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International Journal of Management and Economics 30, 217-233

2011

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.



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Introduction

The debate on the contents, methodology, and effectiveness of entrepreneurship education is still open. As an academic field, entrepreneurship is diversified, multidisciplinary, multi-contextual, and without one theoretical rigor. Education in entrepreneurship has a mirror image. There is a huge diversification in curricula and many borrowings from other disciplines, such as small business management, economics, finance, or psychology (Fiet 2000). Therefore, one of the first and basic questions in entrepreneurship was: what to teach? The concepts varied from creativity workshops, through business planning sessions, to courses of entrepreneurship as a scientific field. No ultimate answer on the contents of entrepreneurship courses was related to the fact that entrepreneurship education was not regarded as a separate concept or a noteworthy issue among some academic communities. However, the perception of entrepreneurship education has recently changed, especially in highly developed countries. Many researchers in the field agree that next step forward has to be taken. According to Fiet (2000), the eclecticism was acceptable when entrepreneurship education was a new discipline, but now, when it leaves its childhood phase, there is a need for more coherent and common approach. There are already some achievements. Researchers and educators admit that entrepreneurship may be learned and taught. The most advanced forms of entrepreneurship education have emerged at the tertiary education level. There is a multitude of courses, specializations, and even degrees in entrepreneurship worldwide. As Kyrö (2008) noticed, we may already experience shift from contents focus into the process of learning and teaching. The shift provokes more challenging question: how to teach? Entrepreneurship education may be understood both as learning about the phenomena and learning some essential skills enabling being an entrepreneur (Rasmussen et Sorheim 2006). Both are valuable but imply different contents and methodology of teaching. A different approach is needed when we learn to understand entrepreneurship, learn to become more entrepreneurial and learn to become an entrepreneur (Hytti 2002).

There are three actors involved in effective entrepreneurship education: an educator (an academic teacher), a student, and an institutional framework (university or other

higher education institution). In a contemporary paradigm, the role of a teacher is to design the most effective learning opportunities for students; while the role of a student is to get involved in the process of learning and profit from that process. Institutional framework should enable a fruitful execution of both roles, that is create the most favourable conditions for entrepreneurship courses development and make the students' learning and educators' teaching possible. The active approach from all three actors is expected. However, the challenging issue remains the problem of types of teaching interventions to be implemented in order to make learning of entrepreneurship most efficient, or in other words – how to be effective?

The aim of the paper is to present the dynamics between entrepreneurship and education, and review main pedagogic and methodological problems occurring during organizing and conducting entrepreneurship courses. The ambition of the paper is to launch a discussion on entrepreneurship education in Poland and to create an arena for exchange of views on the issues regarding teaching interventions. There is a strong need for comprehensive entrepreneurship education in the Polish higher education system. That education should not only concentrate on technical skills of business plan writing or small business management but should refer to the phases preceding the physical creation of a firm (like entrepreneurial intentions), which in turn demands knowledge of the students' values, beliefs and emotions. Contemporary social and economic environment requires entrepreneurial society. What should not be ignored is that education in entrepreneurship plays an important role not only in fighting unemployment (by creating more jobs as a result) but also in increasing human intellectual potential: creativity, innovativeness and talent. Courses and trainings in entrepreneurship serve an important social role. However, at first, it has to become clear for educators and authorities of higher education institution that, as Cieślik (2008) claims: "Launching a new business is a much broader concept than merely the registration of a new business establishment. It starts with identification and evaluation of business opportunities, the most promising ones are developed in the form of business plans and finally implemented".

Therefore, the paper is an appeal to implement more courses, training and other relevant activities in entrepreneurship (on bachelor, master and doctorate level), that correspond to more advanced understanding of entrepreneurship phenomena and profit from current research findings in entrepreneurship education.

Maturity and status of the discipline

Entrepreneurship education as an academic discipline does not have long traditions. The first entrepreneurship course in the United States was held by Myles Mace at Harvard's Business School in February 1947 and attracted 188 out of 600 second-year MBA students (Katz 2003). Although at Harvard University first programmes in entrepreneur-

ship were designed in the nineteen forties, their real expansion started in the nineteen eighties, firstly in USA, later in West European countries. In 1994, more than 120,000 students in USA were taking entrepreneurship or small business courses (Katz 1994). The more interest in educating how to be entrepreneurial came together with a public attention on small business and knowledge-based economy idea in general. In the nineteen eighties, business schools in USA and Europe were still concentrated on preparing students to become part of top management in large or even global corporations. As Klapper and Tegtmeier (2010) notice one of the earliest research on entrepreneurship education appeared at the beginning of the eighties and resulted in proceedings of the conference at Baylor University (*Entrepreneurship Education*, 1981). The next important step was the conference held at Harvard University (*Entrepreneurship: What It Is and How to Teach* it, 1985). The real take-off in entrepreneurship took place in the nineties of the twentieth century.

