

Learning Together with Entrepreneurs - Description of a Project-Based Learning Process

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Abstract. This article describes a learning process between students, teachers, entrepreneurs and partners based on the output of the first year students in HAAGA-HELIA University of Applied Sciences, Porvoo unit. The students carried out a research project which gave students opportunities to learn the business processes of the local small and medium sized companies. The project provided extensive hands-on material for further use for the students and the researchers and trained the team working and project management skills of the students. The research was the base for a further co-operation with the companies in the field of business developing tasks. This article consists of the following parts: the inquiry-based learning method, the progress of the project, the research questions, the main results of the interviews, the beneficiaries and the benefits of the project, and conclusions.

Keywords: Inquiry-based learning, life-cycle curve, SME's, shared expertise, regional development

1 Introduction

This article describes a learning process between students, teachers, entrepreneurs and partners based on the output of the first year students in HAAGA-HELIA University of Applied Sciences, Porvoo unit. The main reason to the research project was to implement the new curriculum that is based on inquiry-based learning method. In addition the research was designed so, that it can be repeated annually in order to collect material for an extensive company life-cycle curve research. Added to this the results of the survey can serve the local entrepreneurs in their developing work as well as giving information to the public sector organizations. The aims of the research were:

- to give opportunity for the first year students to make acquaintance with the business processes of the local small and medium size companies,
- to train students team working and project managerial skills,

- to provide hands-on material for student's further use,
- to serve local partners in cooperation.

According to the Finnish Polytechnics Act (2003/351) the mission of the polytechnics is to provide higher education based on the requirements of working life and its development, to support the professional growth of individuals, and to carry out applied research and development that serves polytechnic education, to support the world of work and regional development taking the industrial structure of the region into account. In executing these tasks, polytechnics shall promote lifelong learning. In carrying out its mission, polytechnics shall cooperate with business and industry and other sectors of the labor market, in particular within its own region, and cooperate with Finnish and foreign higher education institutions and other educational establishments.

HAAGA-HELIA renewed the curricula during 2007-2010 in order to meet the requirements of the new strategy. The main points of the new HAAGA-HELIA strategy are:

- Pedagogic strategy - learning together with the working life
- Research, development and innovation strategy – reformation of business operations
- Service, salesmanship and entrepreneurship strategy – reformer of service and sale
- Internationalization strategy - strengthening competitiveness together with selected partners
- Know-how strategy – proactive working life skills

The new curriculum of HAAGA-HELIA Porvoo unit emphasizes inquiry - based learning method. Porvoo campus is considerably small having approximately 1000 students (HAAGA-HELIA in total 10000 students) and it is therefore agile and swift in adopting new methods.

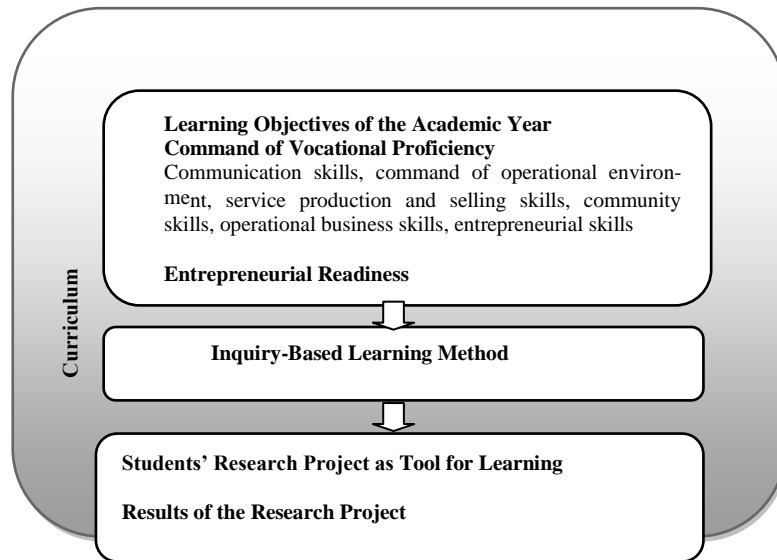


Fig 1 Strategy, Curriculum, Learning Objectives, Method, Tools and Results

Porvoo town is situated close to the Helsinki metropolitan area, in the middle of Eastern Uusimaa region with the biggest centre of oil refining and petrochemical industries in the Nordic Countries and a nuclear power plant. In spite of the small size of the region (90000 inhabitants) and Porvoo town (50000 inhabitants) the business life is active and buoyant. The industrial giants attract subcontractors and increase the business possibilities. The limited size of the economic area enables easy networking between HAAGA-

HELIA Porvoo unit, entrepreneurs and public sector organizations.

