Entrepreneurship Education in a Classroom – What's about Entrepreneurship there?

The aim of our paper is to present practices Finnish teachers take as entrepreneurship and enterprise educators. The empirical study builds on a survey including responses from 167 teachers working in basic and secondary schools. The survey was conducted as a web-based questionnaire and the quantitative data was analyzed by SPSS software. We present what are the average amounts of using different methods and practices, also variances and frequencies will be presented. By explorative factor analysis we find some interesting groups of entrepreneurship / enterprise actions that will also be presented.

Keywords: *Entrepreneurship, Entrepreneurship Education, Teaching, Basic Education Level, Secondary Education Level, Core Curriculum, Factor Analysis*

Introduction

Entrepreneurship and enterprise education has increasingly gained interest in the European Union (Commission of the European Communities 2003, 2006), and for example in Finland, entrepreneurship education has long been included in the national core curriculum (Finnish National Board of Education 2003, 2004) as one of its cross-curricular themes. As entrepreneurship education research has been mainly conducted at the adult education level and studies about entrepreneurship seems to concentrate on higher education level we choose to study the practices amongst teachers at basic and secondary education levels. Furthermore, while the research on entrepreneurship education has largely concentrated on the conceptual difficulties of entrepreneurship and on the possibilities of implanting the promotion of entrepreneurship into the school curricula, the empirical results on the entrepreneurship education practices in the schools are practically non-existent. This study seeks to focus on this research gap.

We propose the view that in teachers' daily work they meet several simultaneous transformation processes embedded in entrepreneurship education. Teachers build the bridge

between the general aims of entrepreneurship education and their actual outcome, for example increasing entrepreneurial activities in the society, as they transform the aims of entrepreneurship education into teaching activities and into learning outcomes. Whilst the entrepreneurship promotion programmes do not explicitly identify the methods best suitable for entrepreneurship education, the teachers are in the central role in operationalizing entrepreneurship education, and more specifically, in finding the best practices (Hynes 1996; Henry *et al.* 2005a, 2005b). However, according to Seikkula-Leino (2006, 2007) and Fiet (2000a, 2000b), teachers have at times had difficulties in identifying contents and means by which to respond to challenges posed by entrepreneurship education. In our earlier studies we found out that entrepreneurship education in practice is rather limited since it is not a part of normal schoolwork. Instead, separate projects and theme days are carried out to fulfil the requirements set out in the curricula. In addition, many teachers do not know enough about the curricula or strategies connected to entrepreneurship education. (Seikkula-Leino *et al.* 2010; Ruskovaara *et al.* forthcoming)

As we are a bit worried about the role of entrepreneurship in entrepreneurship education, we aim to present here the results of a study where teachers at basic and secondary education level faced the questions about entrepreneurship education. That is, how often and what has been done in entrepreneurship education. The purpose of this article is twofold: first, we present average amounts of specific actions and second how these actions, methods and practices are linked together.

Concepts and Theoretical Background

Next we will present the main consepts and theoretial background. As the basis of entrepreneurship education layes on entrepreneurship we first present some definitions of it,

then enterprise and entrepreneurship education will be described and after that its' role in Finnish core curricula.

Entrepreneurship

The concept of entrepreneurship is ambiguous and no consensus has been reached about one single, comprehensive theory of entrepreneurship (for example Bygrave & Hofer 1991; Shane & Venkataraman 2000; Davidsson *et al.* 2001; Eyal & Inbar 2003). According to Schumpeter (1934) the main function of entrepreneurship is *innovation* which means the reorganization of resources to enhance productivity, the creation of new commodities or new ways of producing them as well as the creation of new markets and new materials. Quite a many researchers argue that entrepreneurship is about *bearing uncertainty* (for example Knight 1921; Drucker 1985), where the entrepreneur tries to strike a balance between the demand and supply of the market. Bygrave and Hofer (1991) argued an entrepreneur to be someone who *perceives an opportunity and creates an organization to pursue it*. Shane and Venkataraman (2000) defined entrepreneurship as a study of sources of opportunities, the processes of discovery, evaluation and exploitation of *opportunities,* and those individuals who discover, evaluate and exploit them. Sarason, Dean and Dillard (2006) pointed out that despite the fact that entrepreneurship is treated as a nexus of the individual and opportunity, entrepreneurship is a *social undertaking* and must therefore be studied within the context of a social system.

