interesting image would be worth considering. Another channel might be e-mails sent out by the main office. Information can be placed on the faculty's or university's website. Lastly, it is possible to use various student groups for spreading the news. The more channels that are utilized, the more efficient the advertising campaign.

Another avenue for promotion would be to visit students in other classes and inform them about the course, its contents, purpose, etc. Active students and those engaged in various student activities (e.g. “Friends for Business” at the university of the authors - TBU, which endorses entrepreneurship and organizes events such as lectures) can spread the word. Video recordings could document

elements of the first year of the course, and the resultant video would serve for further promotion. Getting graduates of the course to provide references and share their experiences is also worthwhile.

Given the fact that the course is intended for students interested in entrepreneurship, it is necessary to devise a method for selecting suitable applicants, due to the limited number of places on it. It is advisable that those applying write a letter stating why they want to attend. These are then the basis for the selection process of the body of teachers and lecturers. We recommend that a website is created that details the course and contains an application form, comprising the minimum of the following fields: name, contact details, and application letter; other sections might include area and year of study.

2.5 Forms of education

We view the foundation of efficient education in entrepreneurship as laying in **teamwork and interdepartmental cooperation**, namely when students from multiple faculties or fields participate, even if not on a course with a financial element. It should not only be integrated at economics faculties, but others also, e.g. technology, the arts, marketing, informatics, etc. Past experience has revealed that bringing together students from various fields and different focuses creates effective symbiotic connections, since students on the team then have diverse strengths. Practice shows that a student from a faculty of economics processes the financial aspects of business but often lacks a tangible product to start the business with. Students of faculties of technology, informatics, the arts or creative fields are able to do business immediately, although they need support with finances, the law or marketing.

Each student has a particular role on the team. We recommend creating groups of three to five members. Apart from concentrating on the aforementioned interdepartmental focus, it is wise to create any team based upon the roles within it. For instance, Belbin's Test may serve this purpose, since it defines up to nine roles necessary for a team, which then works on a chosen project.

As for tuition, we advise frontal instruction combined with a cooperative form. This means the mentor instructs everybody in the class in a communally shared manner. A brief explanation of the given matter by the mentor is accompanied by assigned and guided individual work, control of group tasks, and structured instruction from teachers with the entire group; the provision of feedback and evaluation constitute primary elements in this. Cooperative instruction further supplements such education, permitting students to collaborate in small teams and communicate face-to-face. Therefore, emphasis is placed on cooperation among team members in completing tasks, i.e. the success of an individual in reaching the goal is bound up with that of the other members. In accordance with the matters under discussion, selection can be made for the optimal style of encounter between the mentor and students (occasionally also tasks) as well as the learners among themselves; hence the teams have the capacity to evaluate each other by giving constructive feedback (alternating between positive and negative forms of the same).

An essential part of students' work has proven to be finishing multiple tasks as home assignments and fulfilling others outside of class; e.g. confirming a customer's order means carrying out a survey on demand in the field, not the classroom. We recommend splitting the time spent on the given components of such education as follows: direct tuition 60%; and homework / fieldwork 40%. For the latter, endeavor should focus primarily on processing assigned tasks, finalizing full business plans, preparing for final presentations, conducting market surveys, and field work.

It is advisable to organize excursions as a complement to the lessons. Choose an enterprise or concern that has recently emerged (the time horizon is a few years), through which the development of an entrepreneurial project is demonstrated.

2.6 Definition of educational outputs

Outputs and requirements for students may differ depending on the set objectives and credits assigned for the course. If it covers two semesters, final evaluation will naturally take place at the end of the second one. The authors advise a system of classified credit, i.e. an amount of credits corresponding to their integration in study plans at a maximum of 2-4 credits. The ECTS system will award marks based on the ability to complete tasks and utilize the evaluation mechanism (see section 2.7). It is sufficient to grant a credit through evaluation at the half way point of the course (after the first semester). The prerequisite for this is completing partial tasks, preparing and developing ideas via the Lean Canvas form, and presenting the business model to the mentors and the study group as a whole, thereby representing an “evaluation committee” (more details are given in section 3 – Course Procedure).

The following requirements are recommended for capturing credits in the second semester and for completion of the course:

- active endeavor in class, adoption of a role in the team, engagement in group work;
- active work beyond the classroom on assigned tasks;
- closing a business plan to an agreed extent (in the case of real projects, this may also depend on the chosen source of finance);
- final presentation of objectives to the committee;
- finishing assigned acceleration tasks; the point is not to complete them all but, depending on the potential of the team, prioritize tasks and carry out those; argumentation is also important, e.g. why some tasks are in the preparatory stage.

Meeting the above set requirements also corresponds with the key benefits of the course for students. The evaluation process is further described in the following section (2.7).

Quote from the authors:

“When testing out the methodology, the following requirements were set:

First semester:

- *come up with an original idea for a business, and ultimately build it up so it can be defended in front of the committee;*
- *find colleagues for potential teamwork, and create a team for long-term cooperation;*
- *test one’s personal qualifications for entrepreneurship, utilizing the Octoskills tool (further see chapter 2.2.);*
- *draw up a Business Model Canvas for the chosen company;*
- *transfer the notion for the company into a Lean Canvas Model, carry out validation of critical hypotheses and the crux of it;*
- *present the business as an elevator pitch (as a test).*

Second semester:

- *regroup the team if necessary;*
- *present the business model to experts from the profession – the original, refined idea from the first semester (having taken on board any feedback), or an entirely new or elaborated objective;*
- *carry out market research, including feedback on the planned product, validate hypotheses, get feedback from real customers, suppliers, and the like;*

- choose a suitable legal form for the company, including argumentation as to said choice, gather information and/or documents for its foundation (look into the requirements of the trade licensing office, prepare the necessary documents, provide materials for the registrar, gather data for the memorandum of association);
- prepare materials for sourcing finance according to the avenue chosen (crowdfunding / loan / investor), find out what is required;
- process a communication plan, including materials for a potential external agency, prepare low-cost tools (e.g. elaborating social networking profiles), data for the Internet, propose a structure for the website, etc.;
- create a prototype product (at least in part independently);
- complete the project's financial plan, set the source of finance (e.g. develop a crowdfunding campaign), fix economically viable parameters, stipulate one's capital requirements, utilization of capital over time, price and pricing policy, cash flow, and so on.;
- present the finalized business plan, including completion of assigned acceleration tasks, and defend it in front of the expert committee;
- finish the business plan.

In order to complete the course, it was not necessary to finish all the acceleration tasks mentioned above, due to constraints of time and the complexity of individual projects. When these tasks were left incomplete, it was necessary to give reasoning as to why they had not been finished, what stage they were at, and what the following steps would be. It may be presumed that students interested in continuing their projects would do so after the course came to an end.”

2.7 Student evaluation process

The aim of the evaluation tool described herein is to assess students' work and review selected aspects of outputs when engaged in their business projects. Based on such evaluation, organizers are able to assess the readiness of the project and the team behind it for its eventual implementation.

The methodology for evaluation is partially based on an already proven “Evaluation methodology for intent in business” tool, devised as part of a project entitled COoperation, Innovation, and NETworking of Technology Parks and Universities, ref. no. CZ 1.07/2.4.00/17.0094. This was carried out between 9/2011 – 8/2014 within the Education for Competitiveness Operational Program; the primary instigator behind it was the Science and Technology Parks Association CR, although many partners were also involved - science and technology parks, business incubators, and universities. The COINNET methodology was devised, founded on years of experience in evaluating commercial intent in selected start-up contests. Such events are held in various regions nationally, with the primary goal of promoting students' business interests, which could be actual endeavors or purely pursued as trial or competitive projects. Thus, it is limited to a quality assessment of the final output, i.e. the business plan, while the manner of presentation does not generally affect the evaluation.

Even though the form and quality of elaboration of the business plan are important, emphasis is placed on the interest and active approach demonstrated by participants in completing practical tasks. Apart from leading to potential realization of the business objective, a notable aspect is

participants' ability to present the project to the evaluation committee and invoke enthusiasm and faith in the commercial intent. Evaluation encompasses the following criteria:

1. Continuous work on individual modules, level of activity and engagement.
2. Completion of assigned practical tasks.
3. Presentation of intent to the evaluation committee.
4. Quality and contents of the business plan.

With the criterion defined below as “continuous work on individual modules, level of activity, and engagement”, an individual may be evaluated by factors such as continuous observation, assignment of roles, competencies in the team, and feedback from rest of the team. Evaluation of this criterion is the responsibility of the facilitator of the whole course, or other persons involved in most modules; hence they can objectively grade work throughout the course. However, for other criteria it is recommended to evaluate the team as a whole, a task that could be done by the evaluation committee. An arithmetic mean for the individual criteria should be derived if there are several appraisers.

1. Continuous work in individual modules, level of activity, and engagement

Within this criteria, the focus is primarily on the following: the way in which a student engages with the team, completes individual tasks, their level of activity, whether and how they participated in partial outputs, to what extent they performed their assigned role, involvement in other activities they were not directly responsible for, and whether they constituted a key person in the project who directed its progress and shaped the vision.

