

# **The entrepreneurship education in the Czech Republic and the USA**

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## 1.1 Introduction

Firstly it is necessary to clarify how entrepreneurship education is understood in this paper and why is important. „Entrepreneurship education provides a mix of experiential learning, skill building and, most importantly, mindset shift. Certainly the earlier and more widespread the exposure to entrepreneurship and innovation, the more likely it is that students will consider entrepreneurial careers at some point in the future.”(OECD, 2008) Entrepreneurship is driver of innovation and economic growth.

The purpose of this study is to compare and contrast the entrepreneurial programs of Marquette University in Milwaukee, Wisconsin, against that of University of West Bohemia in Plzen, Czech Republic. Looking at the differences and similarities of both programs can give a picture of how either or both can develop into better programs. When comparing both studies it is found that West Bohemia has a lack of a well-developed entrepreneurial program and Marquette is facing challenges with insufficient number of faculty for entrepreneurial program as well as program promotion.

## 1.2 Brief characteristics of economics education

To be able to conclude best case practices and comparison of entrepreneurial education the initial research of this topic must be done. Entrepreneurial education is part of an economics education and has developed significantly during the 20<sup>th</sup> century.

„The education subject of Economics is the phenomenon of the creation and distribution of wealth in the broadest sense of the word, both at the level of individual subjects, i.e. corporations, households, individuals etc., and at the aggregated level (i.e. municipalities, regions, state units, etc.).“ (The Ministry of Education, Youth and Sports, 2012, p. 110)

„Historically, economic thinking and education is as old as mankind itself. The development of trade at the time of the discovery of new continents, and the consequent enrichment of society, contributed to the definition and institutionalization of economics. However, it is necessary to mention some of the important works that were written before the actual establishment of the economic science. For example, texts written by the Chinese general Sun Tzu 2,500 years ago, dealing with the art of war, are still quoted in publications aimed at management or strategy. Nor is it possible to forget the work of the Italian politician, diplomat, writer, historian and military theorist, a contemporary of Leonardo da Vinci and Michelangelo - Niccolo Machiavelli. His *The Prince* (Il Principe, 1532) is particularly known for its section in which it advises rulers how to retain power.“ (The Ministry of Education, Youth and Sports, 2012, p. 110)

“Contemporary economic fields have their origins in the development of trade and until the early 20th century were perceived as purely practical or professional disciplines. The emergence of economics as an independent scientific discipline is usually associated with the 17th and 18th century. The father of modern economics is considered to be one of the key representatives of the classical liberal school of political economy, Adam Smith, whose fundamental work, *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), discusses the nature and origin of the wealth of nations and, among other things, emphasizes the importance of division of labor for productivity.” (The Ministry of Education, Youth and Sports, 2012, p. 110)

„The economic science was then formed as a non-specialized system of economic knowledge. Economic fields at universities were then taught under the name “political economy,” which emphasizes the orientation at the state or lower administrative units. The separation of independent economic disciplines accelerated especially from the second half of the 19th century, when the major work of economic synthesis, *Principles of Political Economy*, was written by English philosopher, economist and politician, John Stuart Mill

(1848). Economic fields were then focused on the economics of the state or exclusively on trade.“ (The Ministry of Education, Youth and Sports, 2012, p. 110)

„Disciplines related to the theory of management developed during the first half of the 20th century. The so-called scientific management was founded by an American mechanical engineer, Frederick Winslow Taylor, who captured his ideas and experience with the technocratic management methods in his work, *The Principles of Scientific Management* (1911). The emergence of integrated managerial concepts is associated with the founding of Harvard Business School (1909) and mainly with the opening of the field masters in business administration (1920), which was already taught at the time in the form of case study analyses. Among other significant personalities in the field of management was a French mining engineer, Henri Fayol, who defined 14 principles of management in his *Administration industrielle et générale* (1916). Considerable influence on the development of management was also shared by “practitioners” of the automotive industry such as Henry Ford and Alfred Pritchard Sloan, Jr. (General Motors).“ (The Ministry of Education, Youth and Sports, 2012, p. 111)

„Peter Ferdinand Drucker is considered the founder of management in the contemporary sense of the word. Among his best works is *Concept of the Corporation*, written in 1945. Peter Ferdinand Drucker greatly influenced the field of management until his death in 2005. Until the end of the 20th century, education in management was divided functionally, generally into the management of human resources, operational management, strategic management, marketing management, financial management and managerial information systems. Although this structure still prevails, processes and their mutual relations are receiving more and more attention. Today, management is seen as a professional field based on many disciplines (e.g. economics, sociology, psychology, anthropology, biology, etc.). The form of education should be adapted to this and develop the students’ skills and value attitudes. Currently, there are two important associations that ensure the quality of education in management and also grant universities very prestigious and generally recognized accreditations.“ (The Ministry of Education, Youth and Sports, 2012, p. 111)

“Further profiling within economic fields occurred in the field of accounting and finances. Which led to the crystallization of 4 major fields in economics education. Economics as such is the basis for all economically oriented fields, which have been described in the historical context above. These directions or profiles differ to a certain extent, both in the ways of scientific research and the methods of teaching, and currently are among the key economic fields taught at university faculties. In various modifications, they appear under the following names:

1. economics and economic policy;
2. finance;
3. accounting;
4. business and management.

Teaching at the economical faculties may be focused both on scientific knowledge and research and on professional employment. While education in the first concept educates future scientists and researchers, the second concept, typical of so-called business schools, places an emphasis on the employment of graduates. Finance, economics and economic policy are generally taught with an emphasis on scientific knowledge, and are thus based on economic or financial theory, which is empirically tested using the mathematical or statistical apparatus. The last two fields are professionally oriented, even though this does not imply that there are no theories or models. These fields are closely related to practical employment and associated with the terms rigor and relevance.“ (The Ministry of Education, Youth and Sports, 2012, p. 112)

Currently the entrepreneurial education is specified in national frame for education in Czech Republic under the subject of Business and Management the professional skills which should be reached by the student are for bachelor studies as stated in National Qualification Framework (The Ministry of Education, Youth and Sports, 2012, p. 115):

- they evaluate marketing, financial, personnel and logistics business plans according to established criteria;
- they are able to prepare and present a business plan;
- they search, analyze and interpret economic data from various perspectives relevant to the organizational unit.

And for master studies:

- they compare and, in mutual links, evaluate the strategies of organizational units and their reflection in the areas of marketing, finance, investing activities, human resources, logistics, organizational architecture and production activities;
- they independently propose goals and processes of quantitative and qualitative research for the support of business decisions;
- they handle the management of their business

“Entrepreneurship has been part of the curricula in higher education institutions in North America for over fifty years. The first graduate course in entrepreneurship was offered at Harvard University in 1948 by Professor Miles Mace. Soon after, legendary Harvard Business School Professor Georges Doriot originated the concept of venture capital. Today, Entrepreneurship courses are offered at most universities across the United States.” (Wilson, 2008, p. 4)

Entrepreneurial education must be also understood in the national context. “In the United States, the venture capital industry started more than forty years ago and began to take off in the 1980s. In Europe, significant growth in venture capital began only about a decade ago, in the mid-1990s. Europe has a legacy of small and medium-sized business, many of them family-owned... However, study after study has demonstrated that the majority of SMEs in Europe are not growth-oriented at all.” (Wilson, 2008, p. 4) It is necessary to mention that Czech Republic can still be seen from a western perspective as an emerging market, which is the usual case in clustering this country among big multinational companies. The tradition of an enterprise is therefore not rooted deeply in Czech society and the supporting environment not developed on the level of western countries. This is meant also in the way of educational institutions and entrepreneurial education.