Entrepreneurship Education

The research of entrepreneurship education builds its basis largely on the conceptual understanding of entrepreneurship and learning. As Gibb (2005) has stated, entrepreneurship education is about learning for entrepreneurship, learning about entrepreneurship and learning

through entrepreneurship. Therefore, entrepreneurship education should be considered both as a method of learning as well as a content of learning (see Remes 2003). On the content of entrepreneurship education, Gibb (2005) has further distinguished between enterprising behaviour and entrepreneurial behaviour. The only major distinction between these two is that entrepreneurial traditionally refers to business activity, whereas enterprising can be used in any context (for example Gibb 2005). In order to avoid confusion and to be exact, this article uses both concepts explicitly: entrepreneurial (referring to the business context) and enterprising (referring to general education and learning processes).

As the outcome of entrepreneurship education, learning has been presented to include several layers. Entrepreneurship education introduces entrepreneurship as a career choice, it supports the entrepreneurial way of seeing and doing things and it characterises a way of teaching and learning (Steyaert & Katz 2004; Berglund & Johansson 2007). Entrepreneurship education for younger students has been suggested to concern more about learning the spirit and ways of doing and seeing than about business activity. The aim is that students could take more responsibility for themselves and their learning (for example Gibb 2006; Remes 2001, 2004). In other words, entrepreneurship education should supports the students' feeling of their internal locus of control. As a learning outcome, the students would also try more persistently to achieve their goals, to be creative, to discover existing opportunities and in general to cope with the complicated society. This education involves the development of attitudes, behaviors, skills and attributes applied individually and/or collectively to help individuals and organizations of all kinds to create, cope with and enjoy change and innovation. (Gibb 2006; Frank 2007) This process involves higher levels of uncertainty and complexity as a means of achieving personal fulfillment and organizational effectiveness.

While the learning outcomes of entrepreneurship education has been under careful research, the viewpoint of teaching has been seemingly underdeveloped. According to Kyrö

(1997), entrepreneurship education deals with three main components: 1) self-oriented, 2) internal and 3) external entrepreneurship. Self-orientated entrepreneurship refers to an individual's self-oriented behavior. Self-oriented entrepreneurship is the basis for developing internal and external entrepreneurship (Remes 2004, p. 84). Internal entrepreneurship deals with entrepreneurial and enterprising behavior. External entrepreneurship is about doing business (Ristimäki 2003, p. 6). Within fairly young students, self-oriented entrepreneurship is emphasized (Remes 2001). As a consequence, the focus is not only on developing factors related to motivation, self-awareness and creativity (for example Menzies & Paradi 2003), and responsibility for learning, but also on co-operation and interaction, which refer to internal entrepreneurship development. In comparison, in the school context, external entrepreneurship education is about developing innovation (see also Gibb 2005, p. 48) and business ideas, as well as strengthening co-operation between schools and the world of work, including such activities as work experience and study tours.

Entrepreneurship Education in Finnish Curricula

National core curricula regulate activities in basic and secondary education level schools. According to curricula entrepreneurship education should be present in the everyday education delivered in Finnish schools, and not only in classroom but also happenings outside school and it should have a role in school climate and culture. The curricula define entrepreneurship education both as content and method of teaching and learning. Although the theme is called "entrepreneurship education" it is of great importance to know that the definition on this aspect has a fairly broad meaning: it contains not only entrepreneurship, but also as an entrepreneurial and enterprise education. Therefore it is about learning through, for and about entrepreneurship (see also Gibb 2005). Entrepreneurship is approached not only as a course or subject, but the theme should be embedded in all subjects in every level. In curricula entrepreneurship is shown

as a career choice but also entrepreneurial way of seeing and doing is supported. For younger students' entrepreneurship education has been suggested to concern more about learning the spirit and ways of doing and seeing things than about business activity. The aim is that students take more responsibility for themselves and their learning. As learning outcomes the students would try more persistently to achieve their goals, to be creative, to discover existing opportunities and to cope with the complicated society. As entrepreneurship education is a cross-curricula theme for both basic education and upper secondary education, especially intrapreneurship is considered as a main target in the school context. (Finnish National Board of Education 2003, 2004)[1] Since year 2010 curricula for vocational education and training contain also studies about entrepreneurship, involving elements developing an enterprising attitude. (Finnish National board of Education 2009a, 2009b)