Continuous work in individual modules, level of activity, and engagement	Point evaluation
The student appears to be uninterested in individual activities, does no work, is frequently absent, does not complete the task assigned, other team members cannot rely on them, and they have no interest in cooperation.	0
The student completes only the most necessary activities, is not actively engaged, waits for tasks to be assigned by team members, communicates only what is necessary, and other team members cannot rely on them, although they are able to provide the required outputs to a limited extent if pushed to do so.	1
The student completes only the most necessary activities, is not actively engaged, but completes tasks assigned by team members precisely; they are responsible, and provide the required outputs to the necessary quality and within agreed terms.	2
The student performs their role, is active within the assigned competencies, and leads their given area; they are responsible, and provide the required outputs to the necessary quality and within agreed terms; they are rather reluctant to take part in activities outside of their area, though.	3
The student performs their role, is active within the assigned competencies, and leads their given area; they are reliable and provide the required outputs to the necessary quality and within agreed terms; they enthusiastically take part in other activities, contribute to directing the project, and rank as a leader of it, although the same is not able to potentially bring it to fruition without the other team members.	4

The student performs their role, is active within the entrusted competencies, and leads their given area; they are reliable and provide the required outputs to the necessary quality and within agreed terms; the same enthusiastically takes part in other activities, contributes to directing of the project, and ranks as a leader of the whole project; this person is key to it, and able to potentially bring it to fruition without the other team members.	5
---	----------

2. Completing assigned practical tasks

This criterion focuses primarily on whether and how assigned tasks have been completed. Evaluation pertains to the following: completing tasks that do not directly lead toward potential realization of the objective, work that shows significant flaws, whether finished tasks are backed up by relevant information (e.g. market research), and to what extent the student dedicated themselves to tasks (if only during class or beyond it, too). Assessment is also given as to whether the individual has made good use of the course, and at least developed “low-hanging fruit”, i.e. prerequisites for further potential realization of their commercial intent. Although it is not absolutely necessary to complete all assigned tasks precisely, the participant should be able to give argumentation as to why some have not been completed, what stage they are presently at, and what their job schedule is. For example, a logical argument would include things like high financial demands, seeking a suitable partner for the project, and reference being made to various activities that currently ongoing. In this context, it depends on the specific project and the tasks assigned. Generally, those interested in carrying out jobs for the project will complete tasks well, and the groundwork shall already exist for further progress. One should expect formal completion of the given tasks for fictional (trial) projects.

Completing assigned practical tasks	Point evaluation
No tasks have been completed.	0
The tasks (or merely a part of the same) have only been completed to a formal extent; the project team focused solely on jobs and outputs stemming from individual modules; said outputs are not supported by relevant argumentation, thus useless for further realization of intent.	1
The tasks (or merely a part of the same) have only been completed to a formal extent, the project team focused solely on jobs and outputs stemming from individual modules; said outputs (or at least a part of the same) are of relatively good quality and supported by relevant argumentation; a proportion of the combined output constitutes a solid basis for further advancement of intent.	2
The tasks (or merely a part of the same) have been completed well; the project team has been engaged and exceeded the basic requirements of individual modules; the outputs (or at least a part of the same) are of good quality and supported by relevant argumentation; a proportion of the combined output constitutes a solid basis for further advancement of intent.	3
The tasks (or merely a part of the same) have been completed well, the project team has been engaged and exceeded the basic requirements of individual modules; the outputs (or at least a part of the same) are of good quality and supported by relevant argumentation; a proportion of the combined output constitutes a solid basis for further advancement of intent; the incomplete	4

state of tasks has not been thoroughly reasoned; a job schedule for the future has not been prepared.

The project team has completed all the key tasks (or a substantial part of the same), the outputs achieved are supported by relevant argumentation and represent specific steps toward realizing intent; the incomplete state of tasks has been thoroughly reasoned; the job schedule is up-to-date and details future work. Overall, the project is progressing toward implementation, or actual business activity is going to happen or has commenced. **5**

3. Presentation of intent to the evaluation committee

This criterion should focus on the following: the quality and extent of the information presented, the chosen form of presentation and technique adopted, the standard of the presentation itself, and the structure and logical cohesion of data; as well as the ability to enthuse observers, keep to set limits (e.g. time), and respond to potential questions. From such a presentation, one can judge the enthusiasm of the team, their motivation and interest in the project, and how they are going to advance the project; all of these are important to this criterion to some extent. It may be assumed that in case of real projects, stress will be placed on presenting a prototype in some form.

We recommend evaluating the team as a whole, despite the fact that a specific speaker with business and presentation skills may be chosen to give the presentation. In terms of content, it should follow up on the work and outputs of the team as a unit.

Presentation of intent to the evaluation committee	Point evaluation
The presentation did not take place or was very poor; important information was not clearly conveyed; the project team was unable to answer questions.	0
The presentation was rather formal; important information was not clearly conveyed; the project team was, nevertheless, able to respond to questions to a limited extent and supplement them with key aspects.	1
The presentation was of good quality; key information was clearly conveyed, but the presentation was inconsistent and a little confused; the project team was able to respond to questions and supplement them with necessary information; however, the team was not convincing, and did not show enthusiasm for the project.	2
The presentation was of good quality; key information was clearly conveyed, but the presentation was inconsistent and a little confused; the project team was able to respond to questions and supplement them with necessary information; the project team was convincing and showed enthusiasm for the project.	3
The presentation was of good quality; key information was clearly conveyed; the presentation was logical, well-arranged, and the data were coherently communicated; the project team was able to respond to questions, were convincing and showed enthusiasm for the project.	4
The project team gave a very high quality and original presentation, supplemented with a prototype of some type; the team was convincing, showed enthusiasm for the project and motivation to carry out further steps; the evaluation committee was significantly enthused by it.	5

4. Quality and contents of the business plan

With this criterion, we recommend focusing on the following:

- the comprehensive nature of the project, its arrangement, logical structure, whether it has meaning;
- the potential for implementation – the real-world worthiness of the concept and product; the level of interest and its chances of realization; the originality and innovative form of the product; distinctness from competition;
- the presence of key information, inner logic, argumentation, and supportive data; e.g. awareness of the market, competition, knowledge of customer needs and market acceptance, communication strategy and plan, pricing policy, and forms of monetization; the plan for costs and revenue; the cash flow of the project, sources and means of finance; the schedule; personal and spatial provision; risk analysis; etc.

Quality and contents of the business plan	Point evaluation
No business plan has been completed.	0
The business plan is badly laid out; the individual parts are incoherent; the contents are incomprehensible; a lot of key information is missing.	1
The business plan is badly laid out; the individual parts are not always coherent; however, it contains most crucial information, which is comprehensible and meaningful.	2
The business plan is well laid out; the individual parts are coherent; it contains all important information, which is comprehensible and meaningful; however, the data is not always fully backed up, and as whole is rather formal. This would presumably constitute a fictional business plan elaborated for the needs of the course.	3
The business plan is well laid out; the individual parts are coherent; it contains all important information, which is comprehensible and meaningful; key data is backed up with other material; the plan is financially/professionally very demanding, and it may be presumed that the team cannot currently carry it out.	4
The business plan is well laid out; the individual parts are coherent; it contains all important information, which is comprehensible and meaningful; key data is backed up with other material; from the perspective of financial/professional demands, it may be presumed that the team can implement it.	5

A maximum of 20 points can be awarded. When evaluation exceeds 16 points, the student has completed this course successfully and achieved an excellent result. 15.9 – 10 points mean that the individual has passed. Less than 10 points constitutes a failure; the student has not completed the course and cannot be evaluated. A condition for passing the course is that none of the criteria is evaluated as 0. If grading is done by the committee, the amount of points awarded should be the arithmetic mean of the results of all members.

3. Course procedure

The contents of course have been arranged so that they logically build on each other sequentially, but some can be worked on separately. It would be possible to employ the complete curriculum at universities that have not previously taught entrepreneurship. In contrast, colleges with a history of education in the subject may find inspiration in these pages, and choose to amend or expand their own offerings with aspects of what is described herein.

The actual extent of the course shall always depend on the time allocated to it, as well as the availability of partners and mentors. As mentioned previously, setting assignments for completion outside of class is crucial, and an ideal option is to integrate individual consultation sessions by said partners and mentors.

The curriculum is devised so instruction starts out with a general perspective and leads to hands-on experience, although practical aspects and specific examples are present throughout. This forces participants out of their comfort zones and engages them actively from the very beginning. As described previously, lessons should include input from experts on topics. They contribute by imparting essential aspects of starting out in business based upon real-world examples, while concurrently serving as mentors and advisers the students can consult with about their own projects. The course should have a facilitator - a person who is always present in class, who coordinates the curriculum of individual workshops, is familiar with the teams and their projects, and communicates with lecturers and mentors. The learners also undertake what we have called acceleration tasks, the aim of which is to move their ideas for a business closer to realization.

The course's structure is as follows. Initially, focus is placed on getting to know the students - their expectations, experience, strengths, weaknesses, and inspirations, as well as creating potential teams and generating portfolios of ideas for commerce. Next, certain legal and economical areas of entrepreneurship, marketing, etc. are explored. These are essential to elaborating a project at a preparatory stage and developing the business further. Since these might be slightly unappealing topics, it is necessary to demonstrate with specific examples how they are dealt with practically. Moreover, such instruction would greatly benefit participants studying non-economic subjects. What follows is understanding the significance of value for customers, transforming a commercial concept into a business model, validation of the same, and a presentation to potential investors.

When studying these topics, students receive real feedback on their ideas and recommendations for further steps. Afterward, students work on assigned tasks, and speak with experts on the given areas of entrepreneurship. Gradually, they move on to conducting market research and validating critical hypotheses, finishing the product, preparing a communications plan (including deriving low-budget tools), carrying out basic financial calculations, and so on. They concern themselves with the necessary sources of finance and defining basic processes for satisfying customers' requirements. Concurrently, they work on supportive mechanisms, i.e. elaborating a business plan and gearing up to commencing trade. The course concludes with a final presentation to investors and the mentors. Therein, the team introduces its detailed business plan, as well as its members' progress - from formulating initial ideas, coming up with the business model and validating it, through to consideration of addressing initial customers.

Quote from the authors:

“When testing out the methodology, two lessons were scheduled per week over the period of two semesters. The output of the first semester comprised a completed and validated business model, and a mock presentation was given. The second semester began with actual presentation of the business model to investors, then acceleration tasks were conducted during the second semester.”