“Entrepreneurship education can help promote an entrepreneurial and innovative culture in Europe by changing mindsets and providing the necessary skills. With the security of Europe’s welfare system, people are less willing to take risks. This attitude is reinforced at the university, which traditionally has been focused on ensuring students can secure future jobs –not become entrepreneurs.” (Wilson, 2008, p. 3)

“Entrepreneurship and innovation must be deeply embedded into the curriculum to ingrain a new entrepreneurial spirit and mindset among students. In Europe, entrepreneurship tends to be offered in stand-alone courses rather than being integrated in the content of courses in other departments or disciplines. The main exceptions are within institutions that have been teaching for longer periods.” (Wilson, 2008, p. 9)

“Many US universities have academic entrepreneurship departments and a large percentage of schools offer entrepreneurship courses. In Europe, entrepreneurship is still trying to find its home.” (Wilson, 2008, p. 5)

Currently there is a project running at national level that is doing an evaluation of all the programs at all the state universities around Czech Republic, after that it should be clear if the actual education and subjects are leading to those goals. For the institutions involved is

known as National Qualification Framework (Národní kvalifikační rámec terciárního vzdělávání České republiky) Based on this project Ministry of Education will be able to make final statement about the situation of entrepreneurial education and education in general at state universities.

### **1.3 Analysis of entrepreneurship education**

This chapter of the paper will further develop the premise of importance of entrepreneurship education as necessary part of economics studies in current world.

As it was pointed out at the end of previous chapter entrepreneurship education is understood as an innovation driver. That is given by the fact that current students are future leaders and in this context they are leaders of new innovative startups and possibly international companies. This vision is promoted widely by international institutions such as EU or OECD.

As stated in European Commission vision for 2020 the member states should build stronger European Union also by addressing the education and entrepreneurship environment. There is a direct recommendation for Member states: "To ensure a sufficient supply of science, math and engineering graduates and to focus school curricula on creativity, innovation, and entrepreneurship." (Europe 2020, 2010, p. 15) and „To promote knowledge partnerships and strengthen links between education, business, research and innovation, including through the EIT, and to promote entrepreneurship by supporting Young Innovative Companies." (Europe 2020, 2010, p. 15) Those visions and papers provided by world famous and accountable institutions were taken as an inspiration for this paper.

"Based on Europe 2020 strategy, European Commission created the Entrepreneurship Action Plan which aims to promote entrepreneurial culture in EU countries, to change the public perception of entrepreneurs, to remove existing obstacles and to develop entrepreneurial skills through education and training programs." (Florea, 2013, p. 76)

The Entrepreneurship 2020 Action Plan is structured on three main parts (Florea, 2013, p. 76):

- Entrepreneurial education and training;
- Creation of an environment where entrepreneurs can flourish and grow;
- Developing role models and reaching out to specific groups whose entrepreneurial potential is not being tapped to its fullest extent or who are not reached by traditional outreach for business support.

The main goals of this Action Plan are (Florea, 2013, p. 76):

- to encourage unemployed people to start their own businesses;
- to improve the sustainability and quality of work of self-employed businesses;
- to support social entrepreneurs;
- to support entrepreneurs through its financial and business support services;
- to assisting female entrepreneurs, disadvantaged or disabled people, who are interested in starting their own businesses.

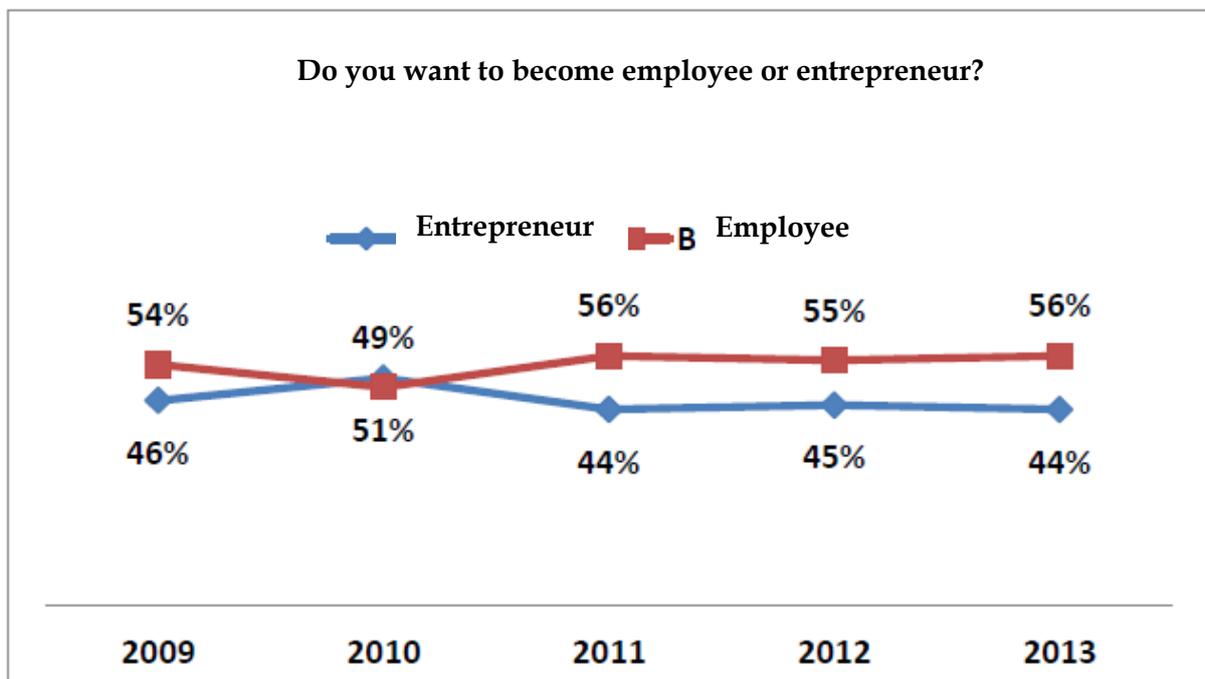
The development of entrepreneurship has important benefits as regarding economic and social perspective. It is widely recognized the fact that entrepreneurship contributes not only to job creation, competitiveness and growth; but also contributes to personal and social objectives achievement." (Florea, 2013, p. 77):

The development is obvious but is it sufficient. Wilson (2008, p. 10) argue that not: "There are increasing numbers of entrepreneurship faculty at institutions across Europe; however, the numbers are still far below that at US institutions...In addition, in many European

faculties entrepreneurship teaching is on the shoulders of part-time or visiting lecturers. This means that there is still a lack of critical mass of entrepreneurship professors at many universities across Europe.”