Even though the curriculum basis for developing entrepreneurship education in Finland is strong, we can find teachers having difficulties in finding contents and means to respond to challenges posed by entrepreneurship education (for example Seikkula-Leino 2006, 2007). The translation of the learning targets explicated in the curricula into distinct teaching practices may be both too challenging and tacit for teachers. Thus it seems that entrepreneurship education has not yet established its position in teacher education and in the continuing professional education of teachers (Seikkula-Leino 2007). Because of that, there is no doubt that the inclusion of the subject in school curricula remains very challenging (Seikkula-Leino *et al.* 2010). In this study we suggest that more attention should be paid for the operational teaching intructions and advice that could support the teachers in their efforts of entrepreneurship education.

[1] National core curricular diverges in basic vocational training level, although every study module of vocation includes own section of entrepreneurship education. The conception of learning is similar than basic and upper secondary level though intrapreneurship is much less highlighted. (Finnish National Board of Education 2009a; 2009b)

Methodology

In this chapter we will priefly present the framework for data gathering and describe the methods used in the data analysis.

Data Collection and Methodology

Our empirical study builds on a survey data including responses from 167 teachers working in basic and secondary education level. The data was collected between September 2010 and April 2011 conducted as a web-based questionnaire. The data was collected for testing the questionnaire itself, in part of ESF-funded project called Measurement Tool for Entrepreneurship Education, and the response does not represent any particular population directly. However, we can assume that teachers who show interest in the theme relating with entrepreneurship have answered and thus, the results are likely to show overoptimistic figures.

The questionnaire includes five main parts: 1) entrepreneurship and enterprise / entrepreneurship education, 2) pedagogical approach to entrepreneurship, 3) enterprising school culture, 4) learning environment and 5) utilizing and working in different networks. The analysis in this article focuses on analysis of the first part in the questionnaire. The first part is built of 23 items concerning the ways of putting entrepreneurship into teaching.

Teachers were asked how many times they had used specific methods of entrepreneurship education during the last six months. The teachers responded by choosing a number from 0 to 30 which best describe their actions. In the questionnaire the range of 0-30 counted for actual times of using a method, and in case a teacher had used a specific method for more than 30 times, they were instructed to respond with the number 30. There were, for example, items concerning study visits to companies, discussions about entrepreneurship or economical news, using of narratives, games and materials connected to entrepreneurship as

well as making a business plan or projects' organized by students. The quantitative data was analyzed by SPSS software. In the analysis we present the data as a whole without for example differentiating between different educational levels, since the number of respondents is rather limited.

Besides studying the basic level of entrepreneurship education practices in the schools, we also seek to understand the underlying relationships between the different methods to entrepreneurship education. To do that, we both conducted an analysis of variances and means, but also an explorative factor analysis. By presenting the means we wanted to create an overview picture of an average entrepreneurship educator and by factor analysis we are aiming at seeking the connections between different actions teachers take while acting as entrepreneurship educators. In the next chapter we will present analysis and the most interesting findings.

Data analysis and results

The questions in the questionnaire concerned the teachers' use of different methods in entrepreneurship education. (See table 1.) The question was built up of 23 items that represented different ways of teaching entrepreneurship for students. All together 167 respondents answered to all of the items, and the item-variance shows, that teachers react differently to each item. That is, the responses of each item vary according to the respondents' situations.

Table 1. The teachers' use of different methods of entrepreneurship education (n = 167).