3.1 Topic 1 – Introduction to the course

As the title suggests, details on the course, its philosophy and procedures for work are discussed at the beginning, as well as the requirements for participants, including what is necessary to successfully pass the course (credits). The key partners and tutors of the lectures are introduced, their individual roles outlined, and mention is made of the added value and opportunities afforded by their participation.

An important part of the first class should be given over to acquainting the learners with one another, and talking about their expectations, motivations, and experience. Efforts to begin forging teams and relationships for further cooperation are to be made.

Discussion should be encouraged on entrepreneurship, opportunities in commerce, and analysis of students’ approach to business.

By completing this module, students will gain:

- information on the course, an understanding of formal and content-related requirements for completing it, instruction on its organization and schedule;
- contact data on the partners and lecturers engaged;
- sources of information concerning regional supportive tools;
- basic introductions to other students in class (including contact data), their opinions, and approach to business;
- a basic overview of strengths and weaknesses, who is needed in a team, what they can offer others, etc. (self-reflection).

The Process

At the outset, details shall be given of the various partners, their roles in the program, organization information, contact persons, and profiles of the lecturers. Moreover, the venue for lessons is discussed, especially if it is to be held outside of university premises.

Quote from the authors:

“When testing out the methodology, classes took place at the local business incubator. The aim was to acquaint students with suitable premises and environments for start-ups, and link them with their local start-up community.”

In reference to the participants going to know one another, sharing their expectations and opinions on entrepreneurship, they are given about two minutes to think before speaking to the class. The whole process is directed by the teacher, guiding them if they deviate, or following up with

questions, while other students listen, have the opportunity to respond, and make notes, especially about potential cooperation in a team.

Areas discussed (from the perspective of the student):

- who I am (faculty, year, field, why I chose this field, whether I want to be active in this field, what I like, etc.);
- why I am here (why I have chosen this course, what has brought me here, and why I want to pass);
- what I expect (specific expectations, how participation in the course may help me, what I need, etc.);
- relevant experience (personal experience, trade licenses, pseudo-business – cooperation by means of agreement, business in the family, potential for taking over the family business, potential projects, whether there is a specific project I want to work on during the course); whether I am interested in becoming an employee; if so, why; etc.
- strengths – what I believe I am good at (my key competencies, skills, what I could bring to the team, my role in the same, whether I am a visionary in some respect, or efficient, or analytical, etc.);
- weaknesses – room for improvement and support mechanisms needed (the key competencies and skills I lack, what/who do I need on the team with the relevant skills, and so on).

The facilitator makes notes on the board and briefly summarizes and analyzes this information.

The long-term task is then assigned – to come up with ideas for a business proposition and any potential requirements of team members.

3.2 Topic 2 – Start-ups

This topic is split into two distinct blocks. The first introduces basic terminology pertaining to start-ups, defining essential vocabulary, explaining the differences between starting a business and a start-up, and going through what constitutes a start-up. Afterward, instruction turns to the variance that exists between a conservative approach to creating business plans and one applying the methodologies of Lean Startup and the Business Model Canvas.

The second block is more practical in outlook. Students present business models of certain companies with the aid of the Business Model Canvas, and discuss the topic further.

The benefits of this module:

- tuition on basic terminology;
- comprehension of the specific characteristics of a start-up;
- knowledge of scalable and repeatable business models;
- tuition on adoption of a customer-first approach and solving customer-related issues;
- comprehension of the difference between a conservative approach to creating business plans and a modern one with Lean Startup, due to a minimum of data and initial development of a business plan;
- knowledge of the term Minimum Viable Product;
- comprehension of what constitutes a business model; theory and practical experience of a Business Model Canvas with actual application of the same.

Home assignments and a follow-up block of lectures encompass:

- testing individual work with a Business Model Canvas in a practical manner;
- learning to analyze basic business models with the information available;
- researching opinions on the business models of selected companies within a study group;
- potential for inspiration by specific business models for further efforts.

A proportion of lesson time is given over to discussing and sharing their own experiences and the opinions of students.

The Process

Block no. 1:

Although many in the class will be familiar with several of the terms, it is worth revising them and defining the basic terms which shall be encountered.

Quote from the authors:

“When testing out the methodology, it was seen that participants in the lessons were from a number of different faculties. Assessment of the pilot program revealed that the knowledge demonstrated of basic terms had not been gained from said faculties, wherein objectives varied, but actually stemmed from students’ personal interest in start-ups and entrepreneurial issues.”

The minimum we recommend is teaching basic terms like start-up, crowdfunding, risk capital, angel investors, business model, lean startup, business model canvas, and lean canvas. Students should be directly involved in defining such vocabulary, and attempt to describe the terminology in their own words and give specific examples. The entire process is led by the lecturer, who guides students or asks additional clarifying questions. Others in the class have the opportunity to respond and add to the discussion. Said tutor continuously writes notes on the board, then analyzes and supplements them with concrete examples.

For example, the term start-up has become widely adopted in recent years, and various definitions and interpretations exist. Consequently, discussion should be given over to perception of it and its defining characteristics, as well as explaining the terms repeatable or scalable business models, and seeking an answer to the question: “Is every business that is starting up actually a start-up?”

Further attention should be paid to the following:

- explaining the term Minimum Viable Product and presenting specific examples; discerning when it is sensible to release the product onto the market, and what constitutes a suitable location for a start-up;
- discussing the point of having a business plan in the early stages of a company’s existence; practically demonstrating the structure of a typical business plan and contrasting it with selected aspects of the lean startup principle; addressing when it makes sense to elaborate a full business plan;
- presenting the logic behind the customer - problem – solution concept and giving concrete examples; addressing whether a particular customer has this kind of problem, and whether the given product(s) could solve the issue;

- introducing the concept of a Business Model Canvas; relating practical means of working with the same; explaining the structure and meaning of individual blocks; note: the tutor repeatedly goes through the blocks, and comments on their meanings when creating a business model, as well as on their mutual interconnections, and gives practical examples; the tutor should provide specific examples of said blocks, as outlined below:
 - customers, customer segments;
 - value for the customer;
 - channels – delivering value to customers, communication with them;
 - relationships with customers – maintaining and building relationships, ensuring repeated purchases, the customer as a co-creator of value;
 - revenue streams and means of monetizing value;
 - key activities necessary to create value;
 - key sources;
 - key partnerships;
 - structure of expenses.

Following this is a practical group exercise. The lecturer briefly talks about a specific industry and/or company and its methodologies in the past; we recommend choosing a progressive industry, in which the advancement of a business model over time is clear. In groups, the students are given ten minutes to consider the function of the business model at that past time, employing the Business Model Canvas to do so. Meanwhile, the lecturer goes around the class, monitoring the groups. Then a controlled discussion is held, wherein each team presents its conclusions, the lecturer enters these into the Canvas, and the class as a whole creates a business model of said case study. The task is repeated, but instead the current model of the industry and/or company is investigated. A follow-up exercise involves revising and discussing any major changes between the two.

Quote from the authors:

“When testing out the methodology, we elected for bookmaking as the example trade. Simple analysis of its business model from the 1990s was carried out, revealing that value for the customer was delivered via bricks-and-mortar outlets. The current business model was then investigated, wherein betting is increasingly occurring on-line. Differences were seen in all areas - from the customers themselves, through to ways of delivering value, co-creating value, and maintaining customers through key activities and required sources. Other case studies may be tried, e.g. DVD rental, sale of audiovisual works, etc.”

This permits participants to directly experience the Business Model Canvas method, learn to identify key areas of a business model, attempt to change the business model over time, and define basic factors that cause or influence such changes.

In the second block, students prepare a brief analysis of the business model of the company and/or industry at home; it should be a familiar local, national, or multinational concern. Either the lecturer makes available a database of selected companies that can be chosen from, or the company is assigned by the lecturer themselves. The learners devise a brief presentation (maximum five minutes) of the business model using the Business Model Canvas; Powerpoint or an equivalent application (e.g. LibreOffice Impress) is recommended for this purpose.

Block no. 2:

Studenti mají k dispozici prezentační techniku a představují zpracované obchodní modely

Utilizing AV technology, students present their findings on the business models of selected companies, going on to comment on the various parts of the Canvas – customer segments, value for customers, forms of communication, delivering value to customers, building relationships with customers, ways of monetization, key activities, sources, partners, and the structure of expenses. Furthermore, content on the following is necessary:

- the sources of their information;
- how the given business model has inspired them;
- what areas they had the most trouble with;
- whether they see any room for improvement.

The other members of the class are encouraged to comment, opine, and share experiences or insight on the presentations. The tutor moderates the discussion; five minutes should be allowed per speech, followed by conversation on the same. The students decide which presentations are to be given from the choice available, since it is not necessary for everyone to present at the expense of discussion.

Quote from the authors:

“When testing out the methodology, various things were confirmed, particularly that it is optimal in this task to analyze the business models of well-known companies (local, national, or multinational). Students engaged in discussion more as a result, in contrast with less familiar entities.”

At the end of the class, details on future excursions are divulged to the learners, and basic data are provided on the companies to be visited. Homework should be set on researching these commercial concerns and thinking of questions to ask about them.

3.3 Topic 3 – business stories (excursions)

This refers to visits by classes to companies to encounter the people behind them. Clearly, the point of this is to encourage students to contemplate the role of an entrepreneur and learn what it actually means to be one.

Benefits of the module:

- learning about firms that began as start-ups;
- hearing anecdotes about being in business “straight from the horse’s mouth”;
- making contacts; listening to entrepreneurs’ opinions and obtaining recommendations from them;
- carrying out market research; asking questions;
- hearing the opinions of speakers on entrepreneurship, entrepreneurial environments, factors of success and failure.