At present, when entrepreneurship seems to be already a well-developed and well-established discipline, it is easier for entrepreneurship education to expand. In the USA entrepreneurship education means more than 2,200 courses at over 1,600 schools, 44 refereed academic journals, mainstream management journals devoting more issues to entrepreneurship, and over 100 established and funded centres (Kuratko 2003). From the beginning, an experimental approach to entrepreneurship education has been popularised. Case studies, feasibility plans and project simulations have become basic elements of teaching programmes. Usually entrepreneurship education takes form of non-traditional teaching. There is a shared understanding between educators to seek for innovative and creative forms of education, including both individual and collaborative learning.

Entrepreneurship education as a separate concept has experienced a long way of recognition. Venkataraman (1997) observes that the development of entrepreneurship in tertiary education results from the increased interest in entrepreneurship among students. An intensive students-driven demand for entrepreneurship education, especially on American universities, attracted the attention of scientists and educators, treating it firstly as a new intellectual challenge and then as a separate academic discipline. Leitch and Harrison (1999) distinguish the three-stage chronological model of the evolution of entrepreneurship education. In the first one, entrepreneurship education was understood as part of general management education. The second one was a reaction to a growing role of entrepreneurship as an academic field and was supposed to differ from the big companies' management education. The last stage means a re-conceptualisation of the field and a reintegration of management education and entrepreneurship education.

The situation differs in the Central and East European countries. In those countries entrepreneurship as an economic and social process shortly became a keyword, but as a discipline still has not received an adequate attention. The field of entrepreneurship education is young and still unstructured there. However, lack of structure may be taken

as an advantage. Youth and freshness of the discipline makes it attractive to educators, as a country or region context is still not sufficiently developed. Even if recognition of entrepreneurship as an academic discipline is still not strong enough, the world "entrepreneurship" gains in popularity. Unfortunately, this popularity has often a negative character in Poland. An overuse of a term entrepreneurship, for example by meaningless act of adding it to the names of faculties or courses, may lead to a wrong perception of the phenomenon. Another problem is an attitude of other scholars and even institutions towards entrepreneurship. The status of entrepreneurship in economic and management departments remains under appreciated, while in other ones is often nonexistent. It happens to be perceived as less scientific and too general. In some environments, there is still a belief that entrepreneurship may be taught only at business/economics schools and consists only of business planning classes. However, it is stressed that it should be a part of programmes in almost all academic fields, including technical and art sciences.

There are some good practices. Dynamic Entrepreneurship platform or SEIPA – a network of academic educators of entrepreneurship (*Sieć Edukacyjna Innowacyjnej Przedsiębiorczości Akademickiej*) - is one of a few excellent examples of the activity of Polish entrepreneurship educators.

New role of educator and new approaches to entrepreneurship education

Education means both learning and teaching. The effort should be taken both by an educator (through the process of teaching), a student (through the process of learning), and a higher education institution. The role of an institution is to promote entrepreneurship and entrepreneurial ventures (Heinonen et Poikkijoki 2006). The role of an educator might be to teach fundamentals of entrepreneurship as a science and enhance entrepreneurial skills and competencies among students. The difficulty lies in finding appropriate proportions between providing knowledge to students and developing their entrepreneurial competences. Klofsten (2000) distinguishes static and dynamic components of entrepreneurship education. Static one means providing theory, whereas a dynamic one- more practical approach and rather applied knowledge. However, entrepreneurship courses seem to be more focused on skills developing than knowledge advancing. What should be noted is that education in entrepreneurship serves a preparatory function. It prepares students to behave in an entrepreneurial way, preferably starting their own firms, and realizing their passions and ideas. That general mission is to develop some entrepreneurial competences, which are verified by market and life. This makes entrepreneurship a unique discipline. Usually, disciplines (especially traditional ones) pay more stress on knowledge contents. Courses are not only means of learning entrepreneurship. Centres and networks for entrepreneurship education, like academic incubators, business accelerators, graduates' business clubs may take a role of further educating instance or supporters.

Entrepreneurship education is quite broad, as it comprises learning to understand entrepreneurship, to become entrepreneurial, and to become an entrepreneur (Heinonen et Poikkijoki 2006). Hytti and O'Gorman (2004) propose an interesting model of education (Table 1), describing different roles of enterprise education. Their conceptual schema is based on three interdependent mindsets that focus on:

- 'learning about' to increase understanding of what entrepreneurship is about and its role in economy and society,
- 'to become entrepreneurial'- to make individuals responsible about their learning, careers and lives, and
- 'to become an entrepreneur'- to act as an entrepreneur and to manage to start up new business.

TABLE 1. Model of education

Learn to Understand	Learn to Become More	Learn to Become an
Entrepreneurship	Entrepreneurial	Entrepreneur
What do entrepreneurs do? What is entrepreneurship? Why are entrepreneurs needed? How many entrepreneurs do we have?	I need to take responsibility of my learning, career and life How do I take responsibility?	Can I become an entrepreneur? How to become entrepreneur? How to manage the business?

Source: Hytti and O'Gorman (2004).