"During the last six months, how many times have you …"	users	mean range
1. discussed (with students) about topical economical news	136	9,70 0-30
2. near-by companies mentioned in teaching	140	9,35 0-30

3. discussed about ones' actions effecting to financial issues 0-30	136	9,26
4. discussed (with students) about entrepren. connected to subject 0-30	131	9,03
5. used materials about entrepreneurship as added teaching material 0-30	129	7,73
6. guided students to utilize a variety of different experts 0-30	128	6,75
7. guided students how to manage with their money 0-30	123	6,47
8. discussed about entrepren. connected to students hobbies 0-30	112	6,19
9. used entrepreneurship stories as teaching material 0-30	111	5,53
10. had students to write an essay / make a presentation about entrepren. 0-30	104	4,94
11. facilitated students' projects (event, exhibition, newspaper, video etc.) 0-30	110	3,63
12. organized teaching together with entrepreneurs etc 0-30	87	3,34
13. enabled students to create marketing etc. material for companies 0-30	60	3,08
14. had students to make a business plan 0-30	71	3,26
15. had study visits to companies 0-30	81	2,98
16. organized a project based on / connected to working-life / companies 0-30	74	2,95
17. enabled students to create their own company 0-30	64	2,70
18. enabled students to organize a bring-and-buy sale etc. 0-30	78	2,44
19. organized a visitor from a company 0-30	61	1,97
20. organized a theme day / an entity connected with entrepreneurship 0-30	65	1,76
21. organized bees 0-30	57	1,68
22. organized / taking part in competition connected to entrepren. 0-28	57	1,35
23. used entrepreneurship games 0-28	32	1,03

(The items freely translated from Finnish)

The results in table 1 suggest that teachers' practical approaches to entrepreneurship education are surprisingly diverse. The items "mentioning near-by companies", "talked about entrepreneurship with students", "discussed (with students) about entrepreneurship connected

to subject" and "discussed (with students) about topical economical news" are the most popular ways to connect entrepreneurship into the entrepreneurship education practices. It seems that for teachers, talking about entrepreneurship is the easiest way to promote entrepreneurship education, and most of the teachers in the study use this approach. The mean scores of the discussion approaches also suggest that this method is used in a regular basis. Whilst it is promising that entrepreneurship is discussed, also more active approaches are needed. Teaching materials like entrepreneurship stories and materials about entrepreneurship are widely used as well, and average numbers are pretty high and it seems that materials are quite well known.

Surprisingly, facilitating the students' projects in schools seems to score very high in the analysis. Roughly two-thirds of the teachers have used the projects. At the same time it can be noticed that the average number of use within a semester stays rather low. These activities are often so massive that it is understandable that they are used quite seldom. In fact, the relatively sparse use of the entrepreneurship projects could be understood by the large scale of the methods and their need for extra resources.

About half of the teachers' have applied study tours in their entrepreneurship education and fewer teachers have organized a company visitor to school. It seems that even if these methods would seem to be fairly easy to arrange, they are not widely used and even among the users of these methods, they are used only a few times in a semester. It is also rather interesting that taking a class to company is more used method that inviting a visitor to school. The responses don't tell us, for example, how big the groups of students in study tours were and how many students were present and listening the company visitor. Although the numbers might indicate that only a part of teaching groups had opportunity to take part those activities.

The item “enabled students to create their own company” showed an interesting view: More than one third of the teachers marked they have used that method. That number seems to be quite high, especially when remembering that a large number of respondents work at the basic education level which could be associated to be quite far from “students own companies”. Finally, it seems that educational games about entrepreneurship are not yet introduced in schools. Only one fifth of teachers have used the method and it could be suggested that this direction of development has a huge promise. It could also be seeing that methods like making a business plan, developing ones’ own business and making materials for companies are used by half or less than half of the responses, but those who are using them use them on quite a regular basis.

The analysis in table 1 shows also another interesting finding. As we presented earlier, entrepreneurship education is one of cross-curricular themes that is meant not only to integrate to schoolwork, but also to enhance cooperation between school and surrounding society, and not to mention the using of different learning environments. Therefore, entrepreneurship education practices can be divided into those practices that can be applied in the normal daily school work and those only applied few times in a semester. Therefore it is possible for a teacher to organize 10 discussions within the semester without any inconvenience, whilst doing company visits 10 times in the period would require manifold organizing and planning. Taking this into account, communication about possibilities within entrepreneurship education would not be too misguided but rather give the teachers new insights on the ways how they could build up their entrepreneurship education plans.

In the table 1 we can see that quite a many frequently used methods take place in classroom, whereas there are only a few methods that likely require operations outside classroom and are frequently used. The table also shows that there is a large variety of methods where the near-by firms and other different organisations can be utilized to both

enlarge the learning environment and to enrich the teaching itself. Development into those directions could be useful as they show a great deal of potential in order to fulfill aims about learning environment and entrepreneurship education set in the cross-curricula.

