

## Entrepreneurship in Finnish Teacher Training<sup>1</sup>

(Finlandiya Öğretmen Eğitiminde Girişimcilik)

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### Abstract

Concrete steps are taken on entrepreneurship education in Turkey, as in a lot of countries. One example to such concrete steps is the treatment of entrepreneurship as one of the skills which students are to be provided in curricula from primary education to higher education. However, as entrepreneurship has just started to be focused on in education, observation of other countries engaged in it for a long time is important. Finland is a country which is always shown as a model for entrepreneurship education in the reports of the European Commission and is one of those countries which conduct most scientific research on this subject. Thus, the way Finnish education system handles entrepreneurship education should be examined. In this sense, the present study aims to explain how Finnish education system handles entrepreneurship education; what steps they take in this matter; and what kinds of supporting elements they use. This is a compilation work. It gives brief information about primary education and secondary education, but focuses most attention on teacher training.

**Keywords:** Primary education, secondary education, Finnish teacher education, entrepreneurship education

### Özet

Son yıllarda birçok ülkede olduğu gibi ülkemizde de girişimcilik eğitimi konusunda somut adımların atıldığı görülmektedir. Bu anlamda ilköğretimden yükseköğretime kadar girişimci özelliklerin öğrencilere kazandırılması düşünülen beceriler arasında yer almaya başlaması bu somut adımlara örnek teşkil etmektedir. Girişimcilik eğitiminin Türkiye’de son yıllarda önem kazanması, diğer ülkelerdeki durumun ne olduğu sorusunu akla getirmektedir. Öğretmen eğitiminde girişimcilik konusunda oluşturulan Avrupa komisyon raporlarında sıkça bahsi geçen ve örnek gösterilen ülkelerden birinin de Finlandiya olduğu görülmektedir. Bu anlamda Finlandiya eğitim sisteminde girişimcilik eğitime nasıl yer verildiğini incelenmenin faydalı olabileceği söylenebilir. Bu doğrultuda araştırmanın amacı, Finlandiya eğitim sisteminde girişimcilik eğitime nasıl yer verildiği, ne tür somut adımların atıldığı ve ne tür uygulamalardan yararlandığını incelemektir. Bu araştırma derleme niteliğindedir. Araştırmada ilköğretim ve ortaöğretimdeki girişimcilik eğitimi hakkında genel bilgiler yer verilirken, daha çok öğretmen eğitimi boyutuna odaklanılmıştır.

**Anahtar Kelimeler:** Finlandiya öğretmen eğitimi, ilköğretim, ortaöğretim, girişimcilik eğitim

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## **Introduction**

Recently, the importance of entrepreneurship education has been emphasized in a lot of countries. This emphasis has mostly been in the field of education rather than business management and economy. Research is carried out and actions are taken to decide the way entrepreneurship education should be included in curricula from primary education to higher education in many countries across the world. Most research on this subject is conducted in the Scandinavian countries.

In Turkey, it can be seen that the concrete steps has been taken in the field of education in terms of entrepreneurship in recent years. For example, 1-3th grades life science curriculum integrated with discipline of entrepreneurship in 2009 (MEB, 2009a). In a similar manner, 6-8th grades math curriculum included concept of entrepreneurship be located in common skills that been aimed to gained students (MEB, 2009b). In the high school level, there was a titled “Entrepreneurship Curriculum of Secondary Education” (MEB, 2009c). Recent developments was added middle school science curriculum revised in 2013, so concept of entrepreneurship was located under the name of life skills in science curriculum. These improvements resulted in two questions. Firstly, how entrepreneurship education is integrated with general education curriculum? And secondly, how are pre-service teachers will trained in teacher education institutions in terms of entrepreneurship education? To find answers to these questions it can be believed that should be examined in countries where good practices of entrepreneurship education.

It is reported that among the Scandinavian countries, Finland, Denmark, and Norway are very good at entrepreneurship education and are followed by Switzerland in this matter (Nordic Innovation, 2012). Finland is said to be one of the countries which treat entrepreneurship education in primary schools and middle schools professionally (European Commission, 2011). Before what happens in entrepreneur education in Finland, which has the best education system in Europe and attaches a big importance to entrepreneurship, is explained, some brief information is provided below about entrepreneur, entrepreneurship, entrepreneurial features, and entrepreneurship education.