2 The Inquiry-Based Learning Method

According to Hakkarainen, Lonka and Lipponen (2004) the inquiry learning process can be divided into different core components. The process is shared between various players, and after the process the players share the experiences and findings, they share the expertise.

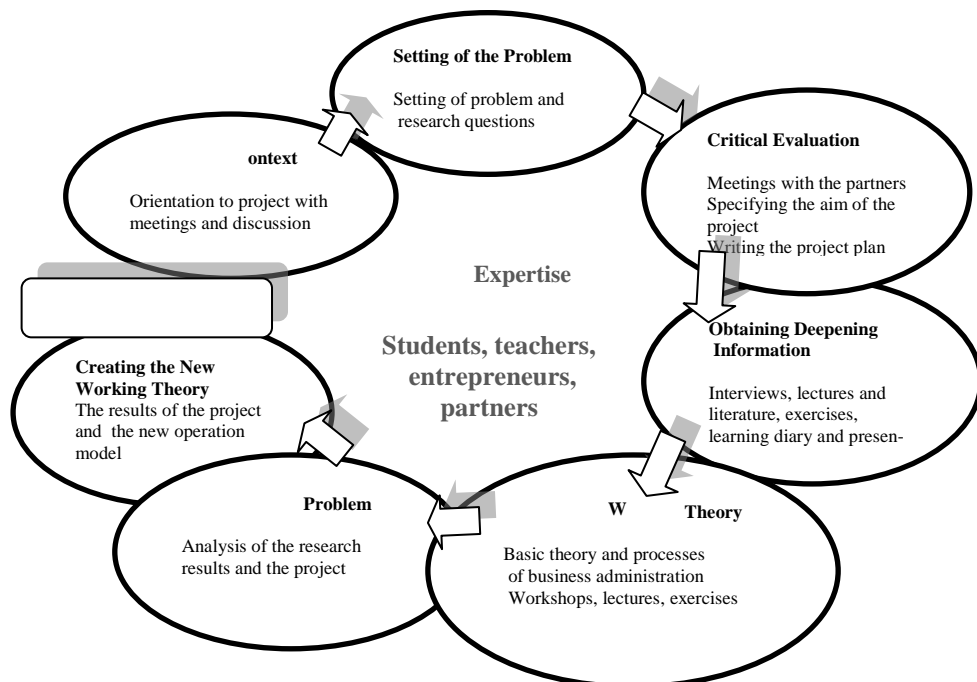


Fig 2 Inquiry-Based Learning Method

In order to apply the inquiry-based learning method in addition to the theoretical business studies, the teachers created a project for the first year students, during which the students interviewed local entrepreneurs, collected data and processed and analyzed it. The main aims of the project were to give students opportunities to learn the business processes of the local small and medium sized companies. The project also provided extensive hands-on material for further use and trained team working and project management skills. The project provided relevant information for two public sector partners in cooperation, municipal development company Posintra Oy, which was interested in how well the entrepreneurs knew about the supply of the public services and the sources of public funding. Employment and Economic Development Office was mainly interested in knowing the need for recruitment as well as the need for further training of the staff in the companies.

3 The Progress of the Inquiry-Based Learning Project

The autumn term 2010 started with traditional basic courses in business administration, communication, economics, business law and ICT. The students participated in lectures, exercises and exams. At the same time the students, teachers and partners in cooperation orientated to the research project by defining its aims, tools and research questions.

The size of the group, 72 students, was challenging. The students were divided in teams of 3 - 4 persons, and each student was responsible for finding one company for the interview. The companies were mainly found in the list provided by Posintra Oy. The whole team discussed with each entrepreneur and the team members were acting by turns as chair person and as secretary, who filled in the questionnaire. The rest of the team filled in the observation form.

