Abstract

National education systems are facing new challenges as entrepreneurship education and, consequently, its effectiveness measurements are to be brought in. The European Union has stated entrepreneurship as one of the key competences for Europeans. To achieve these challenges EU has named entrepreneurial skills, encouraging entrepreneurship by fostering the right mindset and awareness of career opportunities as an entrepreneur as goals and methods for European education system. (European Commission 2003)

The aim of this paper is to discuss the challenges of building a measurement tool for entrepreneurship education and effectiveness of entrepreneurship education. Lappeenranta University of Technology is starting a national project where the aim is to create a measurement tool for the teachers and headmasters to measure entrepreneurship education or entrepreneurship education in the whole school or at one’s own teaching. The target group is comprehensive school teachers, but parts of the tool can be utilised by secondary and vocational schools.

Introduction

National education systems are facing new challenges as entrepreneurship education and, consequently, its effectiveness measurements are to be brought in. The European Union has stated entrepreneurship as one of the key competences for Europeans. To achieve these challenges EU has named entrepreneurial skills, encouraging entrepreneurship by fostering the right mindset and awareness of career opportunities as an entrepreneur as goals and methods for European education system. (European Commission 2003)

The EU has recommended that entrepreneurship teaching should be acknowledged in the national curriculum as well as in the curricula for each level of the educational system. There, Finland has acted in a front line: entrepreneurship education is included in the curricula in every educational level. (Kyrö 2006; Opetushallitus 2003; Opetushallitus 2004; Opetusministeriö 2004a; Opetusministeriö 2004b)
Lappeenranta University of Technology is starting a national project where the aim is to create a measurement tool for the teachers and headmasters to measure entrepreneurship education that means measurement tool for entrepreneurship education in the whole school or at one’s own teaching. The target group is comprehensive school teachers, but parts of the tool can be utilised by secondary and vocational schools.

We here review the comprehensive school level in Finland and there, since 1994, entrepreneurship education has been one of seven cross-curricula themes. The national core curriculum for basic education specifies the objectives and core contents of cross-curricular themes and subjects. There, at the basic education level, the entrepreneurship education theme is called “Participatory citizenship and entrepreneurship”. The national core curriculum is the basis which the local and regional education providers follow but they may put their own emphasis in the curricula. (Finnish National Board of Education 2004)

The challenges here are, as Seikkula-Leino (2006, 2007) has stated, among other things, teachers’ initial training, in-service training and continuing professional education. They should develop into the direction where entrepreneurship education has its place and it is mandatory but motivating for the teachers. Teachers’ awareness of entrepreneurship education has grown and attitudes towards the theme has become more positive, but teachers do not know enough about the aims, contents and work methods of entrepreneurship education (Seikkula-Leino 2007). National, regional and local development projects should correspond to these challenges and entrepreneurship education should be supported by the public authorities.

When the aims, contents and methods of entrepreneurship education are not internalised it’s quite worthless to await positive results. Teachers’ still need concrete examples of how to implement the theme in daily work. But, when the teachers’ attitudes are more positive and the awareness has grown it’s time to act. The challenges here are to take advantage of this positive development and offer concrete aims to achieve.

The aim of this paper is to discuss the challenges of building a measurement tool for entrepreneurship education and effectiveness of entrepreneurship education.

The education system in Finland

The educational legislation and the general principles of education policy in Finland are decided by The Finnish Parliament. The government, the Ministry of Education, and the Finnish National Board of Education are responsible for the implementation of this policy at the central administration level. (see [www.minedu.fi](http://www.minedu.fi))

The Finnish National Board of Education is responsible for the development of educational objectives, contents, and methods in basic, general upper secondary, vocational, and adult education. It also creates the national core curricula and the foundations of degrees in vocational education. The steering of the education is decided by the Government and the Ministry of Education, but there is no separate
inspection department for schools in Finland. The activities of the providers of education are steered through the national core curricula and objectives laid down in legislation.