An entrepreneur is a person who carries out profit-oriented business activities alone or together with others by taking some risk (Finnish Enterprise Agencies, 2014). An enterprise is any economic unit established by entrepreneurs to obtain economic return or to do business (Bozkurt, 2011). Entrepreneurship, on the other hand, is defined as a process that commences when an entrepreneurial individual identifies or notices opportunities to create something new (Fisher & Reuber, 2010). Thus, it can be said that there are some distinctive features of entrepreneurial individuals. For example, they have a confidence in their skills; they want to come to fruition immediately; they want to take risks to a degree; they are willing to take responsibilities; they are vigorous to start something or to create something new; they have prevision to see opportunities; they are good at managing different people; they have a desire for success; they are patient of ambiguity; they make promises about obstacles that are considered insurmountable by others; and they are flexible to adapt to change (Burduş, 2010). As is seen, the attitudes and behaviors of entrepreneurial individuals have cognitive, affective, and behavioral aspects.

It is now accepted that education plays a significant role in the development of entrepreneurial attitudes and behaviors (European Commission, 2004; European Commission, 2008). It is reported that entrepreneurial attitudes and behaviors bring benefit to society, and personal qualifications such as creativity that are associated with entrepreneurship may be useful to everybody both in the working life and in the daily life (European Commission, 2004). There are different definitions of entrepreneurship education in different countries, in different types of education, and at different levels of education. While it is defined as making students ready for the business world in a narrow sense, it is defined as the process in which a series of abilities that will be used in every field of life but will provide individual, social, and economic returns in particular are acquired in a broad sense. In this sense, entrepreneurship is defined as a personal skill that allows putting an idea into practice (European Commission, 2011). The primary purpose of entrepreneurship education is to promote the capacity and mentality of individuals to be an entrepreneur. Among other purposes are ensuring sustainable awareness and motivation about entrepreneurship, making individuals start and manage a business, and improving the qualifications of students to help them identify and enjoy job opportunities (European Commission, 2008).

Before information is provided on entrepreneurship education, Finnish education system is briefly explained here. In Finnish education system, education starts with 1-year preschool education, which is voluntary, and continues with 9-year basic education (comprehensive school). While students attending the 1<sup>st</sup> to 6<sup>th</sup> grades are taught by a class teacher, students attending the 7<sup>th</sup> to 9<sup>th</sup> grades are taught by branch teachers. This educational period is followed by 3-year high school education composed of general and vocational education. Students who graduate from high schools attend universities and polytechnics (Hatak & Reiner, 2011).

It is reported that entrepreneurship can be systematically covered and improved only if an effective use of curricula is made (Seikkula-Leino, Ruskovaara, Hannula & Saarivirta, 2012). In this respect, countries need education reforms. The readiness and willingness of educators for these reforms may play an important role in gaining success in these reforms. In Finland, curriculum is defined as a document that guides teaching. As a matter of fact, it is stated that there is a strong desire to solve problems and implement reforms in Finland (Seikkula-Leino, Ruskovaara, Hannula & Saarivirta, 2012). In Finnish education system, curricula primarily involve courses, their goals, and their contents as well as possible practices for achieving relevant goals (Heinonen, 2005). This is also how entrepreneurship education is handled in curricula in Finland.

As to concrete steps taken for entrepreneurship education in Finland, entrepreneurship education became part of basic education as of 1994 (Nordic Innovation, 2012). In those years, technology and entrepreneurship were new areas of study for Finnish school systems and were not officially treated as topics to be dealt with. However, there is a need for national and international education strategies for technology and entrepreneurship to be developed in education. The program entitled “Finland as an Information Society” launched by the Finnish Ministry of Education and Culture is one of the most important starting points for technology and entrepreneurship (Santakallio, 1998). On the other hand, the first management/administration group for entrepreneurship education was established in 2002; the

first guide on entrepreneurship education was published in 2004; and the next guide on entrepreneurship education was published in 2009 (Nordic Innovation, 2012). The guide on entrepreneurship education clearly indicates the priorities and goals of entrepreneurship education for each educational level.

