

**ENTREPRENEURSHIP EDUCATION :
DO STUDENT-COMPANIES OFFER SUPERIOR VALUE?**

Authors :

Prof. dr. Ghislain Houben
Prof. dr. Roger Mercken

Universiteit Hasselt

Entrepreneurship education : do student-companies offer superior value?

Abstract

An entrepreneurship course for academic students is expected to be a vital stimulus to promote entrepreneurship and the setup of creative new businesses. But do the students learn the right things? A comparison is made between the more classic “business plan” course and the setup of an actual student company.

1. Introduction: key issues for entrepreneurship courses

Entrepreneurship courses are taught at most universities and other institutions of higher education, both for business students and other students. Since the first ‘entrepreneurship’ course was offered to Harvard MBA students in 1947 (Katz, 2003), the popularity of this type of course has grown spectacularly. As the field of entrepreneurship is seen as being in its early stages of development within the larger domain of management (Shane & Venkataraman, 2000) the theoretical foundations and the best educational approach are still subject to considerable evolution and debate. A few principles are however more or less generally accepted, though differently filled in.

1.1. Hands on approach

Most of the courses prefer a kind of ‘hands on’ approach (Gorman et al., 1997): cases, the creation of a business plan, simulation, the setup and running of an actual company. ‘Learning by doing’ is generally preferred. It is observed that much of what real entrepreneurs do is the product of tacit knowledge, that is most often acquired through learning by experience (Honig, 2004). To mimic this experience, simulations or real life student companies can be created. Often the business plan, to be prepared by a small group of students, is at the heart of the course. Depending on the kind of setting, the business plan may be the end product or the starting point of a dynamic learning process.

All too often the basic and final objective of an entrepreneurship course seems to be to learn how to set up a good business plan. The touchstone of the quality of the learning process is whether the students succeeded either in translating a vague business idea into a concrete business plan that can be used to convince venture capitalists and earn credibility for the business project, or in convincingly demonstrating the fact that the business idea cannot be transformed into a viable business and thus should be abandoned. This raises a first problem: a successful demonstration is often preferred over a no-go advice. Often, the plan has to be defended before a jury of real managers or bankers/venture capital companies. This will obviously help to improve the real life features of the plan and can contribute to a real networking experience. Outstanding plans may be picked up by a member of the jury who will act as a promoter of a real setup of the business proposed, and help to provide the needed contacts. It is also possible that a member of the jury will act as a promoter of one of the team members who has demonstrated real entrepreneurial skills but is in need of an enabling environment. It is fair to say though that in many cases the networking effect will not occur and that the business plan will be evaluated as a static product. A business plan resulting in the conclusion that the business idea cannot be translated into a viable business will be much harder to defend than a presumed success, though one of the major advantages of a business plan is the prevention of an unsuccessful start-up. If the entrepreneurship course is somehow linked to one of the popular business plan competitions, success is even more important. Business plan competitions focus on the development of successful business plans and reward

the 'best' business plan. Though they generally take into account the quality of processes that lead to that result, the emphasis is on the quality of the business plan product. Beyond any doubt, students will learn a lot by creating, as a team, a good business plan. They learn to integrate knowledge acquired in many separate courses, to interact with each other and with the environment and to combine and translate lots of information into the format of a comprehensive business plan. But on the other hand, do they learn the right things to become a better entrepreneur? We have to take into account quite a number of limitations of the business plan approach and even a few conceptual flaws..