The Process

The preferred destination for an excursion is the premises of a company (if logistically possible). Alternatively, a business incubator is an option, with the involvement of incubated companies, and inviting entrepreneurs to the university is worthy of consideration.

When selecting speakers, we recommend people such as the alumni of the university, or staff from a company with products well-known to students. For example, after a brief introduction on the company, a discussion could be held (moderated by the tutor), in which students have the opportunity and/or duty to ask questions, the aim of this being to engage all those present. Typical topics for such discussion might be as follows (according to the type of company visited):

- business stories;
- the role of the entrepreneur; the effect on one's private life;
- beginnings / origins; subsequent expansion;
- the vision for further development;
- inspiration;
- business models;
- key milestones;
- self-reflection – what went well, what did not, what should have been done differently;
- recommendations for starting a company;
- trends in the industry;
- trends in business.

Quote from the authors:

“When testing out the methodology, we put on an excursion to the Aukro company (www.aukro.cz) that is behind an on-line auction website. It is an example of a successful technology-orientated start-up that had expanded rapidly, produced a scalable product, experienced many structural changes, and used a form of risk finance, among others. Initially, the firm was incubated at the business incubator of the Technology Innovation Center s.r.o. However, it has gone on to become a well-known company, one based in the local area with ambitions to spread its product globally, which offers internships to students at our university, is a sponsor of the local ice-hockey club, and does more besides. The founder and co-owner, Václav Liška, who we dealt with, himself is an alumnus of the university (TBU).

Another excursion was to the premises of Moje dílna, a creative workshop and a cafe in Zlín (www.mojedilna.eu). Unlike Aukro, it is not a technology-orientated start-up with a scalable product, but a local business project with franchise potential. The product itself is the duality of a creative workshop and cafe. The workshop serves as a venue for creating works of art, and various courses are organized on visual arts, pottery, and so on. Our students learned about the story behind the business, why and how it came to exist, and its teething troubles from Zuzana Kubíčková, the owner and also an alumnus of TBU.”

3.4 Topic 4 – Roles, teams, projects

As mentioned earlier, due to the character and further focus of the course, we recommend forming project teams from class members, who cooperate on refining the concept for business and

elaborating it. Therein, the point is to provide an opportunity for creative discussion and facilitate aspects of a team dynamic (e.g. through processing and discussing a business model, as described above). Each one is enriched by the different competencies and knowledge its members bring to the table. Additionally, the potential exists for genuine cooperation to stem from this in the future.

Benefits of the module:

- self-reflection; contemplation; validation or discovery of one’s ideal role in a team;
- getting to know other students in the class better;
- forging new links and relationships;
- discussing one’s ideas with other team members;
- getting feedback from others in the team;
- coming up with new notions for commerce; pooling ideas;
- exploring one’s motivations and capacity for negotiation.

The Process

The exact procedure for arranging and forming teams, e.g. the maximum number of members, are left up to the educational establishment itself and/or the lecturer to decide, informed by the particulars of the course; for example, the total number of students, and quantity of actual projects. We recommend that the number of teams is limited to a certain extent, not highly numerous, especially at a university, as some individuals may slack off, not gain a real role in the team, and fail to genuinely contribute to it.

A team should be founded on its members’ inherent personal qualities, experience, knowledge, and competencies. A significant aspect is possessing interest in elaborating a particular real-world project in cooperation with classmates, who may just go on to become future associates. Therefore, circumstances ought to go beyond mere “camaraderie”, supposing the team’s project is not one predating the course. Various options exist when making a team - it is possible to follow input information for bringing certain students together; alternatively, simplify the process by defining roles essential to each team, based upon results from testing said roles. If individuals wish to work alone on a project, e.g. since they are elaborating a specific real-world concept, placing them in a pair with another such student will allow them to consult each other on their given projects, voice opposing points of view, and cooperate on partial tasks reciprocally.

Quote from the authors:

“When testing out the methodology, class members comprised students from various faculties at TBU – Technology, Management and Economics, Multimedia Communications, Applied Informatics, and Humanities. Unfortunately, the original hypothesis was not confirmed, this being that students from different fields would cooperate in a conducive manner. We supposed that those from a technical background would come up with an innovative idea, and forge an alliance with economically focused students, due to the latter’s knowledge of financial management and setting prices, and/or others studying multimedia communications, with insight on marketing, design, and communications. Our presumption that teams would be made up of representatives of individual faculties was not validated. When the individuals introduced themselves initially, it was revealed that not every technical student possessed ideas with business potential, while several from the Faculty of Humanities did harbor them. Hence, those in attendance took Belbin’s test for team roles, in order

to identify suitable candidates for the positions of shaper, coordinator, team-worker, and completer/finisher. Afterward, we gave them the information required to form teams comprising four members.”

Once the teams have been arranged, they are tasked with drawing up a list of potential commercial ideas to explore further. Depending on the number of members, the minimum amount of these is decided on in the group, the notions on the list are agreed on, then they are ranked according to plausibility, and then one is chosen as the favorite. This list is handed in at the end of the module. Naturally, students' concepts may have some kind of history and predate the module, or they could stem from brainstorming as a group, or follow on from previous modules and excursions.

In case the suggestion of one individual is adopted and the others in the team share in its development, internal rules should be set and motivations determined as to why they all should contribute to the project; for instance, an agreement on future cooperation could be drawn up. Nevertheless, they may agree to help out equally on other members' projects, which would have to take place outside of the course due to time constraints; such decision-making is left to the discretion of the team itself.

Bearing in mind that a primary aim of the course is to settle on an idea for a business and advance it toward actual implementation, it is necessary to minimize effort wasted on “pipe dreams”, i.e. those which are clearly impractical to pursue from the outset. Since the majority of projects are theoretical, without desire on the part of the teams to make them real, the ability to carry a concept through to ultimate realization is to be considered at the prioritization stage.

Examples of such theoretical pipe dreams:

- a complex, financially demanding project for making investments – real data is lacking; form wins over content; no real chance of gaining finance for it, etc.;
- anything involving gastronomy – especially if no-one has experience of the trade;
- constrained projects – those that are highly seasonal, relate to a niche market, and where the size of the target audience immediately dictates that not one team member can be financially provided for; e.g. organization of a one-off event;
- projects with a substantial legislative barrier.

The educator is to monitor the conversations in the teams and consult with them on their ideas. From experience, it is advisable to point out selected aspects and critical points pertaining to the given project; e.g. structural models, the necessity for links with counseling services and others, differentiation from competition, and seeking means of monetization.

3.5 Topic 5 – Legal aspects of entrepreneurship (I)

This topic is divided into two parts. The first part is given over to general approaches, legislature related to entrepreneurship, and overall awareness of the law applicable to anyone considering a career as an entrepreneur or launching a business. The second part is scheduled for the later stage of the course, after the project's concept has been decided on and elaborated, the business model is fixed (after consultation), and steps are underway to launch the firm.

The topic requires the cooperation of a specialized lecturer, e.g. an attorney.

In the first part, students get to discuss basic legal aspects related to starting out in business, and then do an exercise to work through legislative requirements for opening a company, utilizing case studies and carrying out practical tasks.

Benefits of the module:

- validating one's own experience and knowledge in this area;
- gaining the ability to define and understand basic terms;
- comprehension of basic legislature on entrepreneurial matters;
- obtaining useful information and experience pertaining to starting a business, including the choice of its legal form;
- learning about common mistakes made when starting out in business;
- becoming acquainted with the individual steps necessary for starting a business and any related legal matters;
- hands-on practice of preparing materials for founding a company.

The Process

Although students are expected to have some knowledge of this area, from previous studies or personal experience, it is worthwhile revising essential terminology to begin with. The lecturer asks the class about the basic terms, makes notes on the board, and moderates the discussion on the topic.

Then a practical exercise is set involving a case study. Students have to consider the steps necessary for starting a business, what administrative hoops they will have to jump through, and any stipulations laid down by law (both in a general context and for the project). Then, guided by the educator, they state their findings, and discuss the topic further, mutually placing their findings within a legislative framework. Thereby, analysis is conducted of certain legal aspects via a practical exercise, including any interrelations of the same. In essence, they comprise the following points:

- choice of legal form;
- founding a company;
- starting out with a trade / business license;
- company name;
- the space required for a business, including all relating aspects (space requirements, final building approval, equipment, fixing the place of business / premises, running a business from home, dealing with a lease contract);
- the logo, marketing, copyright;
- intellectual property;
- labor law relations, social and health insurance, health and safety at work;
- accounting and taxation aspects.

This is followed by another practical exercise, wherein students in groups of three are tasked with preparing data for signing the articles of association for establishing a limited liability company, as required for a notary to draw up said articles. They determine what key information is necessary, what modifications to it are desired and why. The class then mutually conducts an analysis of the outputs, under the supervision of the educator.

3.6 Topic 6 – Comparison of regional entrepreneurial determinants and value for customers

By now, the teams will have assembled a rough idea of their intended business for further elaboration, and have a basic awareness of legal matters. Choosing a location (place and region) for a company is one of the most important decisions made by its founders. The first part of this module highlights market conditions, marketing options, business environments, and other aspects that influence decision-making on location, premises, costs for implementation of the business intent, the cost of living, availability of a qualified work force, housing, transport infrastructure, and so on. The other part of the module relates to the behavior of customers and comprehension of actual value for customers - their expectations, and ways of raising such value(s).

Benefits of the module:

- learning about the environment of the given region;
- seeking options for transferability to other regions (what specific data is advisable to collect);
- getting an overview of the selected regional tools of business support;
- receiving contact details for support infrastructure in the region;
- understanding the meaning of discerning value for the customer to further the success of the product;
- understanding how to change or boost value for the customer;
- comprehending why it is necessary, when developing the business intent, to focus primarily on customer-related matters instead of the product itself.