As we also wanted to seek the links between different methods used in entrepreneurship education, we took factor analysis. The analysis shows a structure of four factors (see table 2.) and they represent different dimensions of teacher's entrepreneurship education practices. We labeled them as follow: 1) Leading discussions about economics and entrepreneurship as well as the role of different players in the society, 2) Business-life related activities, like study visits and projects organized by students, 3) Guiding students financing matters, and 4) Using games and taking part in competitions connected to entrepreneurship.

Table 2. Results of factor analysis.

Variable	1	2	3	4
had students to write an essay/make a presentation…	,683			
used entrepren. stories as teaching material	,797			
used materials about entrepren. as added [...] material	,750			
near-by companies mentioned in teaching	,798			
guided students to utilize […] different experts	,820			
discussed about entrepren. connected to subject	,799			
discussed about entrepren. connected to hobbies	,849			
discussed about topical economical news	,621			
had students to make a business plan	,555			
enabled students to create marketing etc. material	,532			
enabled students to create their own company	,736			
organized teaching together with entrepreneurs etc.	,616			
had study visits to companies		,586		
organized a visitor from a company		,777		
organizes bees		,755		
enabled students to organize a bring-and-buy sale etc.		,768		
facilitated students' projects (event, exhibition, video etc.)		,834		
organized a project based on/connected to working-life/companies		,731		
organized a theme day / an entity connected with entrepren.		,688		
discussed about ones' actions effecting to financial issues			,616	
guided students how to manage with their money			,627	
used entrepreneurship games				,826
organized/taking part in competition connected to entrepren.				,735

From the factor analysis we draw some interesting conclusions. The first factor has many items and strongest loadings seem to have entrepreneurship discussions and guiding actions. Also using entrepreneurship stories and other materials have their place there. It seems that quite easily organized actions, like different kinds of discussions, are connected to each other. Discussions can be put together almost ad hoc, it necessarily doesn't need that much of planning and can be a part of a lecture in a class room. Discussions seem to have a major role in this factor, but also other players of society seem to have a part there. This connects nicely the aims of curricula where students should have understanding of society and recognize roles of different players in society. Amongst the respondents the use of different kinds of entrepreneurship materials was grouped in this factor. It is promising if materials were widely used and different methods enables experienced for different learners and therefore fulfills the aims of curricula. However, since these kinds of questionnaires cannot control for the quality of the materials, this issue could provide fruitful opportunities for future studies.

The second factor seem also have many items and there both entrepreneurs' and companies have a role in teaching, but also larger, time consuming, real business-life connected projects can be identified in the factor. It could be suggested that using study visitors from companies goes together with having study visits in companies and study visits that have counterpart from outside world seem to be closely related. Visits could quite easily enlarge the learning environment and therefore create a stronger connection between school and other players of society. If students have a role in organizing the visits they get nice experience of project-like processes, learn responsibility and fulfill other learning aims set in strategies.

Different real business-life related development projects seem to be connected and can be identified in the factor two. If students for example prepare marketing materials for

companies or create their own business ideas together with entrepreneurs show the practice a great potential and fulfills nicely the aims: students become acquainted with the world outside school, feel what working in networks can be, they create their own networks and prepare for the time after school.

Also grouping between projects organized by students can be seen. There were items like organizing bees, festivals or productions. There students, presumably, have active role and expose to project-like working which goes nicely together with entrepreneurial pedagogy. Also some activities which are held for collecting money for the class, like bees, bring-and-buy sales seem to have link between. As there is a strong connection between bigger and perhaps only once processed activities, like bees and bring-and-buy sales, we can assume that these activities provide nice learning experiment for students, but in order to fulfill the aims of the curricula, entities should have the nature of longer time span and continuity.

Among four factors two of them seem to have only two items loaded there. It is understandable that if a teacher both discussed (with students) about topical economical news (s)he also leads discussions about ones' actions effecting to financial issues (see factor 3). Also entrepreneurship games and competitions seem to form a group of actions (see factor 4).