1.2. Dynamics, learning from mistakes and intuition

The static use of the business plan obviously has a number of drawbacks. It suggests that the creation of the business plan is the end of a learning experience, while in fact it should only be the start of it. It is too static in a number of ways. Competition is of course included in the business plan (SWOT-analysis), but not in a dynamic way. Business games and simulations are better to improve the study of the dynamic influence of competition, as is a real life experience. The business plan is also too static in the learning effects. Creating a new business often is a process of learning by doing (tacit knowledge) and learning from failure and emotion. Just writing a business plan is not enough to create the dynamic environment of a real start. Rather than attempting to forecast the long-range effects of actions, successful entrepreneurs are superior in reacting creatively to changes in the circumstances. Furthermore, the focus on establishing a business plan is too rational. Though it is widely accepted that intuition is very important for solving ill-structured problems (and starting up a new business certainly is ill-structured), intuition is seldom included in the cook-book approaches to write a business plan. What also may be lacking is real commitment and fear. Creating a 'paper' business is fundamentally different from taking real risks. Some students are excellent in creating outstanding business plans, but are too risk averse to commit themselves to a real start-up. They have the profile of an outstanding analyst or consultant, but lack the real spirit of entrepreneurship. Allowing the students to setup and operate a real business may offer an ideal setting for in-depth learning and spark entrepreneurship.

1.3. Theory-application balance

The design of a course in entrepreneurship inevitably rises the eternal question of the balance between theory and application. In a study of the 'theory-application balance' in management pedagogy, Wren et. al (2007), based on a survey of a sample of members of the Academy of Management, the balance between theory and applications was measured on a 7-point scale. The balance was most in favour of practice for 'MIS' and 'entrepreneurship' graduate courses (score 4,75) (range for all the courses considered: 3,49-4,89).

This practice-oriented approach places 'entrepreneurship' at the heart of continuing debate of the tension between what Clinebell & Clinebell (2008) call 'academic rigor' and 'real-world relevance'. Clinebell & Clinebell (2008) argue that 'business schools are walking a tightrope between the academic side of the business and the practitioner' and claim that 'the pendulum has now moved in the direction toward greater inclusion of real-world experience'. The first business schools (1881: Wharton School – University of Pennsylvania) were more like glorified trade schools, with lots of executive professors, and were increasingly criticised as being too vocational. Concerns about the academic rigor of business programs led to the application of a more traditional scientific model and the pendulum shifted to a position that by a growing group of observers was perceived as being too self-contained. Harrigan (1990) suggested that 'business educators may no longer know (or teach in their classes) what managers must know'. It is argued that business schools lack relevance (Bennis & O'Toole,

2005) and that management research is lacking real influence on management practice. Some want business schools to move away from the scientific model to the professional or clinical model much like medical schools (Bennis & O'Toole, 2005, Pfeffer & Fong, 2002). But this 'professional model' is not easy to define. The definition of Wren et al. is too broad and lacks precision: "business schools are expected to be 'professional' in the sense that their mission is primarily to prepare people to practice their skills in the business world (Wren et al., 1994). As Clinebell & Clinebell (2008) rightfully state, a business school is different from other professional schools as law or medicine. With to some extent the possible exception of a specialised professional accounting education, business schools are preparing students for a wide variety of careers in a very broad spectrum and not for a specific starter position. By definition, this is the case for entrepreneurship. There are no standard requirements for an educational program for entrepreneurs and there is no such thing as an 'entrepreneurial expert'.

1.4. An impossible dream?

Stimulating academic students to setup their own business and helping them to learn to develop their entrepreneurial skills in an academic context is a very difficult endeavour. Professors and students may be tempted to stick to safe and proven 'academic' recipes, such as the creation of a well-founded business plan for a fictitious enterprise. We believe this is too easy. A course in entrepreneurship for business students has to take into account the problems we discussed above. Finding the right balance between scientific academic research and the real world, between providing a short term impulse to promote entrepreneurship and a lasting long term objective to improve entrepreneurial skills and between theory and practice is a challenging task indeed.

First we discuss the place of the business plan and the creation of opportunities for intuition and learning from failure. Next the student company approach of Hasselt University is discussed.

2. The business plan as an educational artefact

2.1. Concept

In a study of leading entrepreneurship educators, the development of a business plan was identified as being the most important feature of entrepreneurship courses (Hills, 1988). The main emphasis seems to be the translation of a business idea into a business plan to convince stakeholders of the viability of the idea. Teaching and monitoring the creation of a business plan is a popular course format. This is confirmed by a study of the content of textbooks used for entrepreneurship courses (Edelman et al, 2008).