The Finnish Ministry of Education and Culture has published two important documents for all activities that are to encourage entrepreneurship in education system. While the first one is education and research & development plan, the second one is entrepreneurship education guide (COPIE2, 2011). Within the framework of *education and research & development plan*, the education and research & development plan 2007-2012 stipulates that entrepreneurship education has to be diversified and expanded. Similarly, the education and research & development plan 2011-2016 takes entrepreneurship education as a broad strategy. With this plan, it is aimed to improve the cooperation between the working life and education and to promote entrepreneurship education at all educational levels (Audiovisual and Culture Executive Agency, 2012). On the other hand, somewhat different definitions are made for different levels. For example, entrepreneurship education is included in national basic education curriculum under the theme of “Participatory Citizenship and Entrepreneurship” and in national general education curriculum at high school level under the theme of “Active Citizenship and Entrepreneurship”. It is highlighted that entrepreneurship practices must be expanded in vocational education in connection with curriculum reforms to strengthen learning and apprenticeship on the job. As to higher education institutions, entrepreneurship practices are compulsory in some universities while they are voluntary in some others (COPIE2, 2011). The *entrepreneurship education guide* summarizes the desired situation in 2015. This guide notes that communication network among the stakeholders of education should be strengthened at local, regional, and international levels; advanced and expanded regional resource center networks should be established at regional and municipal levels; entrepreneurship education should be part of basic national curriculum at all educational levels including the special curricula of schools; entrepreneurship should be promoted in vocational education and higher education; research on entrepreneurial learning environments and educational entrepreneurship should be increased; and finally pre-service teacher trainings should be provided on entrepreneurship (COPIE2, 2011). From now on, this paper focuses on entrepreneurship in basic education (comprehensive school), entrepreneurship in secondary education (high school), and entrepreneurship in teacher training.

### **Entrepreneurship in Basic Education (Comprehensive School)**

Entrepreneurship education is included in the basic education curriculum under the theme of “Participatory Citizenship and Entrepreneurship”. The primary goal of basic education is to help students perceive the society from the perspectives of individuals playing different roles. Developing skills necessary for civil participation in the society and forming a basis for the entrepreneurial methods about forming business ideas are also among its goals. In addition, it is reported that the learning cultures and the methods implemented in schools must contribute to students’ independent development as well as their taking initiatives, creating conscious purposes, cooperating, and living as responsible and engaged citizens (National Core Curriculum Basic Education, 2004). On the other hand, it is reported that

elementary school and the early grades of middle school do not involve any subject directly pertaining to entrepreneurship; rather entrepreneurship education is mostly embedded in course subjects in such a way that they improve and encourage the creativity of students (Nordic Inovation, 2012).

The Finnish National Core Curriculum Basic Education (National Core Curriculum Basic Education, 2004) contains the traces of both the partnership model and the cross-boundary collaboration model. In these models, entrepreneurship education is not taken as a subject; rather it is covered through integration with other subject areas. Moreover, the National Core Curriculum Basic Education makes the implementation of entrepreneurship education compulsory. However, there may be differences between local municipalities in terms of its implementation (Seikkula-Leino, 2011).

The education reform carried out in Finland between 2004 and 2006 is based on Macdonald's (2003) partnership model. This partnership model was inspired by the model called bottom-up model in 1980 and 1990 (cited by Seikkula-Leino, 2011 from Fullan, 1999). It is stated that the bottom-up model was adopted by the reformers wanting to improve the skills of teachers (Macdonald, 2003). This model, administrators, curriculum reformers, parents, and researchers take part in the curriculum reform process. This model focuses on professional development among teachers, cooperation among schools, students' worries and desires, and the needs of local community (Macdonald, 2003). This model makes it possible to develop local curricula unique to specific areas (Seikkula-Leino, 2011). Local curriculum reforms allow developing a sense unique to a specific community (Heinonen, 2005). Elements unique to local areas are quite important in developing basic education curricula in Finland. In this regard, especially municipalities take part in basic education curriculum development processes. New basic education curriculum, which is planned to be implemented in Finland in the fall semester of 2016, is being prepared by educators, municipalities, and other stakeholders (Halinen, 2015). The Finnish National Board of Education declared the National Core Curriculum Basic Education (National Core Curriculum Basic Education, 2004). In this declaration, entrepreneurship education is included in the curriculum under the theme of "Participatory Citizenship and Entrepreneurship", and the goals are indicated as follows (National Core Curriculum Basic Education, 2004):

- To enable students to understand the importance of working people for the functionality of the society as well as the needs of the school community, public sector, the business world, and enterprises.
- To allow students to form their own opinions by making use of various areas of specialization and to learn that this is something important.
- To teach students how to take responsibilities for the elimination of worries in the local area or the school community and to take part in this process in a proper way.
- To enable them to face and cope with changes, conflicts, and ambiguities and to make them act like an entrepreneur.
- To enable them to have an innovative perspective in order to achieve a purpose and to allow them to assess their own activities and the effects of such activities.