It can be said that economic studies are all about entrepreneurship and business. That’s definitely correct but when a student is put into reality they are missing mostly financial resources, practical experience and contacts. (Vodafone Nápad roku, 2014) The next dimension that should be addressed is the student’s affinity for being an employee or being employer. Vodafone Nápad roku (2014) research is asking this question to students since 2009 as is shown on the next graph. Although the EU supports this idea there is no visible development in the latest years.

**Picture 1: Do you want to become employee or employer?**



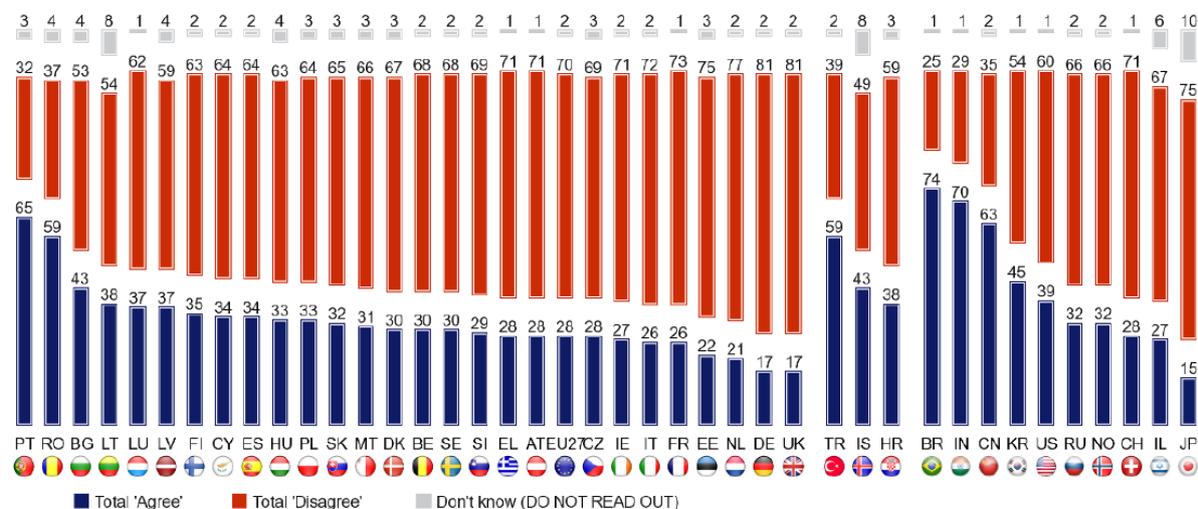
*Source: Vodafone Nápad roku (2014)*

Process of bringing entrepreneurship and creativity to schools has been started in Czech Republic but mostly on other educational segments than tertiary. Which is clear from the report provided by National institute for education, where all of the successful project supporting creativity and entrepreneurship in education are listed. Most of the projects here are from high schools and only 3 are from universities. (Kreativita a podnikavost ve vzdělávání z pohledu kariérového poradenství, 2013) This fact is also visible if we compare two of the Eurobarometer researches conducted in 2009 and 2012. There is a growth in preference towards entrepreneurship in Czech republic and on average also in whole EU. This growth is primarily found between the age group 15 – 24. The detailed figures can be observed below.

## Picture 2: My education is making me interested in becoming entrepreneur

Q11.3. Please tell me if you totally agree, tend to agree, tend to disagree or totally disagree with each of the following statements?

My school education is making/has made me interested in becoming an entrepreneur



Base: N=42.080 (The total number of respondents)

Source: European Commission (2012, p. 132)

## Picture 3: Detailed figures - interest in entrepreneurship

Q11.3 Please tell me if you totally agree, tend to agree, tend to disagree or totally disagree with each of the following statements?

My school education is making/has made me interested in becoming an entrepreneur

	Total 'Agree'		Total 'Disagree'		DK (DO NOT READ OUT)	
	June 2012	Diff. 2009-2012	June 2012	Diff. 2009-2012	June 2012	Diff. 2009-2012
EU27	28%	+3	70%	-2	2%	-1
PT	65%	+25	32%	-20	3%	-5
LV	37%	+21	59%	-23	4%	+2
LT	38%	+19	54%	-18	8%	-1
RO	59%	+18	37%	-16	4%	-2
BG	43%	+12	53%	-14	4%	+2
DK	30%	+11	67%	-11	3%	=
ES	34%	+8	64%	-7	2%	-1
SK	32%	+8	65%	-7	3%	-1
FI	35%	+8	63%	-3	2%	-5
HU	33%	+7	63%	-9	4%	+2
CZ	28%	+6	69%	-4	3%	-2
PL	33%	+6	64%	-4	3%	-2
LU	37%	+4	62%	-2	1%	-2
BE	30%	+3	68%	+1	2%	-4
AT	28%	+3	71%	-2	1%	-1
SE	30%	+3	68%	-3	2%	=
EL	28%	+1	71%	=	1%	-1
NL	21%	+1	77%	=	2%	-1
IT	26%	=	72%	+3	2%	-3
CY	34%	-1	64%	+2	2%	-1
SI	29%	-1	69%	=	2%	+1
DE	17%	-2	81%	+1	2%	+1
FR	26%	-2	73%	+2	1%	=
EE	22%	-3	75%	+11	3%	-8
UK	17%	-5	81%	+5	2%	=
IE	27%	-8	71%	+8	2%	=
MT	31%	-11	66%	+13	3%	-2

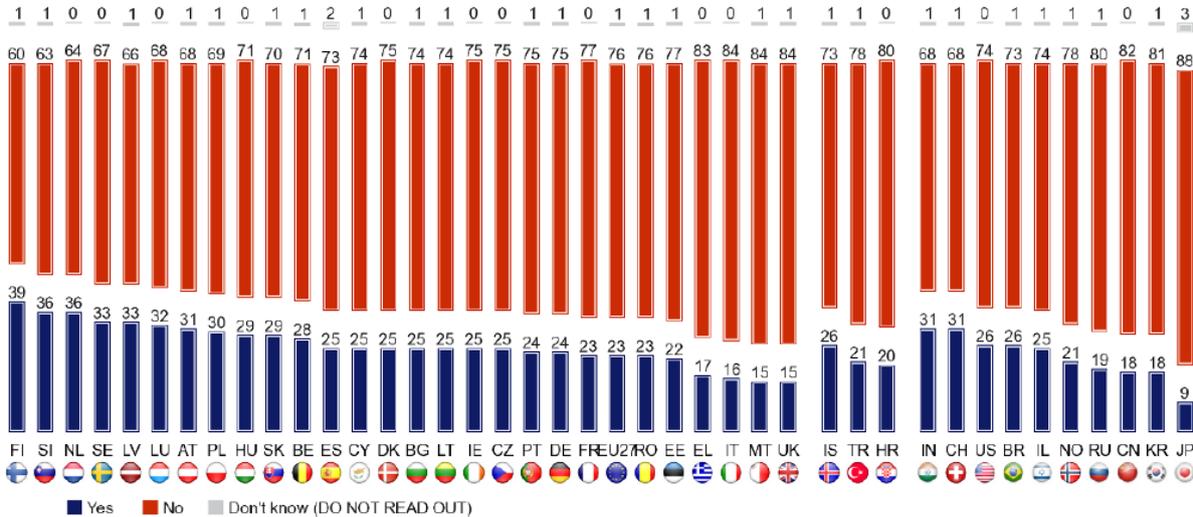
Source: European Commission (2012, p. 133)

Regarding the role of education in stimulating entrepreneurship and new business creation the EU research conducted in EU countries and other developed and emergent countries, “Entrepreneurship in the EU and beyond”, identified the following aspects (Florea, 2012, p. 77)

- 34% of people take into consideration self-employment within five years as a feasible opportunity for them have taken part in an entrepreneurship course, and only 18% of the total respondents refuse this option. 78
- 44% of respondents who are starting a new business have taken part in an entrepreneurship course; this is compared with 30-32% of people who have previously started or taken over a business, and 20% of people who have no plans to start a business.
- Only 23% of EU respondents say that they have taken part in a course or activity about entrepreneurship and the other 76% have not done this. Country results range from the 39% of people in Finland who have done this to the 15% in both Malta and the UK. In Japan, only 9% have done this. Young and male respondents were more involved in this kind of activities than adult and women, as presented in next figure.