Honig (2004) defines as business plan as 'a written document that describes the current state and the presupposed future of an organization'. The Small Business Administration (SBA) defines a business plan as 'a comprehensive planning document which clearly describes the business developmental objective of an existing or proposed business. (...) The plan outlines what and how and from where the resources needed to accomplish the objective will be obtained and utilized'. Business plans typically outline a proposed new product or service, discuss competition, marketing, strategy, corporate structure, management team and financial strategy and translate all these elements in a comprehensive forecasted financial plan for the next three years.

Implicitly, the popularity of entrepreneurship courses is based on a few fundamental but somehow untested assumptions:

- Abramson, 1997);
- the launch of a new organization is the core of entrepreneurship (Low & encouragement and facilitation of start-up new ventures should be a major public concern to promote economic growth, job creation and innovation;
- entrepreneurship courses are intended to encourage and stimulate the creation of new ventures (Vesper & Gartner, 1997);
- strategic planning and the translation of a strategic plan into a set of operational plans is the core of the entrepreneurial start-up;
- 'learning-by-doing' is the best way to teach the necessary skills to future entrepreneurs.

2.2. Launch of a new business as the core of entrepreneurship

The influence of the first assumption is clear. Compared to other business courses that focus on management of, and innovation in, an existing business, entrepreneurship courses focus on the development of a business plan for the creation of a new independent business. Although taking over an existing company can be a topic, the core clearly is the creation of a new business. Re-developing or redirecting an existing company is also less frequently discussed.

2.3. Launch of a new business as a driver of economic growth and innovation

The second assumption explains the rapid growth of entrepreneurial courses and the institution of endowed chairs. As start-ups are a basic driver of innovation and rejuvenation of the economy, entrepreneurship is vital for the economy. Small and medium-sized businesses (SME) account for the majority of the employment. Some successful new start-ups can grow incredibly fast and compensate for the demise of big companies that were the victim of the 'creative destruction' process of innovation. This emphasises the need to stimulate students to think about setting up a new company and to help them to translate the business idea into an actual start-up.

2.4. Entrepreneurship courses as a driver of new business launches

The third assumption is very important for the stakeholders. It is assumed that students who took a course in entrepreneurship will have a higher propensity to actually start-up a new business. There are some research findings indicating that exposure to entrepreneurship education is positively linked to individual self-reported intentions to begin a business, through increased perceived desirability and feasibility of setting up a new business (Peterman & Kennedy, 2003; Honig, 2004). This would especially be the case for practical courses providing real-world experience. 'The more course content corresponds to the reality of behaviours leading to the probability of start-up, the more likely that entrepreneurship courses will be perceived as relevant' (Edelman et al., 2008). The link with actually starting a business and the success of the enterprise started has not been systematically tested.

2.5. The business plan is at the heart of new business launches and entrepreneurship courses

The fourth assumption is vital for the content of courses. As discussed above, most entrepreneurial courses centre around the creation of a business plan. But Edelman et al. (2008) state that there is little evidence to indicate that we are actually teaching the skills most important for future entrepreneurs. They studied the correspondence between practices of nascent entrepreneurs and the practices discussed in major entrepreneurship textbooks and came to the conclusion that it was far from a perfect match. The overall message seems to be that topics such as the business plan, venture capital and applying for patents are stressed too

much in textbooks at the cost of a considerable lack in the treatment of operational items, such as purchasing raw materials and logistics. They also draw the attention to the fact many nascent entrepreneurs say their business idea occurred spontaneously, while textbooks seem to discuss the search for a business idea as a structured process.

Business plans are assumed to help the entrepreneur to take better decisions and to improve business performance. Business plan research though has yielded mixed results. Some very successful new firms did not plan at all, while some prestigious award winning planners failed... Some studies found a positive relationship between planning and survival/profitability (e.g. Schwenk & Schroeder, 1993), others a negative relationship ('planners don't do'), e.g. Boyd (1991) or no relationship at all (Honig & Karlsson, 2004). This seems to suggest a successful use of the business plan is conditional on an array of other factors, and that a contingency model is appropriate. It is not our purpose to discuss the features of such a contingency model in this paper, but the fact that the relationship is not straightforward definitely has implications for business plan education.

