

## **EDUCATING NETWORKING AND ENTREPRENEURIAL SPIRIT: MULTIDISCIPLINARY PRACTISE ENTERPRISE EDUCATION IN CO- OPERATING UNIVERSITIES IN TWO COUNTRIES**

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### **Introduction**

Entrepreneurship is a state of mind. Apparently Finnish educational institutions are facing the challenge in order to react to that observation. It is quite clear that different solutions concerning entrepreneurial courses in curricula in higher educational institutions like universities of applied sciences and traditional universities are here to stay. A key issue in assembling the suitability of entrepreneurship components in university level is to beat the barriers in human attitudes inside the universities as both personnel and students tend to act in a safe way. That is they want to present and attend lectures in the traditional way. Other solutions like Practice Enterprise courses [2], co-operatives established by students in order to earn some pocket money while doing real life projects during study time [9] and even incubations are seen as tricks instead of real options to learn entrepreneurship in a pedagogical process. Considering entrepreneurial culture and entrepreneurial development from both the individual and collective perspectives, visions must be developed as Koironen [11] suggest. He also says that the most difficult aspect to consider in university level might be the change of the teaching structures in universities because new ways of implementations are needed if the learning in courses is wanted to be happening "*through entrepreneurship*". Scott & al [13] mentioned other two ways of learning, which were "*learning about entrepreneurship*" referring lecturing and artifacts provided by the students as a result of learning like a well-organized business plan, and "*learning for entrepreneurship*" which stands for competencies development to prepare the students to start and manage a business.

It is stated in several studies including Hofstede [8] and recently Dousma [5] that one of the most crucial things in promoting entrepreneurship education is developing so called soft skills which should be taken into consideration. This definition of soft skills underlines both personal values, skills, and attitudes like awareness, self-confidence, self-discipline, self-marketing and stress resistance and interpersonal abilities like co-operation, diversity tolerance, willingness for teamwork, conflict handling and decision making skills. Thus, being an entrepreneur is more than gathering and using substance elements of information. It is a holistic view about oneself and one's relations to other people and, of course possessing the facts concerning

one's own specific field of business. The latter is taken for granted in education but not the first two. In addition to that, Bolton and Thomas [4] claimed that there exist 10 key "action" factors characterizing entrepreneurs: creativity, innovation, spotting and exploitation of opportunities, finding resources, networking, risk handling, controlling business, determination in the facing of adversity, putting customer first and creating capital. Likewise Koironen, Hofstede, Dousma and others suggest the new way of thinking and learning when it comes to pedagogical approaches in university levels.

Promoting entrepreneurship and higher education focusing on it is one of the most important core competencies in Finnish government policy nowadays. In addition to foster entrepreneurship in different educational ways, Finnish universities of applied sciences must also promote regional development providing students with contacts with surrounding working life and offering local small and middle size companies a forum to network with universities' personnel and students in order to take part in various development and research projects together.

There are at least two factors visible in the Finnish policy-makers thoughts and actions. Naturally they partly base their conclusions on the strategy of the European Union, which in so called Green Paper "*Entrepreneurship in Europe*" [3] highlights the importance of the creation of an entrepreneurial culture and climate and gives this task to educational system of the country. On the other hand, compared to some other countries Finland also has alarmingly small amount of entrepreneurs, that is, people who have their own company, and Finnish citizens' willingness of becoming entrepreneur is nearly the lowest in Europe. In Sweden 40%, while in Finland only 20% of the population in an age group 20 - 45 considered in the future to be entrepreneurs (Ministry of Education 2004). Also, in Finland people were asked [6] what are the major obstacles preventing people to establish their own company. The first obstacle was the possibility to go bankrupt, second fear to have less income, and third having less time with the family and friends. Therefore we can say that the top three obstacles in Finland were obstacles related to people's fears and attitudes, not the fear of lack of substance information, at least directly.

## **Some History**

How have we reached this state of entrepreneurship being so important and favored? In Finland there was a lot of interest towards society, education, and all sorts of development. The education system also was in turmoil with new universities being founded all over Finland. That was the time when higher education really spread out in Finland to be possible for everyone and, somewhat interestingly, at the same time many political or ideological visionaries very much stressed that the higher education must be free from all commercial values and viewpoints and independent of business life and working life.

All this led to the phenomenon of rather total isolation of universities and the working life in 70's. It was officially not considered proper to have close connections between universities and companies. But the times were still a-changing and remembering that time one feels somewhat strange looking at

the change in the attitudes both personal and official taking place during the 80's. One of the causes of this change was obviously the recession in the end of 80's with a lot of lay-offs especially by the large companies. Another thing changing the attitudes was the observation that even large companies could be sold or re-organized or the management (and especially the owners) could suddenly close down departments, even factories if it seemed that a better profit was to be made elsewhere. Whole companies could be moved to more lucrative pastures leaving a lot of unemployed persons behind. All this led to thinking that there might be a future in smaller and more flexible companies.