**Picture 4: Course or activity about entrepreneurship**

Q10. At school or university, have you ever taken part in any course or activity about entrepreneurship – that is turning ideas into action, developing your own projects?



Base: N=42.080 (The total number of respondents)

Source: European Commission (2012, p. 120)

As stated in Country Report Czech Republic 2015 published by European Commission, there are concerns about quality of higher education. “Participation in tertiary education has rapidly increased but concerns have emerged over its quality and labor-market relevance. The recent OECD survey on adult skills highlighted a decline in younger tertiary education graduates’ skills compared to older generations with equivalent diplomas, while the employment advantage for graduates has decreased recently and is below the EU average.” (Country Report, Czech Republic 2015, 2015, p. 22)

To summarize there is an European Commission (2013) Memo which says: “Investing in education for entrepreneurship is one of the highest return investments policy-makers in Europe can make to support growth and business creation. Yet, according to a recent Eurobarometer Entrepreneurship survey three quarters of Europeans say that they have never taken part in an entrepreneurship course. The acquisition of entrepreneurial abilities

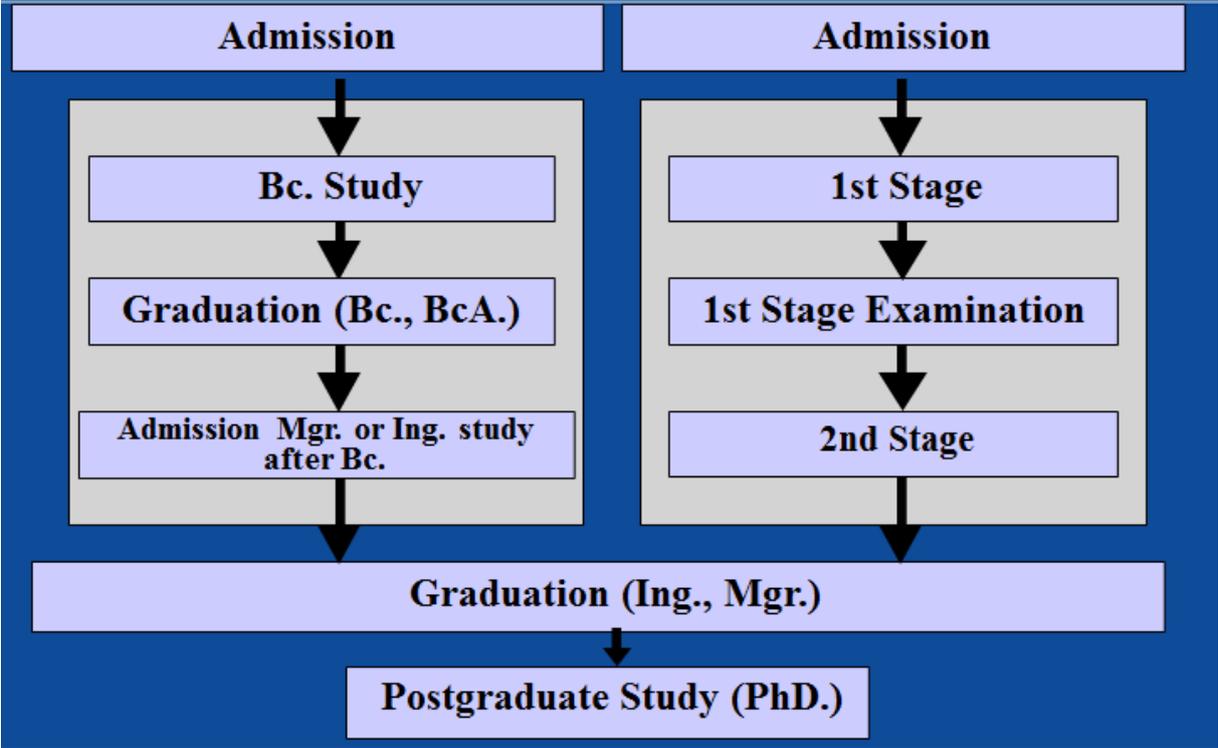
also enhances the employability of our youth: according to recent research, 78% of entrepreneurship education alumni were employed directly after graduating at university, against 59 % of a control group of higher education students."

**1.3.1 University of West Bohemia – Faculty of Economics**

This section of the paper was conducted based on the information provided for each programs at University of West Bohemia and was also consulted with university representatives. For better understanding of the situation the current education system that is running in Czech Republic will be briefly explained.

In Czech Republic the student ending high school applies for prepared study programs spread among all universities. The opportunities vary and high school students may choose from private or state universities or private educational institutions. At this paper we stay with the state universities and state education cause it's a most common form. Previously there were usually 5 years study programs as shown at the right side of the next picture, when student received the title only after 5 years of successful studies and must pass the 1<sup>st</sup> stage examination during studies. Currently the studies are usually divided to 3 years of bachelor studies and 2 years of master studies as shown on the left side of the picture.

**Picture 5: University studies in Czech Republic**



*Source: University of West Bohemia (2015c)*

University of West Bohemia was established on 28.9. 1991 as a result of merger of independent Faculty of Education and Institute of Technology (branch of Czech Technical University in Prague). Current number of students is shown in table below and for example at faculty of economics which we observe the number is decreasing in the past years.

**Table 1: Number of students at University of West Bohemia**

Number of students	
Applied Sciences	1 473
Economics	1 631
Electrical Engineering	1 545
Education	2 229
Law	1 255
Mechanical Engineering	1 377
Philosophy and Arts	2 210
Health Care Studies	770
Art and Design	628
Total	13118

*Source: University of West Bohemia (2015c)*

At Faculty of Economics at University of West Bohemia (further UWB) the fixed structure of study program is usually prepared with only small space for changes from student side. This has pros and cons. Into the pros can be included the fact, that student knows from the beginning what exact subject will he or she study and in which years. The key weakness that can be seen is that students have minimal possibilities to fit the study program to his/her needs. This leads in the fact that education of economics is broad and everyone is taught the same. There is small space for specialization in higher years of study.

Faculty of Economics currently offers 6 study programs. They are split among bachelor, masters and doctor studies. In some programs future students can choose the present, combine or life-long version. List of those programs and their split among study fields shows the table below.