The quantitative research method was chosen in order to secure the reliability of the result, and it also served the ICT learning best. The students pondered the research questions in details according to the theories they had just learned. The structure of multiple choice questions turned out to be very difficult, and finally the teacher team finished the questionnaire, which was commented by the partners and tested by the students in interview exercises. In the end of October the questionnaire with 82 questions was printed out and the teams started working.

After some difficulties and with the help of the teachers each team succeeded in finding suitable companies and in the end of November the teams recorded information in Excel. After that students analyzed the data and started to write comparison reports of the companies. The reports adhered to the structure of the questionnaire and included both SWOT and PESTEL analyses. In December the teams were gathered in a seminar where they held

presentations and compared the findings. During the spring term 2011 students continued analyzing the data whilst their ICT skills improved. In May 2011 the final results such as frequencies and cross tabulations were presented to the entrepreneurs, partners and the media.

It is worth of mentioning that during the research project the students continued with their theoretical business studies as usual. In spring term the students carried on with their work with the entrepreneurs by preparing marketing plans for selected companies, and in autumn term 2011 they will write internationalization plans for some of the companies.

The teacher team continues the work on the data. The amount of the year 2010 observations is huge: 72 entrepreneurs answered 82 questions, of which 57 were multiple-choice questions and 25 open ones, in order to help students to create comfortable discussion.

There are plans for the future that during next 3 - 4 years the first year students will interview new entrepreneurs in order to collect enough material for statistical conclusions of the life-cycle curve of the companies.

3.1 Research Problem and Research Questions

The research problem of the students' learning project was formulated as follows: What kind of businesses there are in Eastern Uusimaa region and what kind of differences and/or similarities do the companies have during different stages on the corporate life-cycle curve and in different industries?

Research questions were phrased in following way:

- How do the companies perceive their future, the growth of demand and competition?
- How does the development of national economy affect a company's everyday life?
- What is the impact of political, institutional and social environments on the companies?
- Do the companies need more work force?
- What is the level of know-how in the company: Does the entrepreneur or the staff need any additional training?
- Do the entrepreneurs need coaching?
- To what extent are public funding and public services used?
- How do the entrepreneurs perceive the status of entrepreneurship in Finland?

The life-cycle research continues until year 2015. The (annual) themes and questions for research are;

Growth of the company,
Labor => do the company need more labor and how to find the requisite labor?

Learning => what are future skills needed for the company?

Finance => how to finance companies investments?

Investments => what kind of investments are needed?

The research problem in the long run is to find out what kind of problems companies meet in different stages of their life-cycle and how they see the next stage in the companies life-cycle curve according to themes for the research.

3.2 Results of the Students' Research Project

Reliability and validity are the most important qualities of the instrument. Reliability is the consistency and the repeatability of the measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. In this research the questionnaire was detailed and well defined, so that even the first year students were able to interview the entrepreneurs and to make notes. The partners, as experts, actively took part in the formulation of the questionnaire and it was tested several times by the students and the teacher team. The big number of interviewers may have affected the reliability, but the teacher team was aware of this risk and controlled closely the process, and even contacted some of the entrepreneurs afterwards. Validity is the strength of the conclusions, inferences or propositions. In our case, the questionnaire was strictly based on the business processes and the questions of the partners' were answered.

Most of the interviewees were the entrepreneurs themselves. The majority of the companies had turnover less than one million Euros and less than ten employees. The age distribution of companies was considerably even, 21 companies were under four-year-old, whereas 22 companies were more than 20 years old. The market area of the companies was mostly local. The two most common branches were trade and welfare sector.

Most of the entrepreneurs considered the demand of their services and products good and the majority believed that both the demand and the turnover will grow in next 2-3 years.

The competitive position was considered to be good, although it was expected that the competition stepped up. The worst competitors were the local companies in the same field. The strength of the company was generally the client service, good quality, good products and suitable business location.

In the opinion of most entrepreneurs, the local politics had effect mainly in form of the taxes and in town planning. State politics and EU regulations had effect, too, e.g. alcohol locks in buses and in taxis.

More than half of the entrepreneurs answered that the lack of competent workforce has negative effect on the company's growth. New employees were mainly recruited on the basis of recommendations.

