### **Z ZAGRANICY**

STUDIA Z TEORII WYCHOWANIA TOM XI: 2020 NR 2(31)

### Erkki Nevanperä

UCN University Consortium of Seinäjoki ORCID 0000-0002-9651-8001

# Entrepreneurship education in Finland and in an international context. Post-doc –study in the context of international entrepreneurship education

## Entrepreneurship education and training in the curricula of Finnish basic and secondary school education

According to Kivi¹ the curriculum is a pedagogical and educational learning and teaching entity, which includes objectives, priorities, means and criteria for education and training². The basics of the curricula are nationwide, but municipalities and schools draw up curricula for primary and secondary schools. The curricula of secondary (vocational) education and polytechnics are drawn up by education unions, limited companies or individual schools. The starting points for entrepreneurship education are in work education. The school has contributed to the attitude and skill teaching for working. The work education has been an integral part of Finnish schooling since Uno Cygnaeus's schooling plans³.

Among other things, Dewey's influence is reflected in the background of work education. Devey's goal was to organize teaching as a practice-based, life-oriented and student-centered activity. "Learning by doing" has been a flying phrase from Dewey's school<sup>4</sup>. Along with the proximity of working

<sup>&</sup>lt;sup>1</sup> T. Kivi, Oppimisen ytimessä, Tummavuoren Kirjapaino Oy, Vantaa 1995.

<sup>&</sup>lt;sup>2</sup> J. Hood & J. Young, Entrepreneurship's Requisite Areas of Development: a Survey of Top Executives in Succesful Entrepreneurial Firms, "Journal of Business Venturing" 1993, p. 8.

<sup>&</sup>lt;sup>3</sup> P. Anttila, *Tutkimisen taito ja tiedon hankinta*, *Taito-, taide- ja muotoilualojen tutkimuksen työvälineet*, Helsinki 1996.

<sup>&</sup>lt;sup>4</sup> J. Dewey, Koulu ja yhteiskunta, Helsinki 1957.

education and practice, this principle is also well suited to the principles of entrepreneurship education. According to Kananoja, the work education is education in the form of practical work or crafting. Educating for work means teaching in work subjects, work-related content in other school subjects, internships, vocational guidance, pupil counseling and work education<sup>5</sup>.

In Finland, the discussion about bringing school and working life closer together began in the 1970s. The problem was that children no longer learn to work or adapt to work life through their parents. The work education at school was seen as a solution for this. However, the 1970s curriculum does not yet define the work education. The 1985 basic school curriculum also does not explicitly mention the work education. The importance of working is highlighted mainly in the context of crafts, technical work and textile work. The goal is to teach the student to work and appreciate the work. In addition, the pupil is taught to be a member of society and to be responsible for the work and the basic rules of working life. There are already clear references to the content of entrepreneurship education, as the concept of cognitive learning is one of the cornerstones of entrepreneurship education.

Entrepreneurship education is explicitly mentioned for the first time in Finnish primary school curricula in 1994. Themes are proposed to be implemented through collaboration, themes and projects in different subjects. Themes can be approached as separate courses or theme weeks, but not as subjects. Teachers wondered most about the involvement of entrepreneurship education in the themes. Teachers believed that entrepreneurship could be increased while educating pupils as self-motivated, self-confident and entrepreneurial. Teachers felt that student's appreciation for the work increased at the same time. Teachers felt that entrepreneurship education is about the old idea of work education in new clothes.

As a historical continuation, entrepreneurship education and training can be seen as a successor to work education as shown in the following figure.

<sup>&</sup>lt;sup>5</sup> T. Kananoja, *Teknologian ja sen opetuksen historiaa ja kehitystä*, "Oulun yliopiston kasvatustieteiden tiedekunnan opetusmonisteita ja selosteita" 56, Oulu 1994.

<sup>&</sup>lt;sup>6</sup> M., *Työkasvatuksen perusaineksia*, "Tampereen yliopiston Hämeenlinnan opettajankoulutuslaitoksen Julkaisuja" 1988 no. 20.

J. Mehtäläinen, Elämää akvaariossa, Kokemuksia koulukohtaisen opetussuunnitelmatyön ensivaiheista, "Kasvatustieteiden tutkimuslaitoksen julkaisusarja" B 88, Jyväskylä 1994.