**Table 2: Study programs at Faculty of Economics**

Present study	Name of the study programm
Bachelor	Business Economics and Management
	Economic and Regional Geography
	Information Systems Management
	Project Management Systems
	Retail Management
Follow-up Master	Business Economics and Management
	Information Systems Management
	Project Management Systems
Doctoral	Business Economics and Management

*Source: Faculty of Economics (2015a)*

Faculty of Economics is currently not offering any entrepreneurial major or minor which could students choose as their study focus. Occupational profiles of graduates are in general specialist for economic positions in companies, meaning becoming the employee.

Almost all of the programs currently went through new round of accreditation that lasts around 8 years and for faculty is a demanding process. This can be considered as one of the challenges that will be summarized at the end. Those challenges are the main cause of not so developed entrepreneurial education at UWB (considering the practical and creative approach, which entrepreneurial education needs to be able to support mind shift). (University of West Bohemia, 2015d)

Currently the entrepreneurship (as we see it in this paper) at UWB is supported by three subject, one of them is compulsory-optional for one bachelor study program, second is compulsory-optional for one master study program and the last is optional for bachelor study program. Their list with number of students who took this subject last academic year is below.

**Table 3: Entrepreneurship subjects at Faculty of Economics**

	2014/2015		2013/2014		2012/2013		2011/2012	
	SS	WS	SS	WS	SS	WS	SS	WS
<b>ZAP</b>	6	0	5	0	13	16	1	8
<b>ASME</b>	18	0	15	0	x	x	x	x
<b>AECE</b>	0	0	0	9	0	0	0	17
<b>Total</b>	24		29		29		26	
<b>Total number of students</b>	x		1631		2016		2316	
<b>%</b>	x		1,80%		1,44%		1,12%	

*Source: University of West Bohemia (2015b)*

There are also other voluntary activities students can attend. They are usually represented by workshops, hosted lectures and seminars. The one that stands out is the Winter school conducted in cooperation with Business Innovation Centre in Pilsen. It's a series of workshop on given topic (eg. starting enterprise which is the topic for this event for spring 2015). This project was funded by grants from EU and that's what made it possible. Students could also participate in UNIPRANET project where they get practical experience during short-term internship in companies around Pilsen. Those two events are connected and are funded from the same grant. Winter school took place 3 times and around 30 students participated at each run. The topics were Startup and innovation, Different views on found a company, Company brand as competitive advantage. The project received really positive feedback from all parties involved and that could be because also important business representatives was part (e.g. Janák brothers, Stanislav Bernard)

Faculty representatives see the potential mostly in cooperation between faculty of economics and faculty of engineering on entrepreneurial courses. The reason is that engineering is currently considering as most demanded and progressive field and in cooperation with economical faculty, there is a presumption those strong technological startups and companies could be founded. Those teams consisting of economical and engineering students would be the source of innovation. In present one major (Project management) is going in this direction and around 50 students take part in this major. (Vacek, 2015)

Currently further progress could be seen in two projects that are ready to be sent as an application for grant funding from EU. One is focus on founding the career center at university and other possibly the university incubator for starting companies.

To make further progress in this area faculty is facing problems connected mostly with finance. There are already cuts in number of seminars taught in smaller groups of students, due to the insufficient financial and personal resources. (Vacek, 2015)

Current bottlenecks which could be observed from everyday situation at faculty are as follows: insufficient contact with real companies provided by university, practical experience of teachers, insufficient funding of teachers, mostly academical education or information overload. To be clear about the roots of those problems and possible implications, further research should be conducted. There are used here to picture the situation in wider perspective.

### **1.3.2 Marquette University**

At the Marquette University the Entrepreneurial major and curriculum is relatively new to the academic institution. This selection of major and classes that go with it were initially introduced in the academic year of 2004 - 2005. This situation means that the Entrepreneurial route is still being developed as a major. For this reason it the number of students that are graduating from this route in comparison to other degrees that have been at Marquette for significantly longer is much smaller.

This comparison of number of graduates can be seen by looking at the size of students that have graduated with an entrepreneurial degree from Marquette over the past academic years. In that first academic year that the major was introduced there were approximately 4 students graduating under that degree of all graduating students equaling about 0.9% of the total. Over the years since its creation the number of students selecting this route has increased and that growth can be seen by comparing the number of students that have graduated under that degree in the recent academic year of 2013 - 2014 versus the number of its first academic year. In the academic year of 2013 - 2014 academic year the entrepreneurial major had a total of 16 graduates overall. In terms of the percentage of the total number of graduates, the entrepreneurial majors made up about 2.7% of the total. This growth of 2.7% in the academic year of 2013 - 2014 from the 0.9% from the 2004 - 2005 graduating students illustrates that the major is developing and growing.

However, the degree is just now reaching year 10 since it was created and still requires a good deal of development before the number of students graduating from that choice of major reaches the numbers anywhere close to those of other degrees. In addition, because the major is still developing and growing at the Marquette University there are still issues with the academic program. In other words, there are possible changes and adjustments that can be done to entrepreneurial program at Marquette that can assist in its growth and development.

One of the issues that the program faces is the lack of emphasis on the entrepreneurial route and making it aware to the students. As of now the program for introducing the entrepreneurial major starts at the freshman level in the college of business. At this stage the freshman take a class called LEADS that assist in introducing basic information about the college of business and its many aspects. One of the many subjects taught in the LEADS course for the freshmen is about the various paths and degrees that are available in their college at the University. This gives the students a basic understanding of the Entrepreneurial as well as the other majors and what each entails. The problem with lack of emphasis comes during the sophomore year.

During this time the now sophomores are introduced to individuals, juniors and seniors,

of various college degrees and each of those students each speak of their experience, reasons for choosing their path, and answer any questions the sophomores may about those majors. However, there the entrepreneurial major on average will lack any influence on the students at this stage of the LEADS courses. This is primarily because as mentioned before although the number of people choosing an entrepreneurial major is growing it is still significantly small in comparison to the others. This would result in a significantly less chance that there would be an Entrepreneur Major student to talk to the sophomores. For this reason because the necessity of human capital or education is so important to the development of an entrepreneur so students need to choose the major early if they want have a better chance at becoming an effective one.

Therefore, in order to get the most out of any possible entrepreneurial training from college the choice of the entrepreneurial route must be made as early as possible. In order to increase the odds of this decision occurring the students need to have more knowledge about the major so that they can make an informed decision so that those who decide to choose that route can make that decision early. In order to increase the odds of this happening the pool of people to talk to the sophomores should include possible alumni or even professors of the program. This would at the very least raise the odds that the students would be exposed to the Entrepreneurial route during this time as well as increase its emphasis on students early on in their time as undergraduates.

However, this lack of emphasis isn't the only issue that the Entrepreneurial program currently faces at Marquette. Another issue of the program centers around the size of the full time entrepreneurial faculty currently being utilized at Marquette University. Research into the program found that as of now there are two full time professors that are part of the Entrepreneurial program at Marquette. These two professors are Dr. Alex Stewart and Dr. John Peterson. As of now the only fully funded professor in the program is Dr. Alex Stewart who has been a driving force for the development of the Entrepreneurial program at Marquette. Although Dr. John Peterson is also a full time professor of the Entrepreneurial route at Marquette he is indirectly funded by Dr. Stewart. These two professors each teach a Entrepreneurial course at Marquette that is required to graduate with an Entrepreneurial major and that also assist in the development and creation of new entrepreneurs.