We recommend engaging experts on regional development (e.g. staff of regional development bodies), representatives of a business incubator or innovation center, and those of a commercial subject which has conducted a case study on discerning value(s) for the customer.

The Process

The lessons are interactive, wherein students are asked brainstorm factors influencing commencement of a business in the region, with the lecturer making notes on the board for additional discussion. Then reasons that affect decision-making on placement of the project within the region are introduced, followed by a strategy for finding a suitable site. A case study is presented of a given region, on such things as the labor market and related indicators, its strengths and weaknesses, average prices, availability and quality of education, availability of a work force, the cost of living, structure of industry, and infrastructure.

A practical exercise is assigned to research selected costs at a regional level, particularly average income in fields relevant to the business intent under preparation, and the average price for renting commercial property and a site at incubators.

The next part of the module involves presentation of basic data on support tools available at a national or regional level, as overseen by governmental ministries or specialized bodies. Furthermore, description is given of profiles (including current contact details) of stakeholders actively supporting commerce, e.g. business incubators, science and technology parks, innovation

centers, start-up contests and accelerators, the Chamber of Commerce, investors' networks, and other actors in the local start-up ecosystem.

Quote from the authors:

“When testing out the methodology, analysis of the type stated above was carried out on the example of the Zlín region. Contemporary mechanisms facilitated by the Czech Ministry of Industry and Trade and the CzechInvest agency were presented, as were programs which nurtured start-up culture (CzechStarter, CzechMatch, CzechAccelerator, and CzechDemo). Additionally, tools available at TBU (our university) were made known – namely the Center of Creative Industries and Business, the Science and Technology Park and the Technology Transfer Office at TBU in Zlín, the ICT University Science and Technology Park, and the Technology Innovation Center (which ran an acceleration program).”

“Understanding the concept of value for the customer is well demonstrated by conducting a case study of a specific entrepreneur, e.g. on the subject of “how we learned what the customer wanted”.

“When testing out the methodology, we as its authors looked a ski school targeting Dutch tourists. We asked the following questions: Do Dutch tourists want to learn to ski? What are their actual needs? What value do they expect from a stay in the mountains? Would they limit their experience to merely the novice slope at the hotel? Can the ski school offer them different forms of value? Finally, would a change in the product affect costs and demands on employees?”

3.7 Topic 7 – Financial aspects of entrepreneurship (I)

Matters relating to economics and finances are always complicated when it comes to processing entrepreneurial plans and starting a business. Ten years spent observing and assessing the opinions of investors and evaluation committees behind start-up contests, and consulting young entrepreneurs has shown that such aspects are often thorny and difficult. The module described herein is not meant to replace specialized financial courses (e.g. business administration, finances, financial management, accounting, etc.), but to pick out and explain key areas worthy of note when setting up a firm, through giving practical examples. Moreover, it should be remembered that learners from technical fields are not likely to be familiar with such topics.

This area is split into two parts. The first one deals with general approaches, focusing on basic economic and financial aspects of entrepreneurship, largely during the preparatory period of the business plan and commencement of commercial operations.

The second part takes place in the later stage of the course, after students have decided on a project, and confirmed and elaborated the business model (following consultation). At this point, learners are preparing for the project's formal realization, working on their business plans - including financial and economical calculations, and thinking about sources of financing.

Benefits of the module:

- validation of related knowledge;
- the ability to define and explain basic economic and financial terms;
- the capacity to generate an overview of capital needs, define and devise a suitable structure of costs, and consider means of monetizing their ideas (foundation for future cash flow);
- obtaining a general overview of financing options, especially at early stages;
- ability to consider what financial resources are needed for starting a business and where to source them from.

The Process

The lessons are interactive. Students and the lecturer openly discuss and evaluate related terminology, and notes are made on the board. Key financial aspects for devising business plans and starting a business are presented via case studies; for example:

- Budgeting and their significance; the founding budget; calculation, and structure of the same;
- revenue streams and expenses vs. profits and costs;
- cash flow – its significance and calculation;
- means of finance;
- initial capital;
- the effect of entrepreneurship; alternative expenses;
- planning cost and expenses (their structure and primary forms);
- break-even analysis;
- the cost function;
- contribution margins, etc.

Discussion is held on sources of finance, and learners are asked what sources they know about, their experiences of them, and where to obtain them, and specific case studies are given. The open talk should cover:

- one's own resources and opportunity costs;
- friends, family, and fools – the 3Fs;
- the financial assistance of banks;
- crowdfunding;
- risk capital; angel investors;
- financial subsidies and guarantees.

A team activity follows:

- decide what would be needed to start the operations of your project (company) and everything necessary during the first twelve months of business, and determine where you could get financing from;
- outline the basic expenses of the project.

3.8 Topic 8 – Lean Canvas

By this point, students will have an understanding of start-ups and what constitutes a business model; they will have been afforded the opportunity to analyze the business models of some companies, considered what value is offered to the customer, comprehend the legal and entrepreneurial environment, and will have learned about economic and financial aspects; all of which are utilized in their ongoing projects. In this context, teams shall be working on a portfolio of

business ideas, making priorities, and defining roles for members. Another part of the course concerns elaborating particular business ideas, firstly into a scheme of business models.

The Lean Canvas module is divided into three lecture blocks. The first focuses on explaining the Lean Canvas model, differentiating between it and the Business Model Canvas, working with the former, and processing an initial business model. The second block is concerned with forming hypotheses and validating them with “validation board” tools, while the third concentrates on “pivoting” and updating the business model, based on verification of the defined hypotheses.

Benefits of the module:

- utilizing the Lean Canvas method;
- understanding the significance and interconnections of segments of the Lean Canvas model, mainly “customer - problem - solution” when considering a business model,
- proposing a business model(s) for their own projects;
- defining key hypotheses;
- working with validation board tools;
- verifying hypotheses via a practical exercise;
- understanding what is meant by pivoting when coming up with a business model;
- preparing an up-to-date Lean Canvas business model and a presentation to obtain feedback.

The Process

Block no. 1:

During the initial part, we recommend revising the Business Model Canvas discussed earlier, and then introducing the Lean Canvas model, explaining the differences between them, and the advantages of the Lean Canvas when developing a new business idea, primarily in the context of “customer - problem – solution”.

Afterward, demonstrate methods for utilizing the Canvas, describing the structure and meaning of the individual blocks and giving specific examples; the educator is to continuously repeat the blocks, and comment on their meanings when creating a business model and their interconnections, supplemented with real-world examples.

A timed activity follows – students have sixty minutes to complete the first version of a business model using the Lean Canvas; in teams they work on pre-defined business ideas; once a concept is finished, they can move on to the next one.

Where possible, it is advisable to arrange the lecture rooms so that each team has a space unto themselves, without external disturbances. Permit them to have expanded Lean Canvases at their disposal, as well as sticky notes, writing utensils, surfaces for sticking the canvas to the wall, and so on.

The teams are tasked with filling out and agreeing on a draft version of their Lean Canvas business model, in relation to the following questions:

- Who are the customers? Who are the users? Who to start with first - initial indicators?
- What are the key problems (needs) of these customers? How do they currently solve them?
- How can we grab their attention? What constitutes value for customers? Could this value be addressed by existing solutions?

- What are the qualities of the intended product / solution? Would it solve customers' defined problems?
- How is it possible to access customers? What means exist for delivering the value discerned? How might customers learn about the business?
- How can payment be earned for delivering the value(s)? What forms of monetization exist?
- What expenses would the company pay out for? How much? What is the structure of expenses?
- What indicators of success are available? How are they measured? What is important for the company?
- What is the company's competitive advantage? If none is discernible, what could it evolve to be over time?

The educator's role is crucial in this, circling through the various spaces to see the teams, monitoring their work, speaking with them, giving advice, and explaining the methodology and specification when necessary. Should a team not complete the exercise within the time limit, it is to be finished as homework. Regarding the concept for a given business, if completion of the model is not possible for whatever reason, or it simply does not make sense to continue it, another can be chosen from the pool of ideas. Indeed, one purpose of the Lean Canvas is to eliminate ideas conveniently that do not suit the context of the model, indicating it is not efficient to pursue them any further.

Block no. 2:

This sets out with discussion on potential ways of validating business models. Such validation may be in the form of implementation (for relatively simple ideas with minimal initial cost), or occasional sale (alternatively, the pre-sale of products with similar parameters to verify demand), or the sale of an imaginary product (e.g. by getting to the ordering stage, carrying out market research, and so on). These are supplemented with particular examples.

Then the validation board tool is introduced, along with procedures for its usage, i.e. determining key hypotheses, selecting the riskiest prerequisites, defining data to support propositions, forms of experimentation (exploration, pitch, concierge), setting limits for when the proposition is considered valid (minimum criteria for success), and adhering to the pivoting process.

Within this, it is crucial to understand issues relating to "customer-problem-solution-revenue-experience", and address the following issues:

- Is there a well-defined customer base?
- Does the customer have a problem(s)?
- Would the customer believe they need this (our) solution?
- Would the customer be willing to pay for the solution?
- Could the solution really work for the customer?
- Have the customer's needs been satisfied?

An activity is set to explore the topic. Teams define the most important and riskiest prerequisites, based on the draft proposals for business models they have completed. They select a form of experiment (e.g. interview, questions, success criteria), and carry out the same with other classmates. Role play is necessary, since testing takes place in the lesson and the proposed customer base would not always comprise students. Before commencing an interview, the interviewer needs to describe the context of the situation, and declare which role the interviewees are to adopt.

The lecturer monitors the progress of the teams, helps with setting up the experiments, and takes part in such questioning.