On the perspective of before described definitions of entrepreneurship we seek to present some conclusions. For example, items connected to *bearing uncertainty* (Knight 1921; Drucker 1985), like discussions about financial issues, are quite often used practices and they are used by most of the respondents. We believe social and co-operative skills have a significant role in everyday teaching. Although on the perspective of entrepreneurship and *social undertaking* (Sarason *et. al* 2006), items like organizing bees and bring-and-buy sales, seem to have lower scores. There teachers might think that those activities are a bit detached from the general aims of subject and therefore the scores are not higher. Most of the items connected to *exploring opportunities* (Shane & Venkataram 2000), like guiding students to

utilize different experts, already seem to be well received by respondents. Since innovativeness is a common virtue, could items connected to *innovations* (Schumpeter 1934), like making a business plan and creating marketing material for companies, have a brighter future ahead.

Discussion

In the introduction of this paper the purpose of this article was set to present results from the study on the teachers' entrepreneurship education practices and to provide some tentative implications for the development of entrepreneurship education practices.

The data analysis suggests that the entrepreneurship education could be characterised by a wide array of activating teaching approaches that can be organised easily in the regular classroom. Yet, there can be seeing a great potential of both enlarging the learning environment and enriching teaching when operating outside of the classroom with entrepreneurs, firms and other organisations. The entrepreneurial education contains discussions about entrepreneurship and possibly could include students' projects where teacher operates more as a facilitator than "controlling" teacher. It could be concluded that, in this group, the basis for entrepreneurship education is well under way.

The results give, however, reason to further findings. Teachers' entrepreneurship education seems rather lightweight in its application. That is, the teachers seem to follow those methods that can be applied without large scale organizing with other parties. This finding suggests that there is much room for enriching the teachers' entrepreneurship education practises by providing them support and resources for more challenging but possibly effective methods. Should this be the case, it is important to invite the school principals to commit themselves more deeply into the implementation of entrepreneurship education in their schools. Furthermore, it could be concluded that the teachers' networking

capability seems to be the key to enriching entrepreneurship education in schools. Again, the principals seem to be in central role in supporting teachers to create and exploit both schools' and personal networks in their entrepreneurship education.

It is also likely that a wide array of entrepreneurship education methods could be followed more easily in teachers' joint projects. That kind of approach, at least in the very beginning, might need extra resources, but could be useful way to enhance co-operation between teachers. It also might be a concrete way to put the genuine idea of cross-curricula theme into practise where integration between different subjects takes place. Also, by developing entrepreneurs' pedagogical know-how, more fruitful co-operation between school and firm could be developed: mutual commitment can provide long-span co-operation easier, it can open new doors as well as create networks and bring up novel ways to operate further. The innovative ideas seldom take place if only organising a study visit every once and while. We presume that in a long term co-operation can a win-win situation be achieved where learning and contents that are important for entrepreneur and firm are linked. There the students' get a real-life experience and they also might have fresh ideas for companies of how to plan marketing materials or company presentations.

The aims of entrepreneurship education are to help students to perceive society from the viewpoints of different players, to develop the capabilities needed for civic involvement, and to create a foundation for entrepreneurial methods. There, the schools' learning culture and learning environment should support the students' development as independent, initiative-taking, goal-conscious, cooperative and engaged citizen (Finnish National Board of Education 2004, pp. 40-41). Although a large variety of entrepreneurship education approaches were used, we may wonder whether they were in balance according to what Gibb (2005) has stated: entrepreneurship education is about learning for entrepreneurship, learning about entrepreneurship and learning through entrepreneurship. According to the data, for

example social skills were presumably learned, but methods strongly connected to real companies and “world out there” were scarcely used. Also, it seems that items (see table 1) connected to learning for and about entrepreneurship were emphasized both in amounts of guestions as well as in means presented. That is, guestions about “through entrepreneurship” (like students creating their own company) were asked fewer times and they also had lower mean. One of the next steps therefore should be categorizing and analyzing these items more precisely.