- To make sure that they are informed of the business world and entrepreneurial activities and to make them feel that they are of both individual and social importance.

### **Entrepreneurship in Secondary Education (High School)**

The primary goal of entrepreneurship education at high school level is seen to be creating personal experiences through participation in practical activities. Accordingly, through the efforts of the school, the learning community must cooperate with other institutions and enterprises in the society (Finnish National Board of Education, 2003). The importance of experiential learning and learning by doing is highlighted especially for late middle school and high school periods (Nordic Innovation, 2012). Entrepreneurship plays a very important role for the Finnish Ministry of Education and Culture. This concept was introduced in 1994 and incorporated into different disciplines. Entrepreneurship knowledge and skills are improved to higher levels at secondary education and higher education levels. It is stressed that entrepreneurship education at high school level must be based on first-hand practices and participatory personal experiences (European Commission, 2012; Hatak & Reiner, 2011).

Enterprises that provide an opportunity for practicing entrepreneurship are used in high school vocational education at national level in Finland. It is told that though these enterprises are mostly imaginary, some students gain experience in real enterprises by using common company products. For example, the Finnish Practice Enterprises Centre is an organization encouraging enterprises that allow practicing. Practicing period is 3 months to 1 year. Educational purpose here is to make students familiar with making a business plan and having different positions in enterprises and to enable students to understand the logic of enterprise as a whole (Hatak & Reiner, 2011). As a matter of fact, it is possible to see goals related to these practices in the curriculum, too. The goals included in the secondary education general high school curriculum under the theme of “Active Citizenship and Entrepreneurship” are as follows (Finnish National Board of Education, 2003):

- To reinforce knowledge about the working principles of a democratic society and human rights.
- To enable students to discuss their opinions by respecting the opinions of others.
- To inform students of how they can access various systems and intermediary units that allow participating in the society.
- To make students ready to participate in organizations etc. that will bring benefit to the local community they live in and to enable them to make decisions on issues that are likely to affect the society.
- To enable students to undertake an enterprise through the methods they create by themselves and to make them proactive.
- To make students familiar with different operating principles, opportunities, and formations of entrepreneurship.
- To enable students to understand the importance of professions/jobs both for the society and for individuals.



- To enable students to know the instruments influential on reaching clients as well as how to apply them.

### **Entrepreneurship in Teacher Training**

It is clear that in Finland there is shift from a salaried society to an entrepreneurial society (Nurmi & Paasio, 2007). That causes new quests in teacher training and teacher training curricula (Seikkula-Leino, Ruskovaara, Hannula & Saarivirta, 2012). That features the importance of entrepreneurship education in teacher training more. In connection with this, teachers in Finland are expected to cultivate their students as entrepreneurial individuals (Hannula, 2010). In this regard, pre-service teachers and educators should have or gain satisfactory readiness on this subject in the teacher training process.

In Finland, teacher training is considered important to take entrepreneurship education to a better position. This is why; primary attention is focused on developing the entrepreneurial skills of teacher trainers (COPIE2, 2011). Since education is based on a research-oriented process in Finland, most teachers have master's degree there. Moreover, research orientation starts in the early stages of education, and then an attempt is made to put theoretical contents into practice in every stage of teaching. Teacher training also includes the traces of the school-based model. It is stressed that the school-based model reminds of the apprenticeship model in some aspects. It is also used in the practical model. This approach is also based on problem-based learning. There is also experiential learning model. This model lays an emphasis on the personal opinions of students regarding teaching (Krokkfors et al., 2009). It is possible to see the effect of each one of these models on teacher training in Finland. However, it is highlighted that research orientation training in Finland has a more typical characteristic in comparison to other countries. In other words, there is a prevalent educational process where students try to confirm/justify their own decisions and actions on the basis of theory and practice (Seikkula-Leino, Ruskovaara, Hannula & Saarivirta, 2012). For instance, higher education institutions in Finland include universities and polytechnics which incorporate applied sciences. These institutions apply the social binary model, which is defined as research-based teaching and lifelong learning that serves the public, involves interaction, and focuses on the effect on the society (Annala & Mäkinen, 2011).