The course that is taught by Dr. Stewart is ENTP 3001, Understanding Entrepreneurship. The goal of the course is to develop each student's entrepreneurial credibility as well as the feasibility of the entrepreneurial projects that they will work to create. The main focus of the program is the second aspect of the development which is to teach students the processes of creating an entrepreneurial concept both textually and visually that is strong enough to survive and have a greater chance of moving forward in the development process. The assignments of the course are broken into two stages. The first stage has the students working individually on assignments and tests that build an understanding of business models and concepts. The second part of the assignments has students working in teams on a final project which is the creation of an entrepreneurial venture that is graded on the teams overall performance as well as each student's individual contribution. In addition, the course prepares students for the second required course in the Entrepreneurial degree program that is taught by Dr. Peterson.

The second required course for the Entrepreneurial major route that is taught by Dr. Peterson is ENTP 4010, New Venture Creation. The course has several objectives that assist in students developing useful skills in the entrepreneurial field. These goals and skills include the ability to recognize as well as analyze business opportunities, strategies and knowledge for effective business planning, how to work in a team and create an effective venture, and finally enthusiasm as an entrepreneur. The course gives students an opportunity to use and practice entrepreneurial skills in real world situations but with the

added safety of the University sources and assistance. The required class assists students in preparing students for the creation of future nonprofit and profit businesses any of the undergraduates may seek to develop in their years after college. The main assignment of the course is the development of a venture the students create in teams of 2 - 4. Over time the teams turn in assignments and make presentations on the development of their venture as well as its final conclusions. In doing this project the students learn the stages and requirements of building a business as well as skills of working in teams in its creation.

Along with the LEADS and other required courses that the students have to take at Marquette before they are able to graduate there are also others institutions at the University that can give assistance to future entrepreneurs.

These additional programs assist students in the development of social capital that the required courses for the entrepreneurs also assist with as well as financial capital. Both versions of capital were supported through several past studies as key to the growth of future entrepreneurs. Financial capital is mainly defined as financial support for an entrepreneur. On the other hand, social capital is defined as the gains and advantages that are gathered from the people that the individual knows.

The closest thing that Marquette has to the assistance of financial capital is that business career center that helps students get jobs and internships. These can help students gain financial support in terms money they gather during their jobs through wages. Through those wages the students can accumulate financial capital that can be utilized in the creation of future businesses and other ventures. Furthermore, there is also accumulation of social capital from those job experiences that students can gain advantages in the future. This social capital is gathered by the students due through the individuals they meet and make connections with at work which they can use in the future.

In addition, Marquette has another source of social capital that the students can take advantage of that is on campus known as the Kohler Center. The center is currently located in the 707 building on campus which many students don't even know where that building is at the University. The Kohler program assists entrepreneurial students in the development of skills that can be used in the real world as well as an incubator for future ideas that are being developed. These connections that are being gained from the Kohler center staff as well as any individuals the center can assist students in meeting help those undergraduates develop a greater amount of social capital that can utilized in the future. Furthermore, the staffing at Marquette for the Entrepreneurial program is soon going to be getting assistance from the Kohler center. A representative from the center will soon become Associate Director of the program. The Kohler center as well as the representative connection that students can gain from it give the Entrepreneurial program more ways to assist future entrepreneurs in their development before going out into the real world.

#### **1.4 Comparison of both universities and pointing out key characteristics**

Situation at both schools was introduced in previous chapters. Here is provided the comparison of both universities in one table, to provide insight on the current situation. In general it could be said, that the situation is similar and both universities face similar challenges. There were already some steps made towards entrepreneurial education, they are presented as well.

**Table 4: UWB and MU comparison**

Dimension	Marquette University	University of West Bohemia
Entrepreneurial major	Yes	No
Entrepreneurial subjects	2 (about 20 students/year)	3 (30 students/year)
Entrepreneurial faculty	2 (Dr. Stewart & Peterson)	1 (Petra Taušl- Procházková)
Career Center	Yes	No
Campus Incubator	Yes	Cooperation
Voluntary Programs	Networking Events	Winter School, hosted lectures, etc
Created Companies	H20 score & Buena Vida	PUB, Sportcentral
Recent Graduates (2013 - 14)	16 students	None

*Source: own creation (2015)*

Entrepreneurial major is offered only at MU. At UWB there is specialization in business management but it doesn't lead directly to creating a new venture but more likely to being manager in already started company of someone else.

On both universities entrepreneurial subjects were found. As mentioned before there would be much more subject with marketing or management topics but the analysis focused only on subject which contribute towards the development of an entrepreneurial mindset and entrepreneurial effectiveness. Mostly in a way of strongly practical and creative lecture delivery with group work, peer feedback and group discussions. For MU those 2 subjects are the key subject which creates the entrepreneurial major. At UWB those subjects not mandatory for any current accredited program and students take them voluntary.

Number of faculty members is insufficient at both universities. This fact was confirmed also by other studies, such as Florea (2013): "A research conducted by EU higher education institutions, called Survey of Entrepreneurship in Higher Education in Europe, identified the fact that entrepreneurial education is still immature in the sense that it is often person driven and depends upon the efforts of individuals rather than a collective, strategic effort on the part of the HEI or national government. This has an impact on the number of academics involved in entrepreneurial education, and thereby, of course, on how well entrepreneurship can be spread in an institution. The study also highlighted the fact that developing entrepreneurial training programs and courses needs important human and financial resources for developing courses, organizing extra-curricula programs, creating entrepreneurial center etc. The study identified that there is insufficient financial and human resources dedicated to develop this kind of activities. All the studied institutions spend less than 50Euros per student for entrepreneurial activities."

Career Center is present at MU and the cooperation with students is working. This approach is quite unfamiliar to UWB, but in latest months the progress was made and the project for Career Center is ready and waiting for new European grants.

Entrepreneurial students at MU can benefit from on-campus incubator known as Kohler Center which helps with incubation of new ventures before they go to other public incubator in Milwaukee. At UWB there is cooperation with Business Innovation Centre. The cooperation was successful during the Winter School and other projects and students can definitely go there for advice on starting a venture. University run incubator is not present.

As for the voluntary programs, which stay outside the study curriculum, Marquette offers

mostly networking events with alumni, successful local businessmen or institutions providing support for enterprises. UWB faculty is trying to offer hosted lectures, workshops, company visits and mainly the Winter School. In relation to this there is an endless circle of students being unsatisfied with lack of the voluntary activities provided by school and then not showing up on them if someone prepare them. Not only faculty members face this situation but also students organization such as AIESEC which are trying to develop young people at university campus.

Both universities has examples of successfully started companies by students. For MU there is Buena Vida, which is focusing on production and distribution of roasted coffee with importance of giving back to community. Second example is H2O score is focusing on tracking your water bill and proposing the water saving strategies. Both can be considered as social business. UWB has example of PUB, which is franchise network of PUBs, which are special for offering fresh beer from beer-tank with tap on the table. Second example for UWB is SportCentral, which is an social network for sportspeople, teams and sport venues.