Conclusions and Implications for Practice

Increasing amount of research deals with teaching entrepreneurship and students activating methods, although, a clear definition about entrepreneurial pedagogy is still missing. We haven’t found articles that are especially linked to methods and working approaches in entrepreneurship education. Therefore, we see our article is of value to open up this discussion, as we would like to develop useful practices for teachers to utilise in entrepreneurship education. This article will offer information on entrepreneurship education practices and it points out many interesting themes. Not only the data can be used when steering the entrepreneurship education methods and practices in the future, but also shows possible contents for teachers’ training and it pinpoints the development of ESF-funded project Measurement Tool for Entrepreneurship Education. One of the future steps is to define effectiveness of entrepreneurship education: which methods and working approaches are effective and which are not. That is a very crucial point but before that can be done should teachers’ practices be illustrated and labelled. That we have started to do by the data described here.

The study concludes with set of implications for the further development of steering entrepreneurship education. First, what methods seem to be the most used in school practice.

Second, how and in what direction teachers' training could be developed and third, how can methods used in entrepreneurship / enterprise education be measured.

As a summary, it seems that used methods in entrepreneurship education are linked to those presented and valued in core-curricula. Although, it might be, that used approaches are mainly chosen by the teachers where the active role of students does not beginning in the early steps of learning processes. What the results then do not show is whether networking and studying take place between classes, or are there any actors outside of school context involved. Also we could not get answers, whether the teaching and it's planning is led by one teacher or by group of teachers, although we presume the culture of working alone might sit quite tight. These questions, for example, could be fruitful starting point for further research with larger data.

The purpose of this article is twofold: first, to present the results of teachers' entrepreneurship education practices and second, to provide some tentative implications for the development of entrepreneurship education practices. Although our data is quite limited and context is Finland, our research shows some interesting viewpoint for further development of entrepreneurial pedagogy and teaching entrepreneurship that could be utilised in other contexts, as well.

References

Berglund, K. & Johansson, A. W. (2007), "Entrepreneurship, Discourses and Conscientization in Processes of Regional Development", *Entrepreneurship & Regional Development*, 19, 499–525.

Bygrave, W.D. & Hofer, C.W. (1991) “Theorizing about Entrepreneurship”, *Entrepreneurship Theory and Practice*, 16, 13-22.

Commission of the European Communities (2003), *Green Paper – Entrepreneurship in Europe.* European Comission. <http://ec.europa.eu/invest-in-research/pdf/download_en/entrepreneurship_europe.pdf/> Accessed 22 Oct 2009.

Commission of the European Communities (2006), *Entrepreneurship Education in Europe: Fostering Entrepreneurial mindsets through Education and Learning,* European Commission, available at: <http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006_0033en01.pdf>. Accessed 21 Sept 2009.

Davidsson. P., Low, M.B. & Wright, M. (2001) “Low and MacMillan ten years on: achievements and future directions for entrepreneurship research”, *Entrepreneurship Theory and Practice*, (25) 4, 5-14.

Drucker, P.F. (1985) *Innovation and entrepreneurship*. New York: Harper & Row.

Eyal, O. & Inbar, D.E. (2003) “Developing a public school entrepreneurship inventory. Theoretical conceptualization and empirical examination”, *International Journal of Entrepreneurial Behaviour & Researc*, (9) 6, 221-244.

Fiet, J.O. (2000a), “The Theoretical Side of Teaching Entrepreneurship”, *Journal of Business Venturing* 16 (1), 1-24.

Fiet, J.O. (2000b), “The Pedagogical Side of Entrepreneurship Theory”, *Journal of Business Venturing* 16 (1), 101-117.

Finnish National Board of Education (2003), *National Core Curriculum for Upper Secondary Schools 2003*, Vammala: Vammalan kirjapaino Oy.

Finnish National Board of Education (2004), *National Core Curriculum for Basic Education 2004*, Vammala: Vammalan kirjapaino Oy.

Finnish National Board of Education (2009a*), Student Assessment Guide for Vocational Education and training 2008a.* <http://www.oph.fi/SubPage.asp?path=1,17627,1561>. Accessed 8 Feb 2009.

Finnish National Board of Education (2009b*), Student Assessment Guide for Vocational Education and training 2008b.* <http://www.oph.fi/binary.asp?path=1;17627;5238;6610;67070;86043&field=FileAttachment&version=3>. Accessed 8 Feb 2009.

Frank, A. I. (2007), "Entrepreneurship and Enterprise Skills: A Missing Element of Planning Education", *Planning, Practice & Research* 22 (4), 635-648.