The Educational Evaluation Council is in charge of national evaluations and quality development in education. Its task is to evaluate education and learning, develop evaluation, and promote evaluation research. Feedback concerning the operations of the education system is collected by means of statistics and evaluations. The information thus gained steers education. Evaluation supports the Ministry of Education, education providers and educational institutions.

For regional administration, Finland is divided into six provinces. Each province has a State Provincial Office, led by a governor. Within the State Provincial Office, the Department for Education and Culture deals with matters concerning education and culture.

Regional planning and development tasks belong to Regional Councils. There are 20 of these and they operate as regional development authorities. Regional Councils are given their authorization from the local authorities in the region, not form the state. Local administration is run by local (municipal) authorities that have a self-governing status and the right to levy taxes. There are 432 municipalities in Finland. They vary greatly in size: The smallest municipality has a population of 130, whereas the biggest one has more than half a million inhabitants. The decision-making authority is the municipal council, elected by the residents. The council appoints the municipal board and committees. Every municipality has at least one local education committee or similar organ, appointed by the municipal council.

In Finland, local authorities are obligated to provide basic education to all children living within their borders, or to otherwise ensure that school-aged children receive corresponding instruction. Local educational authorities may also provide general upper secondary, vocational, polytechnic, and adult education.

General and vocational upper secondary education may be provided by local authorities, joint municipal authorities, or private organizations and foundations. The majority of comprehensive and general upper secondary schools in Finland are maintained by local authorities. One percent of comprehensive schools and seven percent of general upper secondary schools are maintained by private education providers. In vocational education, 18.5 percent of education providers are private.

**Entrepreneurship and entrepreneurship education**

Entrepreneurship is a visible and an important empiric phenomenon, and it has gained a lot of scientific interest. It is also often noted there is no agreement on any single theory of entrepreneurship (e.g. Shane & Venkataraman 2000; Davidsson, Low & Wright, 2001). This and the slowly developing theoretical framework (Dey & Steyaert 2006, 5-6; Grant & Perren 2002) have produced a wide selection of different research settings. (e.g. Hisrich & Drnovsek 2002).
There are, however, some repeating patterns. Johannisson and Olaison (2006) found two frequently used perspectives on entrepreneurship: entrepreneurship as a tool or instrument for management and entrepreneurship as forms of social creativity (Johannisson 1992; Hjorth 2003; Dey & Steyaert 2006).

Entrepreneurship as a scientific discipline is very much launched by Schumpeter (1934), but the modern theorizing entrepreneurship was started by Kilby (1971) and later pushed forward e.g. by Bygrave and Hofer (1991). 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) took it further and stated, that, despite entrepreneurship is treated as the nexus of individual and opportunity, entrepreneurship is also a social undertaking. Thus it should also be studied in a context of social system. (Sarason et al. 2006).

In Finland entrepreneurship education has a certain role in national core curriculum. There, entrepreneurship education has been one of seven cross-curricula themes for basic education, since 1994. The core curriculum defines not only the goals and main contents of the various subjects but also defines so-called cross-curricular themes, which are themes integrating upbringing and education. The cross-curricular themes help responding the educational challenges of the time. The theme in curricula is called “Participatory citizenship and entrepreneurship” (Finnish National Board of Education 2004).

Entrepreneurship education - or enterprise education as it is called also – can be defined as a sum of external entrepreneurship, intrapreneurship and enterprising behaviour (Kyrö 1998). There, especially intrapreneurship is considered as a main target in the school context (Opetushallitus 2003, 25; Opetushallitus 2004, 40-41). In Finland the development has been positive, but there still are challenges implementing entrepreneurship education in teaching and schools (see Seikkula-Leino 2007).

In school context entrepreneurship education can be divided into three aims that are learn to understand entrepreneurship, learn to become entrepreneurial and learn to become an entrepreneur (Hytti 2002). Gibb (2001, 2005) has stated that entrepreneurship education is about learning for entrepreneurship, learning about entrepreneurship and learning through entrepreneurship. Therefore entrepreneurial and enterprise education should be considered both as a method of learning [and teaching] as well as a content of learning [and teaching] (see Remes 2003).