In the discussion on entrepreneurship education, there are usually references to knowledge, skills, and competences of students. Entrepreneurial competences are usually understood as "combination of skills, knowledge and resources that distinguish an entrepreneur from his or her competitors" (Fiet 2000b, p.107). However, regardless of the aspects that are brought into focus, the expected result is that more students will get involved in venture creation during and after their studies.

Before designing curricula, the selection of an approach is encouraged. The development of idea of entrepreneurship education came together with popularization of action learning concept. When transmitting that concept into the field, as Leitch and Harrison (1999, p. 92) noted, action learning is learning "by reflecting on the actions being taken in solving a real organizational problem with managers of similar position also experiencing challenging situations". So, it simply means learning by doing. Learning process is associated with "doing" (Fiet 2000), entrepreneurship means putting ventures into life, so educators through their courses or trainings should stimulate students actions

(Rasmussen et Sorheim 2006). The idea is to give students tasks leading them to discover knowledge, instead of passively receiving the information (Ewell 1997) and to induce entrepreneurial intentions. Thus, the concept of student-centred education is highlighted, and there appears the idea of improving the number and quality of opportunities among students. As Kyrö (2008, p. 42) writes: "Proactive behaviour in complexity assumes that learning is simultaneously individual and social, relating to the dynamics between individual and collective human processes". She continues by mentioning two basic elements of entrepreneurial learning: "an action-oriented proactive holistic attitude towards a complex and changing world and a holistic view of the human individual and social processes". An action-oriented approach involves experiential learning, problem solving, project-based learning, and creativity (Jones et English 2004). Béchard and Grégoire (2007) distinguish three models of teaching entrepreneurship:

- A supply model, in which transmission of knowledge, skills and abilities takes place
 from an educator to a learner; teachers play role of presenters of information where
 as students its recipients.
- A demand model, which is aimed at fulfilling learning goals and needs of students; teachers construct environment for appropriation of the knowledge.
- A competence model, which is aimed at enhancing students' competences in solving problems by using knowledge and abilities; teaching is regarded as an interactive process between teachers and students.

Very closely related to active learning, is experiential learning, which characteristics may be found in the paper of Cooper et al. (2004): "Stepping out of the classroom and up the ladder of learning: An experiential learning approach to entrepreneurship education". The authors assume that better results in entrepreneurship education may be obtained outside the classroom as it enables students to work with an entrepreneur on a business development project.

Problem of contents - how to develop a curriculum?

Hill (1988), after surveying fifteen top-quality entrepreneurship educators, concludes that main educational objective of entrepreneurship education is to increase students' awareness and understanding of the new venture initiation process. Jones and English (2004, p. 416), referring to definitions of entrepreneurship through opportunity concept lenses, understand entrepreneurship education as the "process of providing individuals with the ability to recognize commercial opportunities and the insight, self-esteem, knowledge and skills to act on them". The aims of entrepreneurship programmes at university level embrace: "increasing the knowledge base of participants, improving their entrepreneurial skills and behaviour in life, and finally providing participants with relevant set of skills and competences for establishing a new start-up or managing existing

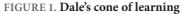
firm" (Heinonen and Hytti 2008, p.328). The aim of entrepreneurship education is often understood also as enhancing entrepreneurial intention to create a venture in future.

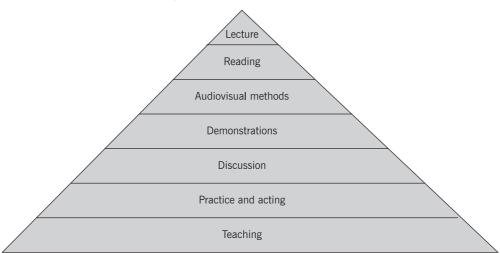
Liñán (2004) presents classifications of educational activities by differentiating their aims. He distinguishes four types of entrepreneurship education:

- Entrepreneurial awareness education, aimed at increasing the number of individuals having basic knowledge about small business, self-employment and entrepreneurship.
- Education for start-up, aimed at preparing participants to be owners of a small conventional business, focusing on practical issues.
- Education for entrepreneurial dynamism, aimed at promoting dynamic entrepreneurial behaviours after the start-up phase.
- Continuing education for entrepreneurs, aimed at improving and progressing entrepreneur's abilities.

In practice, courses in entrepreneurship cover a whole range of business related subjects, so they often resemble business and management courses or small and medium sized enterprises' economy courses. There are many misunderstandings around entrepreneurship courses at university. However, business entry differs from managing a business. To understand the difference between entrepreneurship courses and small business courses, a distinction made by Gibb (1987) might be helpful. He defines an entrepreneur in terms of attributes and a small-business person in terms of tasks. Gibb considers that the role for small business in entrepreneurial education is to enhance enterprise creation by managing the entrepreneurial attributes of young people. Business courses may support this process by providing role models, exposure, networks, and insight into the business process. According to McMullen and Long (1987), Vesper and McMullen (1988) entrepreneurial education should include skill building courses in negotiation, leadership, new product development, creative thinking and exposure to technological innovation. It seems to be appropriate to identify differences between entrepreneurs and (small) business managers. The key feature distinguishing these two groups is a motivation to start up a firm or venture. Managers think mostly about direct financial profits, whereas entrepreneurs pay attention to the increase in growth and profits of a firm (Carland et al. 1984). For Liñán (2004) management training does not focus on traits, skills, attitudes, or intentions of the participant, but more on technical knowledge for business administration.