As MU offers entrepreneurial major, there was 16 graduates in school year 2013/2014).

This comparison will be foundation for creation of case studies where both universities can inspire each other.

## **1.5 Best case practices for further development**

Before concluding the case studies at both universities a further literature review was done and the key findings are presented here. They offer different perspectives how to approach entrepreneurial education, provide recommendation from countries, where this type of education is more developed and can be use as initial notes for faculty which is in charge of entrepreneurial education at both universities.

To be able to conclude best case practices the baseline is needed to make adequate decisions. One perspective for this project was provided review of academic articles focusing on entrepreneurship as such. The most relevant here is a study of Zorn, Otmar. 2004. *"Influence of Entrepreneurial Capital on Entrepreneurial Dynamics."* Economic and Business Review for Central and South – Eastern Europe 6(3): 195 – 212.

This study looks at the entrepreneurs of small firms and the how certain factors influenced their overall success. The entrepreneur characteristics are broken into their personal aims, whether they are dynamic or typical, and their profiles. The dynamic entrepreneur is described as a creative person and an experienced entrepreneur while a typical one is someone just entering the entrepreneurial field. However, the study does mention that although the dynamic aspect can be utilized it is difficult to get sufficient data from the national economy since majority are typical. When looking at the profiles their entrepreneurial capital, which is composed of human and social capital that each have their own characteristics. Human capital is then a group of elements including education, business experience, functional knowledge and entrepreneurial self-efficiency. On the other hand, social capital is defined as the established link or links among people. By the end of the study it was found that both human and social capital has strong positive and significant effects.

Great insight to the problematics of entrepreneurial education in the context of society and environment is provided also by Ahmad et al. (2008): "It is understood that the teaching responsibility does not rest entirely with the educational world. The society has its role in providing the appropriate environment and right atmosphere for the growth of entrepreneurship." (Ahmad et al. 2004: 18)

"If the objective of the education is to prepare individuals to act as entrepreneurs, the most effective technique is to facilitate experiments by trying entrepreneurship out in a controlled environment, for instance through business simulation or role playing." (Ahmad

et al. 2004: 18 – 19)

“In other word, entrepreneurship education is more than business management, it is about “learning”, which mean learning to integrate experience, skills and knowledge, to get prepare to start with a new venture. Entrepreneurship education refers to the formalized program to equip students with the needed skills and knowledge to recognizing business opportunities, searching customer’s insights, understanding the needs of the market, creating an idea, developing the business plan, running the business, evaluating environmental, and institutional and political issues.” (Ahmad et al., 2004, p. 19)

Some recommendations could be taken directly from the similar study (Wilson, p. 15 – 18), those are based on the analysis of the opportunities and challenges in entrepreneurship education and European university leadership should see this as an opportunity and leverage the Bologna reform process to make their universities more innovative and dynamic, in line with the goals of the Lisbon agenda. Example of these recommendations can be seen below: (Wilson, p. 15 – 18)

- General exposure to entrepreneurship, to change mindset and attitudes.
- Functionally oriented courses (SME management, etc.).
- High-growth-oriented entrepreneurship: how to build, finance and grow companies.
- Increase the number of schools offering entrepreneurship courses.
- Augment the number entrepreneurship courses and make them available to a broader group of students.
- Make entrepreneurship a required course.
- Integrate entrepreneurship across other courses.
- Encourage cross-registration across disciplines.
- Build projects and programs across disciplines.
- Focus research and teaching on all of the entrepreneurial growth phases, not just the start-up phase.
- Hire more professors and teachers fully dedicated to entrepreneurship.
- Look to recruit professors who also have entrepreneurship experience.
- ...

Meaningful insight can be found in the handbook *Enterprise and entrepreneurship education: Guidance for UK higher education providers* (The Quality Assurance Agency for Higher Education, 2012), which provides well explained approach for educational institutions focusing on raising new entrepreneurs. The guidance offers a framework for development and assessment of enterprise and entrepreneurship behaviors, attributes and skills which, taken together, contribute towards the development of an entrepreneurial mindset and entrepreneurial effectiveness. The guidance includes advice on possible ways in which these behaviors, attributes and skills can be developed. The focus is on definitions and distinctions, enterprise and entrepreneurship education in context, student learning experience, graduate outcomes and delivery of the lectures. To give an example and to underline what this project is trying to says let’s look how the development of entrepreneurial effectiveness is connected with graduate outcomes. (The Quality Assurance Agency for Higher Education, 2012) In a way it’s a similar recommendation such as National Qualification Framework (The Ministry of Education, Youth and Sports, 2012) for Czech Republic but with focus on entrepreneurship education and more precisely prepared.

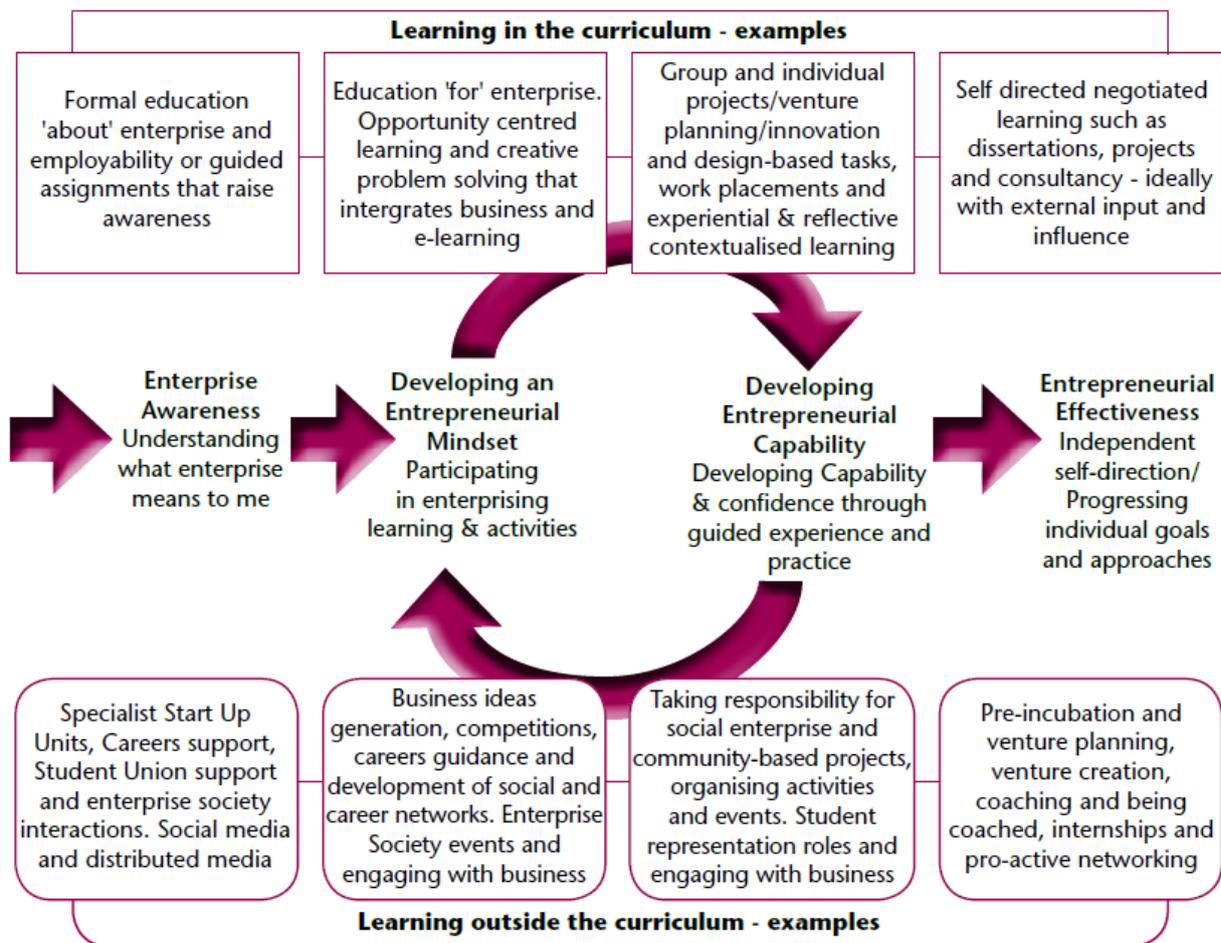
**Picture 6: Connecting the development of entrepreneurial effectiveness with graduate outcomes**