In fact, the business plan is just a special case of strategic planning in general. The origins of the business plan can be traced back to the long-term planning literature. Drucker (1959), who defined long-range planning as the organized process of making entrepreneurial decisions, created the basis for the sudden popularity of the entrepreneurial business plan for SMEs in 1980's. In a few years time many books were written and software developed to sustain the creation of a business plan. In the mid-eighties the first business plan competitions appeared and rapidly gained popularity.

SMEs have to be much more flexible and need a lean way to adopt to the environment. But even for very big companies, empirical research yields mixed results for the benefits of the use of long range planning. Some studies find a positive relationship with long term business results, others fail to identify positive outcomes or suggest a conditional success. It is stated that long range planning is more successful in a stable environment (Honig, 2004). As setting up a new business is seldom related to a stable environment, it can be expected that the relationship between the business plan and success is not obvious at all.

Of course, there is much more to success than just planning... The entrepreneurial features of the entrepreneur are more important than the planning result. In the business planning literature it is widely accepted that the planning process is more important than the planning product. Coercive planning (plan developed to meet the requirements of business angels, venture capitalists or government regulations) has a negative influence on the real relationship between planning and success. If the plan is only created to please an interested party and is afterwards locked up in a closet, it can hardly be expected to have a positive influence on company performance. So a business plan is not a necessary nor a sufficient condition for a successful business launch. It is obvious that long before the idea of the business plan was developed, successful ventures were set up, and that an excellent business plan is no guarantee at all for a successful start.

From an educational point of view, one of the main problems with the business plan approach is that it focuses on a rational, linear, deductive and mechanical solutions. Concepts are more important than actions. Real entrepreneurs though often seem to act irrational, unstructured, inductive and organic. Action is more important than concept. Learning-by-doing, tacit knowledge, is inductive; creating a business plan, enumerating a number of alternatives and analyzing the long run expectations is deductive. Entrepreneurs constantly observe and re-

evaluate the activities and the environment. Entrepreneurs like to act fast and make use of the opportunities that may only be available during a very small time window. Unless this opportunity has been incorporated in the business plan, a plan, once it is written, may limit the mental option framework. Using a plan as a straight-jacket to lead the company, without due consideration of the constantly changing environment and the changes in the internal setting of the company will fail to deliver positive results. Entrepreneurship courses therefore should not overemphasise the production and evaluation of detailed plans, but focus on the development of skills to observe and flexible adopt to changes in the environment. Students need to be prepared for novelty, surprises, deceptions and failures...

For educational purposes, the lack of a clear-cut relationship between business planning and business success, implies a clear message. On the positive side, the business plan offers a unique opportunity to deal with a real business. Creating a business plan is a very good exercise in collecting, analysing, summarizing and presenting information. Every book dealing with the business plan stresses that not the plan as such, but the learning experience is the key to success. The creation of a business plan is a way to structure a basically unstructured learning process called "setting up an enterprise" and to materialize the learning process in a concrete product. What instructors need is a clear structure to give direction to the project in to define the desired output. Students rightfully expect clear requirements and transparent evaluation criteria. The business plan is a product that can be the object of a transparent evaluation. Are all the required elements of the business plan filled in, is it realistic, have the data been collected in a reliable way and checked with key parties, have the business plan methodologies that were taught been used by the students, did they adequately respond to reviews of the staff, how original is the plan, is it clear and convincing,... The process will typically be evaluated on such elements as meeting the deadlines, intra-group conflict resolution, participation in classroom discussions, etc.