There are two concepts of education: teacher-centred orientation and student-centred one. In the first one contents seem to matter, where in the second one the learning process is essential. Taking the contents into considerations the most obvious way of delivering it are theory courses. However, too much theory is not in line with the philosophy of teaching entrepreneurship. What is an ideal proportion between theory and practice in this case? Should entrepreneurship courses be only pragmatic? Looking at Edgar Dale's cone of learning (Figure 1) the effectiveness of learning depends on the media involved in learning. His famous learning pyramid teaches that effectiveness of lectures is poor.





The teachers' experience usually proves that is highly more difficult to get students interested in lecture than during more practice-oriented classes (for example project based). Perhaps entrepreneurship courses should not be the ones done separately for theory and for practice. In this form, theory would be "smuggled" during one type of classes (either via introduction to classes or as their summaries). Therefore, entrepreneurship courses would be more of a student-oriented type.

It has to be stressed also that there is little consistency among the programmes in entrepreneurship. Some countries still lack formal teaching programmes. Fiet (2000) analyses eighteen various syllabuses in entrepreneurship and found six main thematic areas, which are: strategy/competitive analysis, managing growth, discovery/idea generation, risk and rationality, financing and creative. However, as he concludes, only discovery/idea generation is not deriving from other disciplines.

There are many examples of courses in entrepreneurship education available in literature; even more may be accessed easily through the Internet. Some examples are provided in the following papers:

- Dreisler, P. (2008), Entrepreneurship: From Opportunity to Action: the Entrepreneurial Process, teaching Entrepreneurship a description of a course in entrepreneurship,
- Tegtmeier. S. et al. (2009), Increasing Entrepreneurial Intentions through Innovations in Pedagogy: European Approaches, Programmes, and Tools a comparison of different approaches to entrepreneurship education in Europe (Estonia, Finland, France, Germany, Greece and Sweden, and in Poland),

• Klapper et Tegtmeier (2010) – two examples of innovative pedagogy in entrepreneurship teaching, in two different cross-cultural contexts: Germany and France.

Good practice in entrepreneurship education in Poland may be found in works of Prof. Cieślik and his Dynamic Entrepreneurship course, as well at the Cracow University of Economics. However, as Kyrö (2008) and Carrier (2005) noticed we may now experience a shift from contents focus into the process of learning and teaching.

Problem of audience and timing – when and who to teach?

The next problem is an appropriate time (degree level) to teach entrepreneurship. Should courses in entrepreneurship be a part of undergraduate or postgraduate programmes? Should they constitute major or minor? How many hours should be devoted to "pure" entrepreneurship?

The problem of timing relates to the profile of a department that is responsible for conducting courses in entrepreneurship and integration with other courses. In last years in many Western European countries a spate of master degrees in entrepreneurship started to appear. In Poland, where the Master in Entrepreneurship is not popular yet, three situations are possible:

- Entrepreneurship is taught as a part of entrepreneurship specialization programme

 students chose the specialization so probably they consider starting up a company.
 Strong integration with other courses like: venture creation, creativity, negotiating, business plan writing, and business management is recommended. Educators should enhance personal development and broadening the students' perspectives, and provide knowledge about entrepreneurship as the process. Entrepreneurship course at this level should advance entrepreneurial thinking and competences among participants.
- 2. Entrepreneurship is taught as a part of general economics or management programmes students have some general knowledge in business but usually do not show any special interest in entrepreneurship. The aim of the course in that context is more to introduce an entrepreneurship as a broad concept not only related to small business, to encourage participants to launch ventures and to provide basics on entrepreneurship as a field of science.
- 3. Entrepreneurship is taught as a single course at non-business departments (at technical universities, medical schools, art schools). The students there are usually interested in a very practical aspect of entrepreneurship. They treat sessions more as a source of guidelines how to become an entrepreneur than a way of developing a new mode of thinking. However, innovativeness and creativity workshops are particularly welcomed for those groups of participants.

The problematic issue is also who should teach entrepreneurship. Should it be entrepreneurs, educators in management or economics, self-development coaches? Not many

educators have degree in entrepreneurship because these types of master or doctoral degree have been available for a short time. Moreover, the idea of reciprocal learning gains in popularity – students may learn a lot by interacting.

Methodology and pedagogy problems - how to learn?