*Source: The Quality Assurance Agency for Higher Education (2012)*

In this sense the intellectual approach for curriculum creation is proposed, its example is on the next picture. From analysis mentioned above it is obvious that MU quite fit to this framework. UWB is trying to implement some of the parts but due to the internal challenges fails to create a complex package for students eg. entrepreneurial major. Please not one important fact, that the curriculum proposed is even in the process of creation divided to the two parts – learning in and out of curriculum.

**Picture 7: Developing entrepreneurial effectiveness**



Source: The Quality Assurance Agency for Higher Education (2012)

## 1.6 Creating case studies where both countries can inspire each other

Based on the previous chapter, which looked on the best case practices and recommendations concluded by other studies, papers or policies, we will look back at the situation at UWB and MU. We will look for the examples where human, social or financial capital of entrepreneurial student was develop together with the enterprise awareness, mindset, capability or effectiveness.

As is mentioned in analysis part both universities are in different position in entrepreneurship education. Also the national background of those countries from business perspective is different. To make this project most tangible the case studies for the universities will be written based on the findings which was made and discussed at both universities.

For faculty of economics which doesn't offer the entrepreneurial major, would be interesting to develop this area of education for either bachelor or major. As it was found out this development is currently not possible due to the lack of financial and personal capital. If possible its strongly recommended to take advantage of the subject currently taught at MU which is focus on entrepreneurial topics. The subject can be found under the name New Venture Creation and code ENTP 4010, taught by John Peterson, M.B.A. Course objectives

are as follows (Peterson, 2014)

- To develop a heightened ability to recognize and screen business opportunities
- To develop the skills necessary for effective business planning
- To develop and present a business plan as a team
- To create enthusiasm for entrepreneurship.
- To develop the teambuilding skills necessary to create a new venture.
- To give practice in entrepreneurial reasoning.

And the general description of the course, which leads to foundation of ventures run by students, is presented in the syllabus like this. (Peterson, 2014):

“This class provides real world, experiential learning on what it is like to start a sustainable for-profit or non-profit product or service based business. Success in the course will require that you become extensively involved outside of the classroom by talking to customers, strategic partners and competitors as you encounter the uncertainty and turbulence of the startup world. You will learn to carefully craft a business model and how to validate actual customer demand. Finally, you will receive a good deal of feedback from both the instructor as well as your peers in the class. At times, this feedback will feel unwarranted, however, it is this exact feedback that will allow you to learn quickly and will reflect that which you might receive in the “real” startup world so please understand that this is all part of the process.

Venture selection criteria: The business ventures created will be developed by groups of 2-4 students. The ventures must be either original start-ups or businesses that a student has very recently (in the last several months) launched or started to launch. You should plan on a very modest project that you are enthusiastic about rather than an extremely ambitious project for which you lack in-depth knowledge, passion or the ability to fund. Teams that select a web based business or mobile app will need to be prepared to build the site or create a substantial MVP for the class.”

This subject would be a great improvement in entrepreneurship education at UWB and Mr. Peterson would be more than glad to provide additional information.

Also there is a possibility to inspire for example from entrepreneurial courses taught at Harvard. Materials about those courses are available by Mr. Vacek at Faculty of Economics at UWB, who displayed an interest of moving this topic forward at faculty together with other colleagues.

For MU the greatest inspiration would be the Winter School. As explained previously it is an intensive and interactive course offered as voluntary to students of Faculty of Economics. It is prepared and updated every year to cover recent topics in entrepreneurship and startup environment. It is run outside the accredited programs financed by European grant. Faculty voluntarily prepare this project in their free time to support students awareness of entrepreneurship and trends. Preparation of this project takes usually 3 - 6 months and it is run in cooperation with entrepreneurs or university alumni. Participation in project is subject to registration, but it is free. It is recommended to bring own idea to this project and develop it further with assistance of lecturers. Recommended topics which were covered in past are quite similar to the topics covered in New Venture Creation ENTP 4010 MU subject. The intensity and interactivity of this course, together with cooperation with business managers is what makes difference. Also the fact that other students, such as engineering or art, where entrepreneurial skills are needed, can participate makes a huge benefit at UWB (because there is a problem of signing up for a subject from different faculty if it is normally accredited in study program). Topics recommended are as follows:

- Marketing and Corporate Identity
- Remarketing
- Discussion with businessmen

- Basics of web design
- Branding and company name
- Marketing communication
- Business plan creation
- Presentation skills
- Design management
- Presentation of startups and incubators in area
- Innovation management
- Idea generation
- Financing for start-up
- Support of young enterprises
- and other...

The output of the course is a publication with reproduction of slides and papers of lecturers for related topics. The summary of the participants' feedback is also included)

### **1.7 Final statement about situation at both universities**

The situation in 2015 on UWB and MU looks in general quite same as Kourilsky stated on Business Education Forum in 1995: "Education today is unabashedly oriented towards the "take-a-job" mentality. It conveys in both content and attitude that the student is being prepared for a career in which he or she will be working for some kind of small or large business entity - i.e., "taking a job" that someone else has already created." (Kourilsky 1995, p. 6) Which is quite alarming due to the two facts - the article is 10 years old and entrepreneurship of young people is seen as an innovation potential and source of future economic growth. In current education the focus is mostly on taking-a-job education and live opinion than on making-a-change education which is widely recommend by EU, OECD or other researcher which was used for literature research to conduct this project. The innovation driven by young entrepreneurs must start during their education and the mind shift among students and teacher of economics subject must be done. This is facing multiple problems which were also discovered and named during the comparison of both universities.

At Marquette university there is currently an entrepreneurial major present, although would need further development, increasing the number of faculty and increasing awareness among students. At University of West Bohemia, the situation is not so pleasant there is currently not a solid initiative to support new ventures started by students. Due to the limited resources only small and voluntary projects were done in past, but those had a positive impact on participants.

It's recommended for university to encourage entrepreneurship among young people. This project can be used as a good starting point. Best practices from literature review are presented in appropriate chapter and the case studies where UWB and MU can inspire each other are also stated.

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