On the negative side, a latent problem with this kind of project organization is that it may transmit the wrong message. The students may get the impression that the business plan is regarded as the final and definitive recipe to start up the business. It also seems to suggest that starting a business is a well defined deterministic task that starts with learning how to create a business plan, then create the business plan on the basis of the acquired methodology and finally, start and operate the business on the basis of the plan. In reality, both the development and the implementation of the business plan are highly interactive and open-ended tasks in constant communication with the environment and drawing heavily on dynamic interdisciplinary learning. The conventional view of business planning stresses analytical capabilities (cognitive factors) and favours solutions based on convergent thinking, while creativity (divergent thinking), emotion, intuition and failure are largely ignored.

2.6. Learning by doing: divergent thinking, emotion, intuition and failure

The fifth assumption is important for the pedagogy to be used. Experiential learning and simulation help to expose students to the complexity surrounding start-ups. As discussed above, there is a superior value in including real learning experiences in the creation of a business plan. Sarasvathy states that entrepreneurial activities may best be described "as having an experimental focus that utilizes environmental feedback" (Sarasvathy, 2001). Experimental learning therefore is a better support for nascent entrepreneurs than a rather static creation of a business plan. In spite of the fact that in recent years the role of intuition has become much discussed in business and management (Sadler-Smith & Shefy, 2007), there is no obvious way to train the use of intuition, though a few experimental approaches are available. Learning from failure is another important aspect of real life. Learning from

failure is a complex process, with a lot of emotional difficulties and cultural differences. As is well known, in Europe a business failure is a long lasting stigma for the entrepreneur, while in the USA e.g. it is much more widely accepted that it can be a learning process: ‘in order to succeed one first has to experience failure’ (Timmons, 1999). Shepperd (2004) discusses a number of ways to help students manage the emotions of learning from failure: lectures, guest speakers, case studies, role play, simulation, but we think the learning effect of a real experience is greater. Offering the students the opportunity to really operate a company is a better solution than just setting up a business plan. They will be able to experience the real risks of entrepreneurship, as they can learn from failure and learn to adopt to the changing environment and to the constraints of their company and of the management team.

The popular “mini-company” project in many secondary schools is based on this learning-by-doing idea, but as such is too simple to be used for academic business education. Setting up a more complex company is a challenge. It will take much more of the student’s energy and commitment, and therefore the potential reward has to be bigger than just good marks for a curriculum subject... Yielding the students the opportunity to continue their company after graduation, and operate it in an unprotected environment is an enrichment of the learning experience.