While teacher training units provide academic teacher training in conjunction with universities, teacher training schools belonging to these units regulate and develop teaching practice and training subsequent to it through a research-oriented training (Teacher Training School Strategy for 2020, 2011). In Finland, academic teacher training is provided by 12 higher education units and 13 teacher training schools (Seikkula-Leino, Ruskovaara, Hannula & Saarivirta, 2012). The “entrepreneurship education group” composed of the members of 13 teacher training schools focuses on providing support services for guided teaching practices and curricular work. There are non-financial incentives for rewarding entrepreneurial teachers. While entrepreneurship is offered at least as an elective course in teacher training in the universities in Finland, practical trainings are held for teachers in enterprises thanks to the economic information office and YES network. YES has certain functions for offering resources on entrepreneurship education at regional and local levels (Nordic Innovation, 2012).

According to the European Commission report (European Commission, 2013), the close examination of two universities covering entrepreneurship education in teacher training shows the following: In *University of Jivaskila*, various modules are compulsorily applied in entrepreneurship education in teacher training. There is an introductory course entitled “Participatory Citizenship and Entrepreneurship” associated with entrepreneurship education and the foundations of entrepreneurship and management. On the other hand, pre-service teachers are considered responsible for the foundations and concepts of entrepreneurship education, entrepreneurship literature, and planning and carrying out a project which is likely to be conducted in school. Two projects are carried out in schools. The first one is entitled “The Assembly of Students”. It employs the cross-curricular approach and is conducted for developing the entrepreneurial attitudes of students. It is emphasized that this project is effective in influencing students and ensuring their participation. The second project is “Against the Machine”, which promotes active citizenship. The project aims to make high school students have the right to speak on current political issues. In this process, pre-service teachers deal with regulations and permissions. Meanwhile, they support students. On the other hand, most attention is focused on cooperative learning, creativity, problem-solving, and putting ideas into practice for entrepreneurship education in technology training. It is stated that sports tournaments held in partnership of faculties and local enterprises play an important role in entrepreneurship education in physical training. Moreover, the course entitled “Educational Innovativeness and Entrepreneurship” was compulsory in masters’ programs in the 2013-2014 academic year. On the other hand, in *University of Lapland*, an entrepreneurial approach is adopted in the compulsory music course provided in the faculty of education. This course focuses on both entrepreneurial learning and educational learning. Thus, mostly entrepreneurial-based processes such as creating opportunity and discovering, trial and error, information processing, and reflection are used. In addition, every student is allowed to learn based on their strengths, habits, and other personal characteristics. It is emphasized that learning of music subjects are combined with entrepreneurial thoughts and behaviors during lessons. That is achieved through making decisions between different alternatives in music. Educators who play a facilitating role integrate the knowledge reflected through the content and the goals in the curriculum with the experiences of pre-service teachers. In this course, pre-service teachers can obtain information about music and the way it is to be taught. In addition, in this course, attention is focused on entrepreneurial qualifications such as self-confidence, determinedness, risk-taking, decision-making, capability to negotiate, tolerance of ambiguity, and learning lessons from mistakes. For example, in this process, teachers guide pre-service teachers through making decisions on the content, its degree, when learning will occur, and with whom it will take place. In this way, teachers encourage students to take risks, manage ambiguous situations, achieve learning, and be responsible for their own learning. During lessons, peer learning, collaborative decision-making, interactive discussions, and problem-solving are employed. Furthermore, students keep journals reflecting themselves. Teachers exemplify entrepreneurial attitudes and skills, and then students make an evaluation of their strongest attitudes and skills to their way of thinking. They enter such evaluations in their journals.

In addition, Finland has practice enterprises for students to obtain information about the working life and gain work experience. A practice enterprise provides an environment



similar to entrepreneurial life to fulfill prerequisites and run the enterprise. The target group of these enterprises is high school students, college students, university students, commercial school students, and technical school students besides unemployed people. Teachers work in cooperation with experts from the working life. Students go through the processes of planning, setting up, and running an enterprise just like a real enterprise. They play various roles such as manager, sales representative, marketing staff, and accountant. It is ensured that students hold different positions by changing their roles from time to time so that they have more opportunities. Each practice company has a real enterprise as a consulting enterprise. The business plan of a practice enterprise can be renewed by teachers, shareholders, and other managers (European Commission, 2004). It goes without saying that these practices may provide students with important experience. This paper continues with the support provided to entrepreneurship education and some examples of projects carried out on this subject in Finland.