Ronstadt (1987) concludes that an effective programme should show students "how" to behave entrepreneurially and should introduce them to the people who might be able to facilitate their success. However, the question is how to encourage students and enhance entrepreneurial spirit among them? Literature review brings some answers. The most popular tools used in teaching entrepreneurship include: business plans, student business start-ups, consultation with practicing entrepreneurs, behavioural simulations, interviews with entrepreneurs, "live" cases, field trips, and the use of video and films (Kuratko 2003). The catalogue of teaching interventions proposed in entrepreneurship education is very diverse. Apart from the classical one, Pittaway and Cope (2007) using the systematic literature review method, distinguish the following methods of teaching entrepreneurship: action learning, new venture simulations, technology based simulations, the development of actual ventures, skills based sources, video role plays, experiential learning, mentoring. The choice of a method depends on the approach to entrepreneurship education.

The next problem concerning entrepreneurship methodology is a choice of an appropriate teaching model. What is more appropriate – one project during one semester or a few shorter projects? Both choices have some merits. One project-based course teaches logics, consequence, and planning, whereas diversity is more attractive and many shorter projects may teach solving more specific problems, while the students' roles in projects may change. At the Babson College, for example, learning resembles the business cycle: creativity, opportunity recognition, the invention or discovery of a product or service, assessment of the business opportunity, building the market and delivery system, and growth and renewal (Kuratko 2003).

The review of strategies for teaching entrepreneurship is provided by Carrier (2007). She describes various simulations and games (computer-based simulations and behavioural simulations), as well as original educational proposals (teaching through classics, videos, life stories, use of a new venture expert script).

There are plenty of teaching methods, classified in different groups (Table 2). However, in the practice of entrepreneurship education, teaching by the mix of methods would be advised. Only diversity gives the chance to all aspects of entrepreneurship to be included and enriches diverse entrepreneurial competences. Activating methods (*seeking* method and *cooperation* method) that stimulate thinking by involving students in learning and interacting seem to gain in popularity during last years.

Name of a method	Aim of a model	Tools
Delivery method	to provide knowledge by facts and rules	descriptions, lectures, manuals, educational programmes
Teaching by doing	to teach	experiments, experience-based activities
Direct method	to present procedural knowledge	explanations, labo classes
Seeking method	to teach solving problems, seeking the solutions, logics of thinking	problem exposing lectures and cases
Cooperation method	to teach a cooperation and team working	projects, activating methods

TABLE 2. Variety of teaching methods

Source: own proposition of classification by the author.

The choice of the teaching method is related to the choice of attributes or competences the course is supposed to develop. Among the most popular are those leading to comprehension and advancement of the entrepreneurial process:

- A habit of permanent seeking of opportunities in business and their evaluation,
- An ability to observe the business world and discover new possibilities between unrelated issues.
- An ability to search for information
- Self-efficacy
- Self-confidence:

Taking into considerations the above competences, the following teaching activities may be proposed: an exercise of venture creation (preferably team based), an exercise of interviewing the entrepreneur from the students' close environment, an exercise of identifying global and regional trends, based on case studies, or an exercise of searching information about a particular market or sector, the competitiveness, competitors profile, contacts, networks.

As it was already mentioned, usually entrepreneurship education implements non-traditional teaching methods. One of the most often practiced ways of supporting new venture creations is however teaching business planning. Business planning provokes many controversies nowadays. For Delmar and Shane (2003) it is a valuable and effective activity helping to make decisions and attain goals, whereas for example Baron (1998) accuses fallacy planning for entrepreneurs' failures, while Carter et al. (1996) associate success with action and doing rather than planning and thinking. Usually students appreciate all "real world" practice and actuality of business problems. But what should be taken into account is the fact that if we decide to include business planning as a part of entrepreneurship education, then, not only writing but also discussing it in front of others should be a part of a course.

The use of technology can be helpful in a process of teaching entrepreneurship. Educational technology may be based on computer and the Internet use or video making. Regardless financial side of this kind of activities, the right proportion between "only fun" and full commitment learning should also be kept. Technology should serve as a tool only. For example, some scholars ask students to keep digital journals or blogs as an assignment. This kind of task gives a valuable possibility to follow students' reflections on the learning process, however, only if students concentrate on the contents not on a form.

Students should be aware of some aspects of entrepreneurship even during the first session of the course. A good idea might be to discuss the following, to some extent controversial, points:

- Starting up a firm is an act of courage and very often a critical moment of human life.
 It usually requires a resignation from the hitherto life style, change of priorities, confrontation with unknown and uncertain (Cieślik 2008). However, in the meantime, it is a great challenge and adventure, and very often the only way to realize own ambitions and stay in line with own beliefs and values.
- The chances to become successful in starting up a firm do not only have in-born entrepreneurs. The formal education and knowledge in entrepreneurship increase substantially the probability of success.
- Starting up a business may happen during whole lifetime, not necessarily immediately after studies.
- It is not crucial to have an extraordinary, exceptional, very innovative idea to start up a business. A research conducted by Bhide (2000) shows that among 100 American firms from "Inc. 500" list only 6% were delivering unique products, process, or service. There is also the group of replicate entrepreneurs (Baumol 2004) who are persons taking up a business initiative based on existing ideas. They do not offer very innovative products or service and their business concept is only a little bit better than competitors' ones.
- An idea is very important but a complete business concept even more (Cieślik 2008).