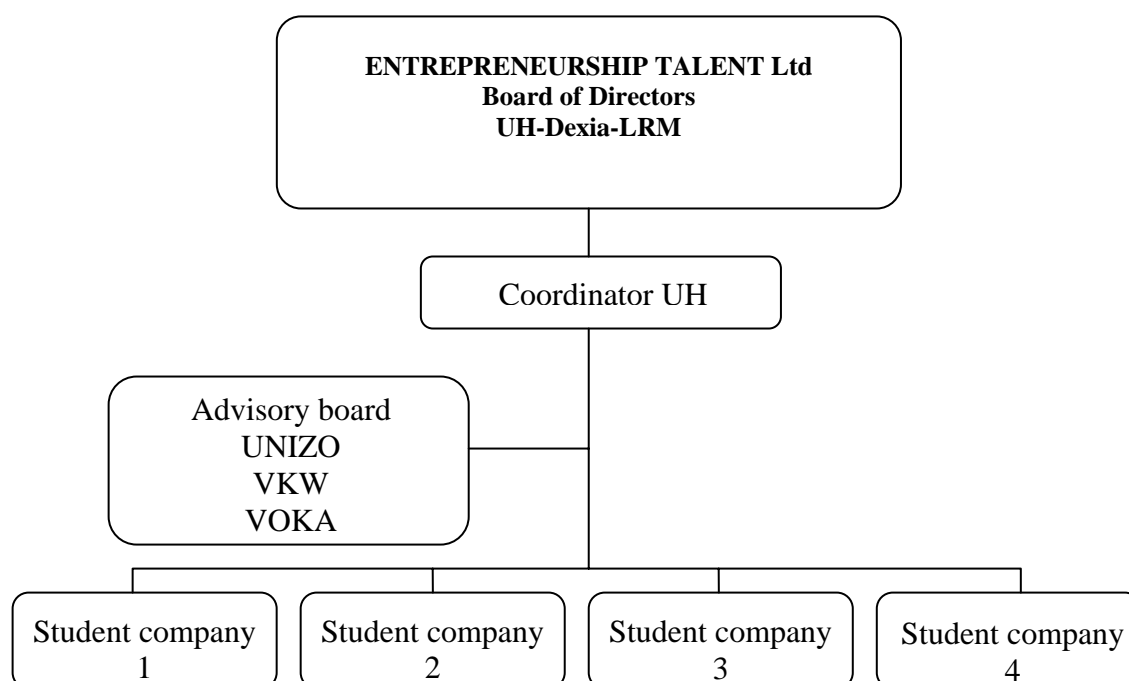
3. Entrepreneurship Talent Ltd

3. 1. Description Entrepreneurship Talent Ltd

Almost a year ago Hasselt University decided to start up their own venture capital firm ‘Entrepreneurship Talent Ltd’ in order to promote academic entrepreneurship initiatives of students. Research results indicated that less than one percent of the graduating master students start an own company at the moment of leaving the university. An analysis of a sample of alumni (after a period of 20 years) shows that this number grows to 4,6 %. This number is still very low in comparison to other non-academic student groups. Many reasons can be found for this, such as more career opportunities offered by large companies at the moment of graduation, high risk aversion, lack of practical experience ... The biggest wave of start-ups of academic students occurs after a period of 6 till 10 years after graduation. Some of them build up enough experience to start-up a company or get the opportunity to take over an existing company. After this period the start-up rate decreases significantly.

Three partners took part in the initiative to found “The Entrepreneurship Talent Ltd”: Hasselt University, Dexia-bank and L.R.M. (a regional venture capital firm of the province of Limburg). The share capital of the company was €70.000 in the first stage. The board of directors of the company has 4 members. Two of them come from Hasselt University and two of them come from the other partners. In this way a balance between educational and commercial objectives is guaranteed.

Figure 1 : Structure of Entrepreneurship Talent Ltd



Since three years every student of Hasselt University can select an entrepreneurship course as part of his curriculum. In this course the students learn to develop a business plan in small groups. This business plan can be the first step in the creation of the own student company as part of the Entrepreneurship Talent Ltd. In that case the student has to present his business plan to the board of directors in order to get the financial support to realise the plan. This financial support can be up to €25.000.

In case of acceptance a new company (student company) will be established.

In the student company the Entrepreneurship Talent Ltd. can take up a maximum of 99 % of the share capital. Other external shareholders are also allowed. After establishing the student company, the student can run his company autonomous. Support is provided on three levels :

- everyday questions and problems can be discussed with one coordinating person of the university. He is very close to the students and is very easily available;
- every student company is linked to one real-life entrepreneur. They regularly meet on the initiative of the student in order to discuss more strategic items of the student company. The employers organizations like Unizo, VKW and Voka are responsible for the recruitment of the real-life entrepreneurs.
- the student is reporting on a quarterly basis to the board of directors of Entrepreneurship Talent Ltd. In this reporting session there is also an exchange taking place of experiences.

Every student can run his company until the moment of graduation. For most students this period covers 2 till 3 years. At that moment a very important decision has to be taken. If the student company offers the student a long term economic viable perspective, he takes over all

the shares of the Entrepreneurship Talent Ltd. The price he has to pay for this is the initial capital increased by a fixed interest rate.

If the student company does not offer the student an economic viable perspective, the company will be stopped. In case of a liquidation profit, 75 % belongs to the student and 25 % belongs to Entrepreneurship Talent Ltd. In case of a liquidation loss, the full loss will be born by Entrepreneurship Talent Ltd.