### **Some of the Projects Carried out on Entrepreneurship Education**

In Finland, substantial amounts of funds are allocated for entrepreneurship education. For example, the “Finnish National Board of Education (FNBE)” is an authority that supports European Social Fund projects for contribute to development of entrepreneurship education. In general, FNBE is the institution responsible for the development of education from preschool education to higher education in Finland. Thus, it is directly affiliated to the Finnish Ministry of Education and Culture. The European Social Fund is a unit within FNBE (COPIE2, 2011). This fund has defined four main priorities in Finland: 1) Transnational and inter-regional European Social Fund actions. 2) Promoting access to employment and sustainable inclusion in the labor market and preventing social exclusion. 3) Development of work organizations, the workforce and enterprises, and promoting entrepreneurship. 4) Development of skills, innovation and services systems that promote the functioning of the labor market. Information is provided below on some projects that have been conducted and some projects that are currently being conducted on entrepreneurship education in the field of education.

The first comprehensive project on entrepreneurship was “KYTKE 2005”. This project started in 1997 and finished in 1999 and was supported by the Ministry of Education and Culture and the European Social Fund. The target group of the project was general education teachers, teacher trainers, and entrepreneurs in the relevant area. The aims of the project were as follows: (1) Organizing lectures, distant and multi-form studies for providing each local government district in Kainuu with a teacher who can a) develop telematic connections in the school, b) plan, prepare, and implement school specific entrepreneurship and technology education curricula, c) function as entrepreneurship agents. (2) Offering telecommunication services planning and user support to the collaborating companies in the form of WWW services and multimedia products in order to promote the marketing and sales of products and services. (3) Establishing a network of entrepreneurship agents to act as a bridge between schools, enterprises, and the business sector in Kainuu. (4) Producing systematic quantitative and qualitative data on project efficiency and the success of purposes and reporting on these both nationally and internationally. (5) Promoting employment and further education among teachers and student teachers through enhancing their modern

technology reading and use skills and their knowledge of business sector policies. Thanks to this project, the first model of the entrepreneurship and technology education curriculum was put into practice in project schools in 2000. In this project, a special attempt was made to cooperate with local businesses and business sectors (Santakallio, 1998).

The EntrEduc-project which was carried out between 2003 and 2006 was about entrepreneurship education. This project aimed to develop teaching, specialization, and scientific research in the field of entrepreneurship education and to strengthen scientific communication networks concerning entrepreneurship both in national and international fields. This project was useful for the integration of entrepreneurship education into university education. This project was made up of three sub-projects: EntrEdu, EntrePeda, and EntreNet. EntrePeda referred to the multidisciplinary research-based projects dealing with the entrepreneurship education of teachers. In that sub-project, attention was focused on developing the entrepreneurial skills of teachers. EntrEdu referred to learning and research projects about entrepreneurship education. In that sub-project, attention was focused on developing the business competencies of those individuals attending departments other than business management and economy. EntreNet referred to the instructional technologies aiming to develop entrepreneurship in virtual educational environments. For more information, see <http://www15.uta.fi/yksikot/entrenet/english/projects.htm>.

YVI-Project (2010-2014) was supported by both the Finnish Board of National Education and the European Social Fund. Additionally, it was supported by school club centers, the regional development center, the Ministry of Economy and Employment, etc. The project involved a web-based toolbox for entrepreneurial teaching methods (Nordic Inovation, 2012). Among the aims of that project were developing a virtual learning environment for entrepreneurship education, creating an entrepreneurial environment model (planning, implementation, and evaluation), strengthening the network of cooperation between those who developed the entrepreneurial environment, increasing the knowledge levels of those who provided the entrepreneurial environment, expanding knowledge of the entrepreneurial environment, and helping teacher trainers improve their pedagogical qualifications related to the entrepreneurial environment (Hannula, 2010). The YVI project focused special attention on the entrepreneurship education practices, teaching methods, and teaching contents of in-service teachers (Nordic Inovation, 2012). For more detailed information about the project, see <http://www.yvi.fi/intro-english>.