Gibb, A. (2005), "The future of entrepreneurship education – Determining the basis for coherent policy and practice?", in Kyrö, P. & Carrier, C. (eds.), *The dynamics of learning entrepreneurship in a cross-cultural university context*, Entrepreneurship Education Series 2/2005, Hämeenlinna: University of Tampere, Research Centre for Vocational and Professional Education, 44-67.

Gibb, A. (2006), "Entrepreneurship/Enterprise Education in Schools and Colleges: Are we really building the onion or peeling it away?" Paper presented in National Council for Graduate Entrepreneurship, working paper 039/2006. Available online at: <http://ncge.com/communities/research/reference/detail/880/7>. Accessed 20 Sep 2007.

Henry, C., Hill, F., & Leitch, C. (2005a) Entrepreneurship education and training: can entrepreneurship be taught? Part I. *Education + Training* 47 (2), 98-111.

Henry, C., Hill, F., & Leitch, C. (2005b) Entrepreneurship education and training: can entrepreneurship be taught? Part II. *Education + Training* 47 (3), 158-169.

Hynes, B. (1996) “Entrepreneurship education and training – introducing entrepreneurship into non-business disciplines”. *Journal of European Industrial Training* 20 (8), 10-17.

Knight, F. H. (1921) *Risk Uncertainty and Profit*, 2e. London: Houghton-Mifflin Co.

Kyrö, P. (1997), *Yrittäjyyden muodot ja tehtävä ajan murroksessa*, Jyväskylä Studies in Computer Science. Economics and Statistics 38. Jyväskylä, University of Jyväskylä.

Menzies, T.V. & Paradi, J.C. (2003), “Entrepreneurship education and engineering students. Career path and business performance”, *The International Journal of Entrepreneurship and Innovation* 4 (2), 121–132.

Remes, L. (2001), ”Yrittäjyyskasvatus pedagogisessa toimintatehtävässä”, *Kasvatus* 32 (4), 168-181.

Remes, L. (2003), *Yrittäjyyskasvatuksen kolme diskurssia,* Jyväskylän yliopisto, Jyväskylä: Jyväskylä University Printing House.

Remes, L. (2004), “Yrittäjyys”, in Loukola, M-L. (ed.), *Aihekokonaisuudet perusopetuksenopetussuunnitelmassa*, Jyväskylä: Gummerus, 89-90.

Ristimäki, K. (2003), ”Yrittäjyyskasvatus: Enemmän metodi kuin sisältö.” in Taloudellinen tiedotustoimisto (ed.), *Yrittäjyyskasvatus: Yrittäjyyttä ja kasvatusta,* Saarijärvi: Gummerus, 12-15.

Ruskovaara, E., Rytkölä, T., Seikkula-Leino, J., Ikävalko, M. & Mattila, J. (2011), *Opettajien toteuttama yrittäjyyskasvatus ja reflektoinnin merkitys,* Forthcoming.

Schumpeter, J. A. (1934) *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.

Sarason, Y., Dean, T. & Dillard., J.F. (2006) “Entrepreneurship as nexus of individual and opportunity: A structuration view”, *Journal of Business Venturing*, 21, 286-305.

Shane, S. & Venkataraman, S. (2000) “The Promise of Entrepreneurship as a Field of Research”, *Academy of Management Review*, 25 (1), 217-226.

Seikkula-Leino, J. (2006), *Perusopetuksen opetussuunnitelmauudistus 2004-2006 ja yrittäjyyskasvatuksen kehittäminen,* Opetusministeriön julkaisuja 2006:22, Helsinki: Yliopistopaino.

Seikkula-Leino, J. (2007), *Opetussuunnitelmauudistus ja yrittäjyyskasvatuksen toteuttaminen,* Opetusministeriön julkaisuja 2007:28, Helsinki: Yliopistopaino.

Seikkula-Leino, J., Ruskovaara, E., Ikävalko, M., Mattila J. & Rytkölä, T. (2010), “Promoting entrepreneurship education: the role of the teacher?”, *Education + Training* 52 (2), 117-127.

Steyaert, C. & Katz, J. (2004), “Reclaiming the space of entrepreneurship in society: Geographical, discursive and social dimensions”, *Entrepreneurship & Regional Development* 16, 179-196.