The employees needed training mostly in sales, marketing, customer service and information technology. Training was also needed in service production and service development. Entrepreneurs themselves needed coaching in sale and in marketing, ICT and in the use of the social media. Coaching was sought in most cases from the consultants, but one third of the entrepreneurs suffered from the lack of time. Most of the entrepreneurs were familiar with the public services and public funding, but they did not use them.

Most of the entrepreneurs felt that becoming an entrepreneur was easy and that the society offers enough of advice and service. Increasing the output and size of the company was considered difficult. Also the roles of the employer and the leader were seen as difficult and demanding. Very positive signal was that only one of the 72 entrepreneurs contemplated closing down the business in nearest future.

There were significant differences between men and women when comparing the attitudes towards entrepreneurship and the development plans as well as the growth of the companies. Men were willing to take more risks and to grow faster, while women were more careful in running the business.

4 Conclusions

The benefits of this research project can be divided in two parts: The benefits inside HAAGA-HELIA Porvoo unit and in Eastern Uusimaa region among the companies and partners in cooperation.

Inside HAAGA-HELIA the students were the major beneficiaries of the project. While visiting the companies the students observed the everyday life in the companies. In parallel with the interviews the students had great opportunity to train their skills in project management, team working and in self management. They also could compare the theories of business administration, economics and business law to the practice in small and medium sized companies. The students used their fresh communication knowledge when contacting the entrepreneurs and writing the comparison reports. They learned how to find information and how to master the MS-Office programs. The idea was not to train the students to become researchers, but during the project they familiarized themselves with the structure and management of a survey and learned to interview and observe. Event management was practiced, when the students organized an informative meeting to the media, partners and entrepreneurs. Motivation to business studies was high as the theory and practice were combined in the process. The collected material is so extensive, that it can be collated in final theses by the third year students.

The teacher team met new challenges due to the size of the group and consequently more attention had to be paid to management and control, and the teachers' leadership skills were tested. The new teaching method was interesting and the teachers found rational reasons for deeper cooperation and team working. The project itself gives potential for a long-span and productive cooperation with the local entrepreneurs, too. Thirty eight of the seventy

two interviewed companies wanted to continue cooperation with Haaga-Helia in the form of developing work and during the spring semester 2011 a marketing plan was made for six companies. In the autumn semester 2011 the cooperation continues with some of the companies and the students are making developing projects both in internationalization and in financial accounting.

HAAGA-HELIA Porvoo unit could through the project fulfill the obligation given in the Polytechnics Act. At the same time the main issue in the HAAGA-HELIA strategy, learning together with the working world, was fulfilled. Also the demand of shared expertise was met and the aims of the first academic year were attained.

The partners in cooperation, Posintra Oy and Employment and Economic Development Office, received up-to-date information from the topics that are important at the present moment. The occupying questions were answered, like how the entrepreneur feel about the use of social media, how much they use governmental and municipal consultation services and do the companies need financing for investments or for developing the operations. The voice of the entrepreneurs was clearly heard in the results and thereby the partners can develop their services to meet the needs of the entrepreneurs in a better and more efficient way.

At the interviews the entrepreneurs in Eastern Uusimaa had the opportunity to contact students, future potential employees, directly. The entrepreneurs were content with the chance of sharing their experiences with keen young listeners and with the opportunity to tell their thoughts of the highlights and mishaps of the entrepreneurship. The majority of the respondents appreciated the contact from the school and would find it easier to turn to the teachers and students in their future projects. By means of the results the entrepreneurs can compare and contrast their own business situation with the others. Even 38 companies answered, that they are willing to cooperate with HAAGA-HELIA in the future, too, and during the spring semester 2011 students prepared six marketing plans for the companies.

The officially approved strategy of HAAGA-HELIA defines the operational framework, but in practice the teacher team was obliged to plan and define the new process and the structure to implement the strategy. Also, a special attention has been paid to integrate the general learning goals of the BBA program, including both generic competencies, professional skills and the project goal to meaningful entities. In addition teacher's work has been changed from the role of independent actor to the role of team worker. The project has been designed for serving the partners, and in the long run, also the local entrepreneurs. However, the most important outcome of the project was the broadened experience of the students.

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