### **Discussion and Conclusion**

It is clear that substantial steps have been taken on entrepreneurship education from primary education to higher education in Finland. For example, an attempt is made to develop entrepreneurship classes at primary education level (European Commission, 2012). One of the reasons for the success of Finland in entrepreneurship education is considered to be the coverage of entrepreneurship education in teacher training. Entrepreneurship education is compulsory in three of pre-service teacher training institutions (Oulu University Department of Teacher Training, Turku University Department of Teacher training, and Abo Akademi University Department of Vaasa). It is elective in other institutions (Hatak & Reiner, 2011).

Both educators and students in Finland have higher entrepreneurial knowledge, skill, and readiness in comparison to those in Turkey and other European countries because

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entrepreneurship has been handled within the scope of teacher training for a longer time in Finland in comparison to the above-mentioned countries. As a matter of fact, entrepreneurship education, projects encouraging it, and experiments involving workplace visits are not considered something new by teachers in Finland. In addition, teachers emphasize that students have an innate capacity to embark on an enterprise and thus education system is responsible for supporting and strengthening it (European Commission, 2012; Hatak & Reiner, 2011).

It is still emphasized in Finland, where the importance of entrepreneurship in teacher training is highlighted, that there are a lot of deficiencies in entrepreneurship education. Based on expert opinions, problems and obstacles in this matter are reported to be problems about including teachers in entrepreneurship education and increasing their motivation, lack of sufficient human resource and financial support, ignorance of entrepreneurship education in the current examination systems, insufficient interaction between politicians and implementers, lack of national areas for good practice examples, and finally imperfections regarding curriculum and tool development (Nordic Innovation, 2012).

There are still gaps in the inclusion of entrepreneurship in teacher training in the Scandinavian countries in general. It is reported that there are problems about motivating teachers to be engaged and interested in entrepreneurship education (Nordic Innovation, 2012). It is stated that one of the important problems in Finland is the fewness of scientific studies examining curricula implemented in higher education institutions and limitedness of the existing studies to only certain fields (Annala & Mäkinen, 2011). That may make it difficult to improve curricula implemented at higher education level rapidly. As a matter of fact, it is suggested that the concept of curriculum may be important for research at higher education level, and curriculum development studies should be carried out within the framework of new concepts (Barnett & Coate, 2005). Another important point is that in Finland, teachers' opinions are considered quite important for improving curricula. In this regard, the conceptualizations and comments of teachers from different branches concerning entrepreneurship education have an obvious effect on the way entrepreneurship education is to be put into practice. Thus, it is reported that there is still a need for concrete materials to guide teachers in Finland which has taken important steps and has made an important progress in entrepreneurship education (European Commission, 2012; Hatak & Reiner, 2011). As a matter of fact, Mattila, Rytkölä & Ruskovaara (2009) mention that teachers mostly have difficulty in expressing the problems confronted in the process of entrepreneurship education besides in defining contents and goals. Moreover, they have difficulty in discussing the goals of entrepreneurship education and focus on practices rather than goals. Indeed, that may be attributed to the prejudiced approach of traditional teachers in Finland, just like those in Turkey, to new practices and thus lack of any effort to understand them among such teachers. In this regard, an attempt is made to increase the knowledge and experience of teachers in entrepreneurship through the education models, modules, or programs developed. For instance, Gustafsson-Pesonen and Remes (2012) report that Entrepreneurial Development Coaching, which is a new entrepreneurial pedagogy model, clearly changes the thoughts and behaviors of teachers. They highlighted that teachers participating in their study had a higher entrepreneurial mentality, had more positive attitudes towards entrepreneurialism, and had a

higher tendency to be engaged in teamwork and cooperation after they went through the abovementioned program.