In Finland there are now about 250.000 companies of different size and of those over 220.000 are small or medium-sized. The small companies are a very important employer. From all this Finnish government draw obvious conclusions: if we want to keep people employed, it really pays to give more attention to the smaller companies, even individual entrepreneurs.

To meet the government's requirements concerning the employment target, there should be the total amount of 90,000 new Finnish entrepreneurs by 2010 [12].

### **The Practice Enterprise Project at Telecommunications and e-Business**

The core idea of this study unit – seen also as a project by the students – is to gather the attending students together, mix them carefully and group them into groups of about 10 students, as much heterogeneous as possible. This most multidisciplinary group then learns about enterprising in PBL-fashion, founds an enterprise, prepares the necessary plans, and executes those running their enterprise for this study year learning while doing.

Turku University of Applied Science has units at Turku and at Salo, about 50 kilometers between each other. The PE-project was begun at the department of Telecommunications and e-Business at Salo unit and after two years it also begun at Turku unit. Basically the study unit is same in both the units, but schedules differ a bit because there are differences in curricula and the students have somewhat different schedules.

The Practise Enterprise is a compulsory course lasting the whole study year and worth of 15 ECTS credits. The total amount of students attending this course is about 150 at Salo and about 100 at Turku. At Salo this work involves 7 business lecturers, 4 nursing lecturers, 4 business information technology lecturers, 2 engineering lecturers, and 1 communications lecturer as teacher-tutors. In addition to that language teachers and outside lecturers and visitors are used in specific fields of studies. At Turku unit this course involves 1 teacher of digital arts, 2 of multimedia, 1 of languages, 1 of international business, and 3 of software engineering. That is a rather varied and multidisciplinary group of knowledge and experience.

The first problems arise semi-immediately at the start of the study unit. The future nurses let it be known that they have entered the school to become caring nurses, not businesspersons. Future librarians also let it be known that they have no intention whatsoever to become involved with business. And so on. It can be rather a demanding task for the teachers to explain why this course is considered necessary especially to those students

whose training points to public services. It can be especially difficult sometimes to explain this to a foreign student – depending of his or her country of origin – as they may have very different views of entrepreneurship and small companies.

After thinking about future nurses and librarians, it can be surprising to hear that we have also faced a lot of difficulties meeting with the future engineers – even though from different viewpoint. The future engineers still seem to have the firm belief that a technically superior, good quality product will sell itself. There is no need for marketeers and especially no need for an engineer to study or even think about marketing. Again the same problem: how to explain to this group that they really must learn many a skill outside their “own” profession.

At the very beginning the students will be given a clear introduction paper for the study unit consisting of the actual timetable with deadlines for things such as examinations, documentation, lectures and fair. There are lectures of different subjects. The difference to a traditional course is that the number of lectures about each particular subject is rather small – one or two hours. How can one understand accounting after two hours of lectures? The group will search for more information, read assigned books and other material, support each other, and learn by doing. The students work in the practice enterprise company 8 hours per week: four hours under the guidance of a tutor teacher and four independently. There is also a link for the timetable in the home page of the Salo unit, which could be used to follow the project. All the material is found in electronic Optima system, which is available for everyone in the university intranet. Each practice enterprise has there their own file-folders, which they have to use in order to put their outputs for the study unit. When students need to contact numerous authorities concerning taxation, VAT, police etc. they can upload their questions and documentation also to Optima space and will get answers and instructions from simulated authorities through that.

Each group has a tutor-teacher available. This teacher’s role is more facilitating and guiding than eventually teaching. If the group is totally going astray or does not seem to know or understand what to do, the teacher will advice them, but tries to keep this in mimimum. This seems also to raise some amount of tension: why is the teacher not clearly and uniquely telling us what to do. Many students find this very distressing, but as the group will support its members, they learn to cope with uncertainty and missing or unclear information and to deal with different optional choices.

To make the work realistic, each group has a real background company. After forming the group it will visit its background company to learn about the the business – all aspects of it - and get real facts and figures from the company. They also meet a real entrepreneur and discuss with him or her. Thereafter the group can start to prepare a business plan. The idea of the background company is not to copy it but to gain the basic information about that particular business idea in order to shape a business plan for the virtual student company. Background companies are located in Salo and Turku area and they are small and medium sized companies in different business fields e.g. electronic and retail. Furthermore background companies often help student companies in practical matters such as commenting the business

plan, giving business gifts for the fairs and giving pieces of advice in budgeting. It has been reasonably easy to get the background companies and they have shown considerable interest towards this kind of co-operation with the university.