As seeing here, entrepreneurship education has many forms and it is diverse. That brings many opportunities for teachers, headmasters and education providers to put the theme into practice, but also there are threats. What if this challenging theme isn’t implemented in every-day teaching? What if the theme is bypassed although it is mandatory? These are likely to happen when the aims are not internalised.
Current topics within measurement and schools

It is difficult to point exactly the incident where measurement was first time connected systematically to organizational behaviour. Measurement is an elementary in the classics of management since Adam Smith, Max Weber and Fredrik Taylor, and it is also present in the modern management disciplines like “Management by Objectives” and “Balanced Scorecard.”

Measuring seems to be topical at schools. The Programme for International Students Assessment – PISA – is widely known when speaking about learning outcomes. PISA gathers information on the state and results of education, and it takes into account both learning that takes place inside but also outside of the school. PISA is a collaborative project of the OECD countries and the target group of the survey is the 15-year-olds who are within the educational system. (see http://www.pisa.oecd.org)

The learning outcomes of Finnish comprehensive schools have been found excellent in international comparison in the PISA and explanations are found e.g. in the Finnish school system and teacher training. The PISA programme tests skills in mathematics, science, reading and problem solving. Obviously, these skills are very important, but the test doesn’t assess the outcomes from the cross-curricula themes like entrepreneurship education.

At this very moment, the Ministry of Education is building up a criterion for quality of comprehensive schools and the criterion will be published during the spring 2009. At the same time, the Finnish National Board of Education has launched quality management tools and methods for comprehensive schools.

The PISA outcomes seem to effect on teaching. The quality criterions for comprehensive schools are under process, but are waited to gear the work at schools. The common phrase is “you get what you measure”, so now it’s time to take advantage of these processes - and the phrase - and create a measurement tool for entrepreneurship education.

Discussion

The educational legislation, local decision making and emphasis the schools commits to follow effects on everyday work at schools. Many doers contribute and try to contribute to teaching but still, it’s up to the teacher how he fulfils the aims of the curricula. Contributors and nearby business live have, no doubt, an opinion about how entrepreneurship education should be brought into the schools. And not to mention the teacher colleagues from the other school levels, they might have a quite different overall picture about the theme and what the teaching should consist. That means the field of entrepreneurship education is full of opinions, contradiction and expectations.
As noticed, there are a range variety of challenges while building a measurement tool for entrepreneurship education and that means there are many levels to take into the consideration. The first challenging level is the aims the Government, Ministry of Education and local decision-makers have stated, but also the goals the nearby business life and school system have set. We assume that all these sectors have a bit different purposes and they may not speak the same language. The second challenging level is different nuances of entrepreneurial aims the comprehensive, secondary and vocational schools have. The aims are determined by the national core curricula, but municipalities, schools and teachers have quite wide freedom of action when following that.

The third challenge is the content of entrepreneurship education. The theme is very wide as Hytti (2002) and Gibb (2001, 2005) has stated, so one should take it into account as a method of learning and teaching as well as a substance of learning and teaching. The fourth challenge is the nature of teaching: The freedom is a virtue, but when the actors – here teachers – don’t know much enough about the aims, work methods and content of the entrepreneuships education, like stated by Seikkula-Leino (2007), it is pretty pointless to measure its effectiveness and quality. First, teachers need systematic further education, not to mention teachers’ initial training. Secondly, teachers need a common understanding of the theme and that can be contributed by training.

At the same time, when the local and national education provides take over the training described above, the project mentioned here is concentrating on building the measurement tool. The process is not going to be easy. At least all these mentioned challenges must be taking into account and all levels should be conducted to create and implement a common language and understanding.

We here argue that when building the measurement tool the focus should be on teaching, not learning. The most important questions then are how teachers are teaching entrepreneurship educational contents and what they consider as an entrepreneurship education.

References


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