In Finland, there are always ongoing projects and academic studies which aim to bring entrepreneurship education to a better position. These works mostly focus on what kinds of methods, techniques, and evaluation processes teachers or trainers employ in entrepreneurship education. For instance, Hannula, Ruskovaara, Seikkula-Leino, and Tiikkala (2012-conference) aimed to assess the entrepreneurship education activities of teacher trainers in Finland and determined that there were quite good efforts to encourage entrepreneurship education. They found that teacher trainers used educational and instructive tools in entrepreneurship education and encouraged students to act independently, be self-confident, take responsibility, head for their goals, and guide themselves. In addition, they reported that students had a chance to learn lessons from their mistakes. Likewise, Ruskovaara, Pihkala, Rytkölä, and Seikkula-Leino (2010-conference) aimed to see the way entrepreneurship is incorporated in teaching process in Finland and concluded that teachers mostly use methods such as learning by doing and experiencing, problem-based learning, group work and pair work, entrepreneurship stories, narratives, and discussions. They also stated that journals and workplace visits are included in learning processes while e-learning environments are either regularly used or never used. Seikkula-Leino (2011) attempted to identify the way entrepreneurship education was integrated with general education through the partnership model and concluded that teachers employ methods such as group work, discussion, individual work, field trips, peer work, and invitation of entrepreneurs to the school. Based on the above-mentioned research results, the most frequently used models, techniques, approaches, or models in entrepreneurship education in Finland can be listed as team work, workplace visits, invitation of entrepreneurs, discussions, problem-based learning, entrepreneurial stories, learning by doing and experiencing, journals, and independent actions. As is seen, it can be said that students are more active in entrepreneurship education in which student-centered approaches allowing interaction with others are used.

One of the attention-grabbing aspects of teacher training is that there is cooperation with external stakeholders and the business world in the educational process. In this regard, the interaction between the labor market and educational institutions plays an important role in the way entrepreneurship education is integrated into curriculum in higher education institutions (Seikkula-Leino, Ruskovaara, Hannula & Saarivirta, 2012). As a matter of fact, Seikkula-Leino (2011) carried out a comprehensive study whose participants were teachers (1<sup>st</sup> grade to 9<sup>th</sup> grade), counselors, principals, presidents, educational officers, workplace owners, trade officers, and industrial officers working within the municipalities of a specific area. As is seen, external stakeholders play an important role in entrepreneurship education. Likewise, the common features of the good practice examples in Finland are seen to be intense cooperation with the business world, network of communication with other stakeholders, high level international cooperation, focusing on experiential learning in the learning process, overcoming the problems of limited human resource and financing, and capability to manage (Nordic Innovation, 2012).

The opinions of pre-service teachers in Finland about entrepreneurship education are considered important for the experience they have or they are to have on this subject. For

instance, Lepistö and Ronkko (2013) investigated the perceptions of pre-service teachers in Finland regarding entrepreneurship, which would be part of their job in the future, and entrepreneurship education. They put the pre-service teachers in three categories: suspicious, following, and innovative. They found 90% of the pre-service teachers to be willing to receive entrepreneurship education. Especially the pre-service teachers put in the innovative category wanted to develop their own methods for entrepreneurship education. Hietanen (2013) aimed to make pre-service primary school teachers receiving higher education carry out and interpret entrepreneurial activities in the music course. It was found in that study that every pre-service teacher strengthened their musical competence by applying knowledge and skill to new situations. In addition, the active participation of every pre-service teacher allowed them to observe others. In this way, every pre-service teacher was able to decide how, when, and with whom they would carry out activities. These results indicate that pre-service teachers are open to innovations.

To conclude, teachers, educators, and pre-service teachers play quite an important role in entrepreneurship education. There are scientific research, comprehensive projects, and supports provided by the ministry of education on this subject. In addition, it is stressed that entrepreneurship education should be provided through a research-oriented approach. Apart from that, it can be said that teachers are encouraged to prepare lesson contents appropriate to the school context in their own right rather than getting ready-made course materials for entrepreneurship education. Another frequently emphasized point about entrepreneurship education is the necessity of close communication with other colleagues and the business world. It is a common view that entrepreneurship education should be provided through integration with other subject areas such as science, mathematics, and music rather than inclusion in curricula as a separate course or subject. Accordingly, all of the above-mentioned should be taken into consideration in the revision and renewal of curricula to be implemented in Turkey. Implications for practice in Turkey stated that:

- Educators should motivate pre-service teachers to workplace visits to obtain information on specific issues.
- Educators should follow research-oriented process.
- Educators should give place discussions, group activities, brainstorm in their courses in order to produce pre-service teachers alternative ideas, innovative ideas.
- Administrators of Teacher training institution should collaborate administrators of management and economy departments so that pre-service teachers can gain experiences about business sector.
- Educators, their fields including science, mathematics, music etc., should integrated with entrepreneurship education. This is the only way to benefit from entrepreneurship education.



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