In running his own company the student can earn some credits. In this way the initiative is part of the curriculum of the student on three levels:

- the development of the business plan is rewarded by 6 credits;
- the quarterly reporting activities are rewarded by 6 credits;
- the student can use his student company as a case study in his master thesis. The master thesis has a weight of 21 or 24 credits.

The item of integration of the initiative as a part of the curriculum is very important in order to offer the student the possibility to spend enough time to operate the student company.

Last but not least the student companies receive a full accommodation from the university. This means that they have their own equipped office and conference room. This is visible to all the other students and gives some extra attraction and publicity for the project within the university.

3.2. Results after the first year of activities

In April 2007 the Board of Directors of Entrepreneurship Talent Ltd started to study the first business plans. Because students from different faculties take part in entrepreneurship courses during an academic year, this becomes a continuous flow. Students preparing a business plan and indicating to use it for fund raising, receive a supplementary coaching session in order to prepare for a venture capitalist presentation.

Up till now ten business plans were fully presented at the board of directors. Seven of these plans received funding, one was rejected and two got the advice to rethink the plan. The table below gives some extra information concerning the accepted projects.

Table 1 : Accepted projects first year

	Activity	Number of students	Kind of partnership	Special remarks
Company 1	Production of race cars in miniature	1 student + 1 external person	minority shareholder	World wide business
Company 2	Market research	3 students	majority shareholder	Coöperation with student company in HEC Liege
Company 3	Organizing in-company training courses	1 student + 1 external person	subordinated loan	
Company 4	Web-design	1 student	minority shareholder	One full time employee
Company 5	Software	2 students	minority	

	development		shareholder	
Company 6	Selling hot tubs and sauna's	1 student	minority shareholder	Using licence of foreign company
Company 7	Consulting concerning environmental care	3 students	majority shareholder	Using licence of foreign company

3.3. Some interesting findings

Students who participated in entrepreneurship projects on the level of the secondary school are more open to take part in entrepreneurship courses on an academic level. These school projects surely open the mind of students towards entrepreneurial initiatives.

In the entrepreneurship course students prepare a business plan in small groups of 3 to 5 students. Students put all their energy and their creativity to come up with a very original idea, not really thinking about the possibility to turn this idea into a business. The proposed and accepted business plans did not cover the most creative ideas. The rather short realisation time (2 years) and a rather limited starting capital (€25.000), puts a burden on the possible ideas. Students try to find a solution for this by choosing for a service company with rather low capital intensity.

The founders of Entrepreneurship Talent Ltd tried to develop a kind of standard company structure and financial offer for the student companies, thinking this would satisfy the students needs. But even here we can see that every company is different and needs its own structure and financial conditions. The most self confident starting student entrepreneurs search other financial means than the ones of Entrepreneurship Talent Ltd.

The acceptance rate of the Board of Directors is rather high. Students prepare very well before taking the decision to try to turn the business plan into business. This decision has very important consequences concerning their student life and student career. Students with a rejected business plan are very motivated to find another idea or to restructure their business plan in order to succeed. They certainly do not give up after one attempt.

Up till now most of the projects are realised by students in applied economics and industrial engineering due to the limited number of faculties of Hasselt University.

The business ideas of the newly created companies are not necessarily linked to the kind of study of the starting entrepreneur. This conclusion offers opportunities for introducing the concept in non-entrepreneurial oriented faculties.

Students prefer to start up with a small team (2 or 3 people). The members of the team do not always belong to the same faculty or even to the same university. Also students from other schools on the campus site spontaneously join the project. The fact of belonging to a team encourages the students to take the step to start their own company. The two projects with a sole entrepreneur were well sustained by their family background with a long entrepreneurial tradition.

The profile of start-up problems of the student entrepreneurs is very similar to the ones described in the literature. The existence of Entrepreneurship Talent Ltd helps them very well in tackling the financial problem of the necessary funding.