And how to be effective?

Monitoring the result of teaching entrepreneurship is difficult. How to determine the impact of entrepreneurship education on the decision to start a new venture? One way seems to be monitoring of graduates. However, it is time consuming and does never give an answer of the real impact, as we are never sure whether other factor did not influence the graduate's decisions.

The popular method is to check the changes in attitudes and intentionality of students before and after their participation in a course. Lena and Wong (2003) searched for the relation between new venture creation and attitudes towards education in en-

trepreneurship. After surveying 1500 students, they discovered a positive correlation. Similarly, the results of Rasheed (2000) indicate that students receiving entrepreneurial training have higher motivation to achieve. The results make a strong link between new venture creation and entrepreneurial attitudes: motivation to achieve, a sense of personal control and self-esteem. Kolvereid and Moen (1997) indicate positive relationship between education in entrepreneurship and entrepreneurial behaviour, both for actual behaviour and for behavioural intentions, by examining Norwegian business school students. Similar findings might be found in the papers of Clark et al. (1984). A positive relation between entrepreneurship education and students intentions for venture creation seems to dominate in literature. However, for example, Oosterbeek et al. (2008) prove a negative impact of entrepreneurship programmes on entrepreneurial competencies and intentions.

The question that educators still pose is whether the teaching to identify entrepreneurial opportunities is possible. For example, De Tienne and Chandler (2004) admit that it is possible to teach opportunity recognition, but for instance Saks and Gaglio's (2002) exploratory research provides contradictory results. In-depth interviews of 14 well-known entrepreneurship teachers led to the conclusion that teaching opportunity evaluation is possible, whereas teaching opportunity recognition, or creation, is rather difficult, if not impossible. However, nearly three quarters of the respondents hoped that the students would in fact be able to learn to identify potential business ideas. Carrier (2005) argues that we should be more creative and put more emphasis on creating the business idea, not to evaluate imitated ideas.

One of other basic question posed by the scholars is: does a course or programme in entrepreneurship help or facilitate new venture creation? The dominant stress on effectiveness sometimes covers such important issues as the students' understanding of venture creation (opportunity identification and development). Structure of the courses reflects the educators' approach to venture creation. Most of the research on entrepreneurship education seeks to pursuit the effectiveness of the education, but as Fiet (2000) explains, teaching entrepreneurship needs first an assumption on the exis-tence of the process that can be explained theoretically. What is more, the question how to teach should be preceded by the question: who is taught. Better understanding of students' perception of venture creation and entrepreneurial process is necessary.

Challenges for the future

Constructing the bridge between education and entrepreneurship is not an easy task. However, we may experience nowadays a growing interest in entrepreneurship education all over the world. Entrepreneurship education is a promising field. It is challenging for teachers, as it demands crossing the borders between disciplines, and it is demand-

ing for students, as it requires active learning and engagement. It is also challenging for institutions (like universities) as it requires acceptance of non-conventional teaching interventions and innovative methods. Entrepreneurship education has expanded during the last three decades. A contemporary paradigm of entrepreneurship learning suggests that educators create learning experiences for students while they create the content that educates. To achieve that, entrepreneurship educators should have the same innovative drive that is expected from their students (Kuratko 2003). Teaching entrepreneurship becomes a challenge as it means developing and enhancing entrepreneurial skills and competences.

Another important challenge is to overcome a popular belief that entrepreneurship is only an innate feature, therefore if a person is entrepreneurial, regardless of the education, she or he will start a business, so the learning aspect is abandoned. It is a belief completely not understandable and not justified. In Poland, the myth of a poorly educated and sometimes unethical entrepreneur still poses a challenge to fight against.

However, foremost the challenge remains to improve the quality of entrepreneurship courses. One of the ways to achieve better quality in teaching is to search what students' intentions are. As a result, many intention models were constructed (in particular based on the works of Shapero and Sokol 1982, or Ajzen 1991). They are aimed at seeking determinants of human entrepreneurial intentions, apart in background factors, in perceived feasibility and perceived desirability of being an entrepreneur. By knowing the factors influencing the students' entrepreneurial intention (their antecedents) educators are able to design programmes that are more accurate and chose more appropriate teaching methods. Another way to improve the quality of teaching is to recognize and study how students identify, evaluate, and finally exploit opportunities. The nature and dynamics of the process from idea generation to venture creation determines the character of teaching interventions.

Entrepreneurship education is not a fad or one season fashion; it is a reality and requirement of modern world. We have to implement quickly more advanced entrepreneurship courses in Poland in order to stay competitive, at the university, regional and national level, as well in order to become more entrepreneurial society, to increase employment and to encourage innovation and induce knowledge-based economy. Entrepreneurial competences are desirable in all environments.