When the business plan is ready and a virtual company established, the virtual companies start to prepare for financing negotiations. Each student company will visit real bank managers in different banks in Salo and Turku area to get the business plans evaluated and to negotiate with them about the financing of the company.

All in all, these practice enterprises have been made as realistic as possible with real forms filled, real plans made, real background companies existing, and real banks being contacted. Only the enterprises do not use real money, and do not make real products. This can sometimes cause difficulties, but most of the time this lack of concretism is not noticeable.

### **Expanding abroad**

As an enterprise grows it often wants to expand abroad. That happened also with our Practise Enterprise education. Estonia is the closest neighbour of Finland when going South and Finns and Estonians have had very close relations for centuries save only for an exceptional period of 1940 – 1989. Now that situation has become normal, the relations are strenghtening and getting closer. In Estonia there has been a centuries long tradition of very small companies, handicrafts included. After getting back their independence the Estonians returned to previous ways. In 2004 there were about 40000 enterprises in Estonia. Of those 99.6% were small or medium-sized. In recent years the number of small or medium-sized enterprises (SME's) has been rising, and especially the number micro-enterprises have been going up [2].

The reason why Tallinn University of technology became ointerested in this education model is that although the number of SME's is reasonably large and has been growing, the university students have shown marked disinterestedness towards entrepreneurship. The university has offered different courses about founding an enterprise, but the students have not been selecting those courses. The university had to cancel many such courses because the lack of interest. This led the university to decide that just a traditional course format of entrepreneurship education is not the right thing to offer. What is needed is rather a form of education that can change the attitudes at the same time as giving the information.

Tallinn University of Technology has over 11000 students and personnel of 1750. It is organized into 8 faculties, and those into 33 departments. It has one university research center and 9 faculty research centers.

After initial meetings and discussion between the two universities, TUT decided to implement the same concept, although in somewhat smaller form. Turku University of Applied Science provided TUT with all the material used at Turku (translated to English and Estonian with EU financial support), the framework, the implementation, and experiences. Everything was shared. The two universities wanted to be partners in developing and applying this sort of education. TUAS sent a team of students and teachers to guide and coach

TUT while the first PE course was running in Tallinn. The difference between Tallin implementation and Turku implementation lies within the role of the background companies. In Tallinn the background companies wanted to have a more active and visible role being more involved with the operations of the practice enterprises.

## **Objectives and Results**

The objectives of this study unit can be divided into three categories, the third of which contains some familiarity with the first one, but there is one clear distinction in the point of view.

First there are objectives aiming to develop an entrepreneurial way of thinking and behavior, multicultural and interdisciplinary skills as well as taking responsibility and being self-steering. We could call them soft skills (or maybe human-skills).

Secondly there are very concrete objectives or results required, which are easy to measure like establishing the company (bureaucracy and legal issues), making the business plan, financing of the start up company (public support and lending), budgeting, paying wages, making WWW-pages, preparing for the fair etc. In other words, learning to create and creating a number of artifacts.

The third objective concerns with a third aspect, which at first seems to have very little to do with entrepreneurial world. If the students were to found their own company, they would carefully choose their partners, their business area, and so on. If they work in any organization, they will face different projects for which the members of the project group are selected by the management; the goals, budget, and schedule are also somewhat dictated. Yet this group must be able to work together efficiently and carry out the necessary work. This study unit can also be seen as a project, and as such it is very realistic model of a reasonable large project. Thus the third category of objects is to learn the skills needed in any project in any organization. This is something that is learnt by taking part in the work during the course – learning by doing.

All these three types of objectives have been reached rather well. Especially noticeable is the fact that the opinions and views of the students have in many cases changed being more favorable towards entrepreneurship. Surprisingly many of the students indicate that even though in the beginning they did not think of themselves being entrepreneurs, after this experience they have begun to think that it is possible, even rather realistic an option for them [10]. This was a result that should be achieved by any form of entrepreneurship education and in our case it can be said that this model of practice enterprise has fulfilled the expectations we had.

There is one more important and concrete result achieved. That is co-operation with Tallinn University of Technology which has been in close co-operation with Turku University of Applied Sciences in year 2006-2007. The aim of the cooperation was to launch a pilot project in Tallinn for business and technical students based on the project in Turku University of Applied Sciences in Salo. However, this piloting also emphasizes a role of the real companies in Finland and Estonia to engage in trans-national cooperation

through the practice enterprise project. After all, Finns and Estonians have had very close relations for centuries save only for an exceptional period of 1940 – 1989. In addition to that the incubation operations are going to be launched in both countries. In these incubation operations real enterprises, founded by the students are being fostered. More about this in Collan and Teder 2006 [2]

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