Quote from the authors:

“When testing out the methodology, the students’ task was to focus on validating the critical hypothesis and the fact that customers were faced with a specific problem. The students on the team set the success criteria, came up with questions, and then questioned one another.”

To prepare for the above, students can work with a real target audience through a homework assignment. Detailed research and experiments with such an audience are scheduled in the curriculum for a later date.

Block no. 3:

The third Lean Canvas block comprises assessment of experiments and a follow-up exercise on the business model (pivot). The process is similar to the first part. The updated business model is then introduced at an investment forum.

3.9 Topic 9 – Investment forum

Prior to this, the business model will have been completed, critical hypotheses validated by internal testing, and adjustments made to hypotheses (pivot). Class members shall have a clear idea of their intended business, and be aware of further steps to accelerate it.

This topic is divided into two lecture blocks involving the participation of real entrepreneurs and investors. The first presents the outputs of the work done so far on the business models, with the aim to getting feedback and recommendations from the experts; at the same time, the class is assigned individual tasks for accelerating the business concepts. The second block takes place at the end of the entire course, wherein participants present their final business plans, including said acceleration tasks, and receive a final evaluation.

Benefits for students:

- testing out their presentation skills;
- giving a presentation within a set time limit;
- practicing an elevator pitch;
- receiving feedback from experienced entrepreneurs and investors (on the projects and the hypotheses);
- getting advice on how to further develop their projects;
- making contact with mentors and investors;
- learning of other contacts and potential helpful connections from the participating entrepreneurs and investors;
- receiving a list of acceleration tasks, which they can continue to work on, even with regard to their business projects.

The Process

The guest entrepreneurs and investors are introduced. Presentations of the individual projects are given, which should cover an outline of the idea, basic parameters of the business model, the selected hypotheses, and future steps for implementation; a time limit is set that has to be adhered to. After each instance, the guests provide feedback and recommendations, and discuss the project. Standard equipment for presentations is made available to the students; the facilitator keeps an eye on the clock, and leads the discussion. The same also records the recommendations and tasks. Once all the presentations are finished, a task list for students is compiled with the help of the entrepreneurs, comprising general jobs for the students to undertake as well as particular ones based on the given project and its stage of advancement.

The purpose of these tasks is to accelerate the project, so that after the course has finished the teams have a completed and validated business model, a simple business plan is ready, and the opportunity is there to begin its realization. An active approach to them can be expected from students interested in organizing low-cost activities within an implementable project. Such tasks form a regular part of homework, so these can be prepared, brought to class and consulted on. Ultimately, their fulfillment is verified during the final presentation.

Ideally, practice presentations should be carried out first without the presence of the guest entrepreneurs and investors, so learners can try out everything including giving feedback and participating in a discussion.

Quote from the authors:

“When testing out the methodology, practice presentations took place, involving teachers and lecturers at TBU; they gave feedback on the projects, the manner of presentation, and extent of information communicated. The follow-up discussion was contributed to by other students.

The actual investment forum occurred at a later date, attended by four entrepreneurs, investors, and mentors. Each presentation lasted a maximum of 3 minutes, followed by feedback and discussion.

Finally, the same general tasks to be undertaken by learners were set. Furthermore, individual jobs were assigned, the need for the same emerging from the discussion on and recommendations to the particular projects; these mainly pertained to specifying and elaborating a general task, or entering into cooperation, verifying legal matters, expounding and launching selected communication channels, and so on.”

The tasks listed below could be generalized as necessary for students in the following semester of the course (not in chronological order):

- making up and confirming the company’s name;
- choosing a legal form of entrepreneurship, including justification of such a choice; validating the requirements of relevant authorities for starting the business; preparing the necessary materials for dealing with said authorities / a notary, etc.;
- coming up with a product and name for the line of products;
- compiling a technical specification of the product, or the process for administration in the case of a service; designing a wireframe for web-based or mobile applications; determining specifications for developers, or a prototype;

- conducting real-world market research; validating critical hypotheses with the potential target audience (primarily, problem – product - price); updating the target audience (customers, segments, users);
- defining and verifying distribution channels, possibilities, and conditions;
- clearly determining value for customers (in one sentence);
- thinking about one’s vision for the next calendar year;
- clarifying financial and economic aspects of the given business intent within 2 years (extent: expenses / revenue, price and means of price creation, basic calculations, cash flow);
- devising a detailed communications plan (including materials for external agencies, specifying and previewing a website’s structure);
- carrying out low-cost activities (e.g. developing social networking profiles);
- stating the required resources for financing the operation; analysis of all necessary materials, including preparation of the same (e.g. a scenario for crowdfunding, materials for investors, the bank);
- compiling a business plan.

3.10 Topic 10 – Business plan

This topic is concerned with devising a business plan, and ensuring its logic, structure, and relation to all activities pertaining to the team project. Proper attention should be paid to it since it represents a highly important document to an entrepreneur, and completion of one constitutes an output of the course. Although students may already boast some experience in this matter, especially those from economically-focused faculties, it is at least desirable to teach fundamental aspects, and focus on possible structures, key points, and requirements of various subjects, e.g. banks and investment groups.

It is intentionally scheduled only for inclusion at this stage of the course, since it would be inefficient to cover it earlier, when projects remain unclear or incomplete, and the business model is not tested, mainly due to an absence of relevant information and validated hypotheses. Thus, we first recommend adopting a strict approach to completing the business model, defining and checking hypotheses, and the pivoting and updating of the business model. Then it is constructive to gather together the necessary information and complete the business plan.

The structure of the business plan somewhat correlates with the other tasks assigned in class. While working on these tasks, students gradually collect the information and materials they shall later employ for overall completion of the business plan.

Benefits for students:

- becoming acquainted with business plans;
- learning to view a business plan as a “live” document;
- being familiarized with the potential content and structure of a business plan;
- learning about specific requirements for completing one, e.g. as demanded by the banking sector, subsidy providers, and investors;
- understanding the meaning of the individual chapters, their content, and necessary scope;
- discovering how to avoid common mistakes when compiling a business plan through case studies;
- receiving instruction on possible sources of data for chapters;
- gaining the capacity to compile a real business plan methodologically.

The Process

In the initial part, the educator asks questions about what a business plan is, who it is meant for, when it is worth compiling one, what types exist, and so on. Notes are made on the board, which are summarized, and a brief analysis of the information is given.

Subsequently, the following is discussed:

- Is a company needed?
- Is a business plan essential for success?
- Is sufficient information available for compiling a business plan?
- Is it actually a waste of time?
- When might the absence of a business plan eventually become plain?

Another discussion is held on what should be inherent to a business. Together the class puts together an approximate schedule on the board, afterward analyzing the various elements with particular emphasis on the following:

- identification – legal form, company name, address, premises, share capital, structure of assets, ways of dealing on behalf of the company, trade licenses, liable persons, etc.;
- description of a/the company(s), the history, or concept of the same, especially those starting out and where they have succeeded;
- description of the product / service – qualities, characteristics, technical specifications, form of problem solution, relation to target audience, edge over existing solutions in the marketplace, intellectual property;
- human resources – role of owners / associates; requirements for expertise and competencies; relation to budgeting; ways of securing, proving one's own experience and expertise, especially in the case of new companies;
- premises – own, leased, alternatives, investment into other property, legislative requirements for premises, market research, price maps, relation to budgeting and schedule, deposits, periods of notice, agreement conditions;
- technology – suppliers, time demands of supplies, running costs, services, training, placement and related requirements for spaces, financing and relation to budgeting, hardware, software;
- marketing – combination of marketing techniques, target audience, customers, users, segments, market size, initial customers, distribution, suppliers (key suppliers), purchasers, competition, substitutions, competitive advantage, communications plan;
- economics and finances – forms of monetization, initial capital, revenue streams, expenses, profits, costs, cash flow, necessary investments, financial resources, price calculations, relation to schedule, market research, optimistic / pessimistic / realistic options;
- schedule – time and financial reserves, product development, testing, meeting legal requirements (certification), relation to seasonal products, communications plan, relation to budgeting and inherent capacities;
- risks – key risks, definition of the same, their impact, ways of prevention, SWOT analysis;
- vision, mission, aims, vocation;
- and so on.

It is advisable to supplement content with case studies or examples of real business plans, or confront students with questions on tackling parts of their business plans in relation to their projects. The lectures are supplemented with an analysis of sample documents, e.g. loan/subsidy requests, or other recommended examples, and sample structures of business plans.

Quote from the authors:

“When testing out the methodology, students were presented with texts of real business plans (or for the purpose of keeping information confidential, with modified values, texts, etc.); students analyzed the presented texts, and there was a parallel discussion on whether the cited information was sufficient, particular enough, and comprehensible.”

3.11 Topic 11 – Legal aspects of entrepreneurship (II)

This topic relates closely to Legal aspects of entrepreneurship (I), which takes place during the initial part of the course. While the earlier module focused on practical aspects of starting a business from a general perspective, this module addresses the specific business intents of the students on the course. Cooperation with a specialized lecturer, e.g. an attorney, is recommended.

Benefits of the module:

- deriving the particular steps necessary for starting a business;
- obtaining practical information and experience when starting a business, including the choice of its legal form for particular business intents;
- analysis of certain business intents from a legal perspective (relation to law in other areas);
- consultation with one’s own concept for business, dealing with specific individual issues and tasks related to starting a business, legislative requirements for a relevant activity, and possible limitations and topics which need attention during further processing of a business plan and its potential realization.

The Process

The guest lecturer should be slightly acquainted with the individual business intents of the students. The progress of the module follows on from the tasks assigned, i.e.:

- creating and validating the company’s name;
- choosing a legal form of entrepreneurship;
- preparing all necessary materials for dealing with the relevant authorities.