Notes

¹ A part of the paper was presented during European Summer University, *Entrepreneurship in Europe – Innovations in Pedagogy*, at Dauphine University in Paris, September 2008.

References

Ajzen I. (1991), The theory of planned behavior, "Organizational Behavior and Human Decision Processes", vol. 50, 1991

Alvarez S.A., Barney J.B. (2007), Discovery and creation: alternative theories of entrepreneurial action, "Strategic Entrepreneurship Journal" No 1, pp. 11–26

Béchard J.P., Grégoire D., (2007), Archetypes of pedagogical innovation for entrepreneurship education: model and illustrations, Handbook of Research in Entrepreneurship Education, vol. 1. (Fayolle A., ed.), Chetelham (UK): Edward Elgar Publishing

Baron R. (1998), Cognitive mechanisms in entrepreneurship: why and when entrepreneurs think differently than other people, "Journal of Business Venturing" No 13, 275–294

Baumol W.J. (2004), Entrepreneurship and small Business; Towards a program of Research, FSF, Stockholm

Bhide A.V. (2000), The Origin and Evolution of New Business, Oxford University Press, Oxford

Carland J.W., Hoy F., Boulton W.R. Carland J.A.C. (1984), Differentiating Entrepreneurs from Small Business Owners: A Conceptualization, "Academy of Management Review" No 9

Carter N.M., Gartner W.B., Reynolds P.D. (1996), Exploring start-up event sequences. "Journal of Business Venturing" No 11, pp. 151–166

Carrier C. (2005), Pedagogical challenges in entrepreneurship education, [in:] P. Kyrö & C. Carrier (eds.), The dynamics of learning entrepreneurship in a cross-cultural university context (pp. 136–158), Hämmeenlinna: University of Tampere

Carrier C. (2007), Strategies for teaching entrepreneurship: what else beyond lectures, case studies and business plans? [in:] A. Fayolle (ed.), Handbook of research in entrepreneurship education (vol. 1, pp. 143–172), Cheltenham: Edward Elgar

Charney A., Libecap G.D., (2000), The Impact of Entrepreneurship Education: An Evaluation of the Berger Entrepreneurship Program at the University of Arizona 1985–1999, The Kauffman Center for Entrepreneurial Leadership, Final report, May 23

Cieślik J. (2008), Przedsiębiorczość dla ambitnych. Jak uruchomić własny biznes, Wydawnictwa Akademickie i Profesjonalne, Warszawa

Cieślik J. (2008), University-level entrepreneurship education in Poland, Proceedings of ICELM-3, Tîrgu Mureş, Romania http://www.upm.ro/proiecte/EEE/Conferences/papers/S604.pdf

Clark B.W., Davis C.H., Harnish V.C. (1984), Do courses in entrepreneurship aid in new venture creation? "Journal of Small Business Management"

Cooper S., Bottomley C., Gordon J. (2004), Stepping out of the classroom and up the ladder of learning: An experiential learning approach to entrepreneurship education, "Industry and Higher Education", vol. 18 No 1, pp. 11–22

Delmar F., and Shane S. (2003), Does business planning facilitate the development of new ventures? "Strategic Management Journal", No 24(12), pp. 1165-1185

DeTienne D.R., Chandler G.N. (2004), Opportunity identification and its role in the entrepreneurial classroom: a pedagogical approach and empirical test, "Academy of Management Learning and Education", No 3(3), pp. 242–257

Dreisler P. (2008), Entrepreneurship: From Opportunity to Action: the Entrepreneurial Process, Teaching Entrepreneurship

Fayolle A., Gailly B., Lassas-Clerc N. (2007), Towards a new methodology to assess the entrepreneurship teaching programmes, [in] A. Fayolle (ed.), Handbook of research in entrepreneurship education (vol. 1, pp. 187–197), Cheltenham: Edward Elgar

Fiet J. (2000a), The theoretical side of teaching entrepreneurship, "Journal of Business Venturing" No 16, pp. 1–24 Fiet J. (2000b), The pedagogical side of entrepreneurship theory, "Journal of Business Venturing" No 16, pp. 101–117

Gibb A. (1987), Education for Enterprise: Training for Small Business Initiation - Some Contrasts, "Journal of Small Business and Entrepreneurship", No 4(3)

Gorman G., Hanlon D., King W. (1997), Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review, "International Small Business Journal", vol. 15 No 3

Heinonen J., Hytti U. (2008), Enterprising individuals from an entrepreneurial university: entrepreneurship programmes in non-business and business schools, "The Finnish Journal of Business Economic", No 3

Heinonen J., Poikkijoki S.A. (2006), An entrepreneurial-directed approach to entrepreneurship education: mission impossible? "Journal of Management Development", Vol. 25 No 1, pp. 80–94

Hill G.E. (1988), Variations in university entrepreneurship education: an empirical study of an evolving field, "Journal of Business Venturing" No 3, pp. 109–122

Hytti U., O'Gorman C. (2004), What is "enterprise education"? An analysis of the objectives and methods of enterprise education programmes in four European countries, "Education + Training, Vol. 46 Iss: 1, pp. 11–23