Most of the effort is invested in finding customers. Once they succeed in finding the first customer, the company start-up is launched very well. In their promotion activities the students make use of their existing link to the university and their link to Entrepreneurship Talent Ltd. This gives confidence to new customers. The fact that the student companies share the same office accommodation can be seen of great value. It results in a large “learning by doing”- effect. Students of different student companies motivate each other to go on in trying to find customers. At the same time they also share good practices and they come up with joined efforts for some customers.

Although these students are very familiar with the business plan, they loose track very quickly after the moment they start up. They almost automatically change to a more intuitive kind of management. By obliging them to report quarterly, focused on the layout of their original business plan, we try to learn them from the beginning to keep a balance between planning and intuition. In this way they take the advantages of both ways of managing the starting company. Time will show if this results in a more prospering development of the start-up company.

4. Conclusion

Student companies within the framework of an academic entrepreneurship course are the next step to be taken by universities in order to develop the entrepreneurial skills of their students. More than only writing a business plan for a fictitious enterprise, this confronts the students with the real business world of starting-up their own company. It gives them the opportunity to develop their own entrepreneurial skills with a good balance between intuitive management and formal planning behaviour.

References

- Béchar, J.P., Grégoire, D. (2005), Entrepreneurship education research revisited : the case of higher education, *Academy of Management Learning & Education*, 4(1), 22-43.
- Bennis, W.G, O'Toole, J. (2005), How business schools lost their way, *Harvard Business Review*, 83(5), 96-104.
- Cheit, E.F. (1985), Business schools and their critics, *California Management Review*, 27, 43-62.
- Clinebell, S.K., Clinebell, J.M. (2008), The tension in business education between academic rigor and real-world relevance: the role of executive professors, *Academy of Management Learning & Education*, 7(1), 99-107.
- Edelman, L.F., Manolova, T.S., Brush, C.G. (2008), Entrepreneurship Education: correspondence between practices of nascent entrepreneurs and textbook prescriptions for success, *Academy of Management Learning & Education*, 7(1), 56-70.
- 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*, 15, 56-77.
- Harrigan, K.R. (1990), Professionalism in management education: is the Emperor naked in the 1990's?, *Academy of Management Review*, 15(4), 696-698.
- Hills, G., 1988, Variations in university entrepreneurship education: A empirical study of an evolving field, *Journal of Business Venturing*, 3, 109-122.
- Honig, B., 2004, *Academy of Management Learning and Education*, 3(3), 258-273.
- Katz, J., 2003, The chronology and intellectual trajectory of American entrepreneurship education 1876-1999, *Journal of Business Venturing*, 18(2), 283-300.
- Low, M., Abramson, M, 1987, Movements, bandwagons, and clones: Industry evolution and the entrepreneurial process, *Journal of Business Venturing*, 12(6), 435-458.
- Peterman, N., Kennedy, J., 2003, Enterprise education: influencing students perceptions od entrepreneurship, *Entrepreneurship, Theory and Practice*, 28, 129-144.
- Pfeffer, J., Fong, C.T. (2002), The end of business schools? Less success than meets the eye, *Academy of Management Learning & Education*, 1, 78-95.
- Sadler-Smith, E., Shefy, E., 2007, Developing intuitive awareness in management education, *Academy of Management Learning and Education*, 6(2), 186-205.
- Shane, S. A., Venkataraman, S., 2000, The promise of entrepreneurship as a field of research, *Academy of Management Review*, 25(1), 217-226.
- Timmons, J.A., 1999, *New venture creation; entrepreneurship for the 21st first century*, Boston, Irwin McGraw-Hill.

Vesper K.H., Gartner, W., 1997, Measuring progress in entrepreneurship education, *Journal of Business Venturing*, 12(4), 403-421.

Wren, D.A., Buckley, M.R., Michaelsen, L.K. (1994), The theory/applications balance in management pedagogy: where do we stand?, *Journal of Management*, 20(1), 141-157.

Wren, D.A., Halbesleben, J. R. B., Buckley, M. R., 2007, The theory-application balance in management pedagogy: a longitudinal update, *Academy of Management Learning & Education*, 8(4), 484-492.