At the beginning of the module, students are provided the leeway for carrying out the above-mentioned tasks (in class or at home). One by one, the individual projects are discussed, and the chosen legal form is talked about, including reasons as to why it has been selected. Further discussion covers the requirements of authorities and bodies pertaining to commencement of said business intents, and recommendations for preparing the founding documents, etc. The lecturer provides feedback or suggests alternative solutions and options.

Group analysis of individual team projects and advice from the lecturer could well lead to other possible topics and legislative matters being discussed. Many will be similar for most of the business concepts, although specific questions may arise. In such a case, it is possible to arrange for a personal follow-up consultation.

After completing this module, students shall have a clear idea about how to start a business. They will have been acquainted with materials for preparing association documents, as well as the requirements of authorities and institutions. Moreover, they will be familiar with potential legal impacts that relate to aspects of their planned business.

Quote from the authors:

“When testing out the methodology, discussion on starting out in business and founding a company especially concentrated on the following:

- *building a brand, logo, product, and related intellectual property;*
- *copyright law (especially in relationships with customers, suppliers, employees);*
- *labor-law relationships and related responsibilities;*
- *personal data management and protection;*
- *liability for damages;*
- *requirements of premises, and associated technology (construction, hygiene, etc.);*
- *requirements for the product (standards, certification);*
- *setting business conditions, etc.*

It may be supposed that the areas mentioned above are applicable to most business concepts.

3.12 Topic 12 – Marketing

This topic follows on from comparison of entrepreneurial determinants in the region and providing value for the customer, as well as from the parts on Lean Startup and validation of critical hypotheses. While those were concerned with sources of information, regional relations and key indicators, location, value for the customer, defining and validating critical hypotheses of the intended projects (including recommended tools), and affording a practical exercise with the following pivot, this section hones in on the actual projects of students and recommending suitable forms of market research, as relevant to the target audience and the given concept. A specialized lecturer, e.g. a market research specialist, would be best suited to deliver such instruction.

Benefits of the module:

- defining specific steps to validate critical hypotheses under real-world conditions;
- obtaining useful information and experience when conducting market research and getting feedback from customers;
- analysis of particular business intents in connection with the necessary market research;
- receiving consultation on one’s own business intent, answering particular individual questions, and fulfilling tasks related to market research (the form of such research, sources of information, determining the target audience, defining topics and possible questions, forms of evaluation, interpreting the data obtained, etc.)

The Process

The guest lecturer should be slightly acquainted with the individual business intents of the students. The progress of the module follows on from the tasks assigned, i.e.:

- complete technical specification of the product, or administration process if a service;
- actual market research, validation of critical hypotheses with the potential target audience (primarily, problem - product - price), updating of target audience (customers, segments, users);
- discerning and verifying distribution channels, possibilities, and conditions;
- determining convenient communications channels and marketing content.

At the beginning of the module, students are provided the leeway for carrying out the above-mentioned tasks (in class or at home). One by one, the individual business projects are evaluated as to data requirements, the size and extent of the target audience, recommended forms of research, defining critical hypotheses and means of validating them, methods for performing the selected type of research, processing and interpreting data, integrating the data obtained, and so on. The guest educator provides feedback or suggests alternative solutions and options.

The lecturer then gives a summary and analysis of the business intents, and makes recommendations. Many matters that arise will be common to most of the business concepts, although specific questions may crop up. In such a case, it is possible to arrange for a personal follow-up consultation.

After completing this module, students will have gained useful information on the extent and manner of market analysis that is necessary and validation of critical hypotheses. They benefit from feedback on their proposed discussion topics, questions for surveys, selected sources of information, and so on. Homework is then set that involves conducting a minimum of basic research, according to the chosen parameters, in a real-world environment.

Quote from the authors:

“When testing out the methodology, discussion on the individual business intents primarily covered the following areas:

- *the size of the target audience, what the mutual indicators and customer segments are, and which segment to focus on first;*
- *what constitutes the market, and the potential of individual segments;*
- *the behavior of the customer, how the same chooses between suppliers;*
- *what sources of information exist and how to work with them;*
- *primary vs. secondary data;*
- *convenient ways of conducting research - advantages, disadvantages, qualitative vs. quantitative, in-depth/expert interviews, focus groups, desk research, questionnaires/surveys;*
- *what constitutes the purchasing process;*
- *what information needs to be found out, what type of research to do, how to carry it out, what to ask about and in which way;*
- *how to confirm prices;*
- *what customers are willing to pay for;*
- *what supplementing services are missing and whether customers might welcome them;*
- *possible forms of distribution;*
- *how to source information, what communications channels to choose;*
- *the state of the competition, what works or not, why competitors are successful, what they offer, what their arguments are;*
- *what constitutes key demands for the product, what other service(s) customers need;*
- *what is missing in the given area, what is failing;*
- *statistical data and utilization of the same;*
- *Internet-based research (including from abroad).*

It may be supposed that the areas mentioned above are applicable to most business concepts.

3.13 Topic 13 – Communication

This topic is related to the marketing module, and highlights selected aspects of preparing a communications plan and its continuation following implementation of the business. It is a topic which should be taught in cooperation with a specialized lecturer, e.g. a specialist in communications and Internet marketing.

Benefits of the module:

- defining specific steps for preparing and elaborating a communications plan;
- practical advice on how to address and target people, and shaping a brand;
- useful information on trends in communication, especially social networks;
- specifying value for a customer-related definition;
- obtaining practical data and experience from selected communications channels;
- analyzing particular business intents in relation to convenient communications channels;
- receiving consultation on the business intent, answering individual questions and tackling tasks related to preparing a communications plan and disseminating the chosen tools (selecting low-cost tools).

The Process

The guest lecturer should be slightly acquainted with the individual business intents of the students. The progress of the module follows on from the tasks assigned, i.e.:

- creating the product / name for the product line;
- clearly defining value for the customer;
- compiling a detailed communications plan;
- developing “low-cost” activities within the communications plan.

In the first part of the module, the group works together to address the following:

1. Why the customer has sought out the company.
2. Who the ideal customer is – age, location, income, job, hobbies, favorite books, etc.
3. Where to find him or her; their preferred social networks, the TV programs they watch; the websites they visit; their off-line activities.
4. The offer that would get their attention.
5. The highest value they can be offered; the most valuable (i.e. the most sophisticated and expensive) product that the company could tempt them with.

Students are provided the leeway for carrying out the above-mentioned tasks (in class or at home). A discussion is held on the following: current trends in communication and related tools, possible strategies on selected social sites, methods of utilization, their benefits, working with them, when users are active, frequency, mutual synergy among social networking platforms, interconnecting the personal and the company brand, and the role and use of “bloggers” and “influencers”. We recommend demonstrating this topic by providing a specific case study.

In the next part of the module, the business concepts are looked at, relevant settings of the communications plan are recommended, tools are investigated and their utilization described, along with settings for the same, and subsequent evaluation takes place. The lecturer provides feedback or suggests alternative solutions and options. A summary and analysis are given of the individual business intents and recommendations for the same.

After completing this module, students are familiar with drawing up a communications plan, setting up a strategy for building the brand, are able to identify (and use) the best tools for communicating their products to the target audience and the most effective social networking platforms to employ and to what end, and so on. Homework is then set, wherein students are asked to develop the preferred “low-cost” communication tools.

Quote from the authors:

“When testing out the methodology, the above-mentioned theses were presented via a case study of a company - Mentee Systems s.r.o.; a co-owner of the firm was the lecturer teaching the topic. The company is a technology-based start-up behind a global mobile application with a modern innovative solution for sharing skills among people.”

3.14 Topic 14 – Financial resources

The topic of potential financial resources of the business concepts was covered under the earlier section entitled “financial aspects of entrepreneurship”. This section builds upon that, providing detailed analysis of options for finance, especially from banking, community financing, and risk capital. Regarding the availability and associated challenges of the same, emphasis is also placed on subsidies and financial tools. It would be advisable to secure the services of a specialist(s) for such instruction, e.g. a representative from a bank who deals directly with companies, or an individual from a crowdfunding platform, or a person with experience of preparing and running a crowdsourcing campaign, or a private investor (angel investor).

Benefits of the module:

- defining specific steps necessary for launching one’s own business;
- obtaining useful information and experience for seeking financial aid from a bank;
- obtaining useful information and experience for securing community financing;
- obtaining useful information and experience for dealing with a potential investor;
- conducting analysis of particular business intents regarding possible financial resources for the same;
- receiving consultation on one’s business project, answering certain questions and tackling tasks for securing financial resources, addressing the requirements of individual providers, gaining an appreciation of the suitability and readiness of the business concepts for such resources, progress, and processes;
- receiving feedback on the business project from a banker, investor, or operator of a crowdsourcing platform, and making new contacts.

The Process

In light of the potential number of lecturers engaged and the extent of the topic, we recommend setting aside sufficient time for it; for example, one of the modules could be dedicated to banking

finances, financial tools, and subsidies, while the other examines community financing and risk capital.

The guest lecturer(s) should be slightly acquainted with the individual business intents of the students. The progress of the module follows on from the tasks assigned, especially:

- defining the necessary tools for finances, conducting analysis of mandatory materials, and elaborating them.

Over time, such financial resources are introduced, along with specific details on them, requirements for input information and materials, demands on time and for processing the same, examples, and case studies. Particular attention should be paid to practical aspects. Regarding possible overlap of topics, it is advisable to consult the extent and contents of the same with the guest lecturers; alternatively, lessons could take the form of a round table with a discussion moderated by the facilitator. The selected topics are as follows:

The banking sector:

- banks vs. start-ups;
- special banking tools and guarantees;
- requirements for one's history;
- expectations and the roles of a bank;
- warranties;
- requirements for materials, readiness;
- negotiations at the bank, what to prepare for;
- factors for success, and the decision-making of the bank;
- case studies and recommendations.