Jones C., English J. (2004), A contemporary approach to entrepreneurship education, "Education and Training", Vol. 46, No 8/9, pp. 416–423

Kirby D. (2007), Changing the entrepreneurship education paradigm. In A. Fayolle (Ed.), Handbook of research in entrepreneurship education (Vol. 1, pp. 21–45). Cheltenham: Edward Elgar

Kolvereid L., Moen \emptyset . (1997), Entrepreneurship among business graduates: does a major in entrepreneurship make a difference?, "Journal of European Industrial Training", Vol. 21 No 4, pp. 154–160

Kuratko D. (2003), Entrepreneurship education: emerging trends and challenges for the 21st century, 2003 Coleman Foundation White Paper Series for the U.S. Association of Small Business & Entrepreneurship

Kyrö P. (2008), A theoretical framework for teaching and learning entrepreneurship, "International Journal of Business and Globalisation", Vol. 2, No 1

Klapper R., Tegtmeier S. (2010), Innovating entrepreneurial pedagogy - examples from France and Germany, "Journal of Small Business and Enterprise Development", Vol. 17, No 4

Klofsten M., J.-E. Dylan (2000), Comparing Academic Entrepreneurship in Europe – The Case of Sweden and Ireland, *Small Business Economics*, 14(4), June, pp. 299–309

Leitch C., Harrison R.T. (1999), A process model for entrepreneurship education and development International Journal of Entrepreneurial Behaviour & Research, Vol. 5 No. 3, 1999, pp. 83–109

Lena L. and Wong P.-K. (2003), Attitude towards entrepreneurship education and new venture creation, Journal of Enterprising Culture, Vol. 11, No. 4, December 2003, pp. 339–357

Liñán, F. (2004): "Intention-based models of entrepreneurship education", *Piccolla Impresa / Small Business*, Iss. 3, pp. 11–35

Liñán, F. (2007). The role of entrepreneurship education in the entrepreneurial process. In A. Fayolle (Ed.), Handbook of research in entrepreneurship education (Vol. 1, pp. 230–247). Cheltenham: Edward Elgar

Liñán, F., Rodríguez-Cohard, J.C., Rueda-Cantuche J.M. (2010). Factors affecting entrepreneurial intention levels: a role for education. International Entrepreneurship and Management Journal, March 2010

McMullen C., Long M.B. (1988), Entrepreneurship: Past Research and Future Challenges, *Journal of Management*, 1988, 14(2), pp. 139–161

Oosterbeek H., van Praag M., Jsselstein A., (2008), The Impact of Entrepreneurship Education on Entrepreneurship Competencies and Intentions: An Evaluation of the Junior Achievement Student Mini-Company Program, Discussion Paper Series, IZA DP No. 3641, August 2008, pp. 1–24

Pittaway and Cope (2007), Entrepreneurship Education. A Systematic Review of the Evidence, *International Small Business Journal* 2007; 25; 479–510

Rasheed H.S. (2000) Developing Entrepreneurial Potential in Youth: The Effects of Entrepreneurial Education and Venture Creation, http://usasbe.org/knowledge/proceedings/proceedingsDocs/USASBE2001proceedings-063.PDF

Rasmussen E., R. Sørheim (2006), Action-based entrepreneurship education, Technovation 26(2), pp. 185–194 Reitan, B. (1997). Where do we learn that entrepreneurship is feasible, desirable and/or profitable? - a look at the processes leading to entrepreneurial potential. San Francisco, CA., paper presented to the International Council for Small Business

Ronstadt R. (1987), The Educated Entrepreneurs: A New Era of Entrepreneurial Education is Beginning., American Journal of Small Business, 11(4)

Saks N. T., Gaglio C.M. (2002), Can opportunity identification be taught?, Journal of Enterprising Culture, Vo. 10, no. 4., December 2002, pp. 313-347

Sánchez, J.C. (2010). University training for entrepreneurial competencies: Its impact on intention of venture creation, International Entrepreneurship and Management Journal 2010

Tegtmeier, S., Asplund, C., Bengtsson, L., Klapper, R., Kurczewska, A., Kyrö, P., Leger-Jarniou, C., Pruvli, E., Tzeremes, N.G. and Vliamos, S.J. (2009), *Increasing Entrepreneurial Intentions through Innovations in Pedagogy: European Approaches, Programmes, and Tools*, 2009 ICSB World Conference, The Dynamism of Small Business: Theory, Practice, and Policy, 21-24 June, Seoul, Korea

Venkataraman, S. (1997). The Distinctive Domain of Entrepreneurship Research: An Editor's Perspective. Advances in Entrepreneurship. J. Katz and R. Brockhaus. Greenwich, JAI Press. 3:119-138

Vesper, K.H. and McMullen, W.E. (1988). Entrepreneurship: Today courses, tomorrow degrees? *Entrepreneurship Theory and Practice*, 13(1), pp. 7-13