Community financing:

- comprehension of the same and the types that exist;
- convenient projects;
- campaign progress, conditions, requirements for materials;
- demands for time and processing;
- factors for success, the perspective of investors and what influences them;
- case studies and recommendations.

Risk capital:

- definition, role, active vs. passive investors;
- benefits for investors;
- expectations of the given parties, choosing an investor;
- what the investor is interested in;
- exit strategies;
- negotiations, demands on time and processing;
- factors for success, how to capture an investor's attention, how best to prepare;
- case studies and recommendations.

Students are provided the leeway for carrying out the tasks assigned (in class or at home) – analyzing all the possibilities of the various financial resources, and discerning requirements for materials,

including elaborating the same for the given business intent. The lecturers then check this work and advise on said projects.

Analysis and recommendations by the lecturer follow on potential financial resources. It may be supposed that these would be applicable to most business concepts. However, specific issues may arise, in which case a personal follow-up consultation would be an option.

After completing this module, students will have gained a basic knowledge of primary financial resources, and having been acquainted with the demands of investors, they shall recognize what materials and information are necessary. Moreover, they shall possess contact details for relevant people in case of need.

Quote from the authors:

“When testing out the methodology, the following topics were discussed with lecturers; pertaining to the banking sector:

- *how much the party invests (financially x non-financially);*
- *what risks exist and how they are secured;*
- *if it concerns a company, legal personality, connection to a family-run business, or parent company;*
- *the ownership structure, legal representatives, key know-how bearers, and how the same are employed at the company;*
- *the party who shall direct the company, their managerial and financial experience;*
- *competitors, alternatives;*
- *suppliers, purchasers, payment conditions, distribution;*
- *technological setting, place of realization, connection to real property;*
- *economic aspects, costs, profits, cash flow, prognoses, and supporting this information.*

For crowdfunding:

- *equity-based crowdfunding (investing in company shares);*
- *lending-based crowdfunding (loans);*
- *donation-based crowdfunding (donations);*
- *reward-based crowdfunding (prepaying a product);*
- *the investor’s perspective – emotion, diversification of the portfolio;*
- *benefits – marketing, finance;*
- *case studies of successful campaigns.*

For investors:

- *benefits and roles – experience, contacts, help with strategy, credibility, avoiding mistakes, external view, possible strategies;*
- *what the investor interested is in – numbers, predictions, requirements for finances and their use, personal interest and endeavor, dealing with issues of hypotheses validation, prototype vs. paying customers, the know-how bearer(s) and their engagement in the project;*
- *mutual interest and chemistry – cooperation through good times and bad;*
- *technological status, scalability, global potential;*

- *methods for preparation, and answers to investors' questions when seeking financial backing."*

3.15 Topic 15 – Financial aspects of entrepreneurship (II)

The second part of the topic “financial aspects of entrepreneurship” highlights the more practical area of economics of entrepreneurship. The lecturer explains cash flow in greater depth, also discoursing on economic results and setting a break-even point. By this point in the course, the business plans for the projects will have been completed, and these are now put through economic enumeration, in an attempt to discern costs and profits for the same.

Benefits of the module:

- setting and calculating margins (contributing to covering fixed expenses and profit generation) for products; working out prices, profit levels, and other aspects to keep a business economically viable;
- learning to assess and plan sales and revenue streams;
- developing consideration of wider circumstances concerning the sale and distribution of products;
- gaining the ability to analyze and set a break-even point;
- learning how to calculate basic cash flow in a start-up, and choose a relevant source of funding;
- gaining the ability to enumerate the financial parameters necessary for filing in an application for a loan (based on a specific case).

The Process

The lecture is interactive. Students are told about the differences between profit and cash flow, and the lecturer guides the conversation to encourage comprehension of the importance of securing positive cash flow. Example calculations are done on the board, stress is placed on discussion, and each team outlines its own plan for generating income. The lecturer introduces the concept of financial planning, and sets up an economical aspect of a project in a spreadsheet, for example, for the purpose of illustrating derivation of economic results, cash flow and break-even points.

The lecturer in this module works closely with the teams and discusses the setting of the various economic concerns. Each team puts together and presents a draft (association) budget, detailing its requirements for finances, plan for revenue and expenses, and enumeration of cash flow.

To make calculations, students should use the following tools: spreadsheet software (e.g. MS EXCEL, LibreOffice Calc or similar), and on-line resources (for gauging interest rates for expenses, depreciation of long-term assets, etc.). They should also be able to use financial tools, such as expense functions and break-even points with the aid of software.

Tasks for individual work:

- work out an operational financial plan for an extended period in the future of at least 24 months (e.g. the first 12 months and the following 24);

- elaborate a plan and conduct a price / margin assessment for different methods of sale (it is necessary to realize if additional charges for revenue can be applied when setting prices and considering sufficient leeway for the margins of other interconnected sales).

3.16 Topic 16 – Business Process Model for the new entrepreneur

We recommend scheduling this topic at the end of the course. Students should by then have a clear idea about their intended product or service, and will have decided on their customer base, distribution and communications channels, and resource requirements. The module focuses on defining the key processes of a newly-founded company, especially those related to satisfying customer needs. The aim is for learners to take on board which basic processes they will have to set when implementing their business intents, what tools they shall need, who will be responsible for said processes, who will actually do them by cooperating on, checking, and securing inputs, etc., in what is called a “responsibility assignment matrix”, and how the same then affect expenses. The module does not include teaching of a “process engineering” subject, and participating in the module does not have any prerequisites for students; it is also possible to use modeling software for this purpose (e.g. BizAgi or similar).

Benefits of the module:

- understanding the basic aspects of a process-managed company;
- obtaining useful information and experience for defining key processes in a company;
- the possibility to discern key processes for a business, assign resources, and identify coherent expenses;
- understanding relationships between economic aspects and capacities;
- analyzing business intents from the perspective of processes;
- receiving consultation on the given business intent, dealing with specific issues, and tackling tasks related to defining key processes.

The Process

It is advised that the guest lecturer(s) should be slightly acquainted with the individual business intents of the students. The learners are instructed on process management and the concept of a process-managed company, in contrast with a traditionally directed company; key processes in this context are discussed, especially pertaining to satisfying customer needs and delivering value. Furthermore, tutorage is given on key resources and assigning responsibilities to processes, as well as the potential expense of the same. Everything is demonstrated practically via a case study of a service (the example must be as simple as possible and widely known, in order for everyone to imagine the process, potential inputs, and expenses, e.g. making and selling coffee).

This is followed by a practical exercise, in which students are assigned the task of defining key processes that have to be set for their “newly-founded” company, also assigning the responsibility matrix, and fixing requirements for resources and expenses. These should be processes primarily related to satisfying customer needs (production, service provision, customer acquisition, delivering value, and so on). The lecturer addresses the individual projects, provides feedback or suggestions for alternative solutions, and makes recommendations.

After completing this module, students have an idea of the key processes necessary for realizing their business intents.

3.17 Topic 17 – Final presentation

This topic follows on from the “investment forum I” topic, wherein students presented their completed business model, for which the output encompassed assignment of acceleration tasks. This constitutes the final presentation, in which their finalized business intents are presented, including present progress on the assigned acceleration tasks. Students receive feedback from mentors and entrepreneurs, and said presentation comprises part of the final evaluation.

Benefits for students:

- testing out presentation skills within a time limit;
- obtaining genuine feedback from experienced entrepreneurs;
- getting advice on progressing the project further and where to focus attention;
- gaining new contacts and connections from the participating entrepreneurs and investors for people who could aid them in the future;
- obtaining potential offers for further cooperation in realizing the project (e.g. with an incubator, investor, mentor, etc.; and the possibility to engage in other follow-up programs).

The Process

The entrepreneurs and investors are introduced to the teams. For the purpose of continuity, it is advisable to engage the same people as those who participated in the initial investment forum.

Then the teams present their individual projects, followed by discussion on the same. Such presentations should outline their progress through the course, how they have dealt with acceleration tasks, what stage the project is currently at, and further plans. The final appraisal includes evaluation of the business plan.

Students have a limited time for each presentation, which has to be adhered to. After finishing the presentation, a brief evaluation is given by the entrepreneurs, including feedback and advice, and discussion takes place on the project. Standard presentation equipment is available to the teams; the facilitator keeps an eye on the clock, and directs the subsequent discussion. The facilitator also records the recommendations, and once all the presentations are over, a list of recommendations for students is compiled with the help of the entrepreneurs.

References

Antlova, K. and Rydvalova, P. (2016). GUESSS: Report for the Czech Republic (2016): Student Entrepreneurship in the Czech Republic. Liberec: Technical University of Liberec.

Bacigalupo, M., Kampylis, P., Punie, Y., Van den Brande, G. (2016). EntreComp: The Entrepreneurship Competence Framework. Luxembourg: Publication Office of the European Union; EUR 27939 EN; doi:10.2791/593884

Hovorková, H. (2013). Většina studentů pracuje při škole, ale podniká jich minimum. (Most students have jobs in parallel with school but only a small amount of them actually have their own businesses.) Dostupné z: http://finance.idnes.cz/malo-studentu-pri-skole-podnika-dn6-/podnikani.aspx?c=A130512_151511_podnikani_kho

JA Europe (2018). ICEE Project Findings: A Summary of the key findings from the ICEE research project on the impact of entrepreneurship education. Dostupné z: <http://icee-eu.eu/the-research/final-report.html>

Papadaki, Š., Novák, P., & Dvorský, J. (2017). Attitude of university students to entrepreneurship. *Economic Annals-XXI*, Vol. 166, Issue 7-8, pp. 100-110.

Rydvalová, P., Antlová, K., & Lamr, M. (2017). Vztah studentů k podnikání. GUESSS 2016. Liberec: TU v Liberci, s. 80.