The core content of life is			The position of		The work is in	The engagement of
work			work changes		change	work and place
,, ork			work changes		change	reduces
Historical and religious background of			Content of work		Unemployment, part-time	Globalization, increased
work					and multi-job work	proactive work, short-
						term employment
Work was taught at home.			Children alienating from work and working.		A new model of work.	Creating a foundation for entrepreneurial approaches.
RESPECT FOR WORK			FAMILY, FREE TIME,		INTERNAL	Developing internal
			JOB		ENTREPRENEURSHIP	entrepreneurship
						capabilities, self-
						motivated
						entrepreneurship
Curriculum 1925	Curriculum 1946	Curriculum 1952	Curriculum 1970	Curriculum 1985	Curriculum 1994	Curriculum 2003, 2006, 2015 and 2016
Imitative	Education	Character	Positive attitude for work,		Entrepreneurship,	Supporting of initiative
	for work	education	appreciation of work		flexibility, responsibility	
WORK EDUCATION					ENTREPRENEURSHIP	ENTREPRENEURSHIP
					EDUCATION AND	EDUCATION AND
					TRAINING	TRAINING; Topics of Entrepreneurship / cross-
						curricular transitions of topics

Figure 1. Work education, entrepreneurship education and training; their connection to work change and curricula, the revised version of figure 168

Seikkula-Leino believes that entrepreneurship education is basically civic education which affects skills, behavior and beliefs. The development of entrepreneurship is related to personal life and the achievement of professional and financial goals. Entrepreneurial people work in different parts of society - in both the business and non-profit sectors. The Finnish school has responded to social changes through work education, civic education, entrepreneurship education and training. In the current situation, the concept of work has faced enormous upheavals. Entrepreneurship education has contributed to these changed circumstances with the concept of internal entrepreneurship, cf. Figure 1.

# General information about entrepreneurship education, goals and contents of entrepreneurship education

The concept of entrepreneurship education is problematic. In Finland, entrepreneurship education is generally seen as external and internal entrepreneurship. The term "entrepreneurship education", in turn, is mainly

<sup>&</sup>lt;sup>8</sup> E. Nevanperä, *Yrittäjyys Suupohjan opiskelijanuorten ajattelussa, Tutkimus Suupohjan seudun nuorisoasteen opiskelijoiden yrittäjyysnäkemyksistä sekä yrittäjyysopetuksen opetussuunnitelman kehittämispyrkimyksistä*, Väitöskirja, "Studies in Business and Economics" 2003, Jyväskylä University.

<sup>&</sup>lt;sup>9</sup> J. Seikkula-Leino, *Opetussuunnitelmauudistus ja yrittäjyyskasvatuksen toteuttaminen*, "Opetusministeriön julkaisuja" 2007 no. 28.

linked to the ownership of a small business and the pursuit of a business. According to Heikkinen, different parties, when they are talking about entrepreneurship and entrepreneurial spirit, may speak completely about different things<sup>10</sup>. The study by Ristimäki confirms this, as some of the teachers say that entrepreneurship education is only a part of teaching entrepreneurship, which emphasizes external entrepreneurship<sup>11</sup>.

The basis for entrepreneurship education research is mainly based on the conceptual understanding of entrepreneurship and learning. According to Gibb, entrepreneurship learning is 1) learning for entrepreneurship, 2) learning about entrepreneurship and 3) learning through entrepreneurship<sup>12</sup>. Referring to many studies, Fayolle has tightened the case quite the same way<sup>13</sup>.

In the definition of entrepreneurship education, the terms are entrepreneur and entrepreneurial (spirit of entrepreneurship). A significant difference between these terms is that the entrepreneur is perceived to be connected to the business, and the entrepreneurship can also be used in other contexts. The concept of internal entrepreneurship also includes self-employed entrepreneurship. The external entrepreneurship is to do the business. The Internal entrepreneurship in teaching is learning to do business. The external entrepreneurship is an understanding of entrepreneurship and the start-up and the development of entrepreneurship. For younger students, teaching should include more self-motivated and internal entrepreneurship. In the early stages of entrepreneurship education, in pre-school and in primary education, entrepreneurship education is mainly concerned with the development of entrepreneurship, internal entrepreneurship and self-motived entrepreneurship<sup>14</sup>. In this case, a school should mainly develop factors related to self-esteem, motivation and creativity. In addition, skills

<sup>&</sup>lt;sup>10</sup> V. Heikkinen, *Yritteliäisyyteen kasvattamisesta, Käsitteitä ja ajattelutapoja,* Teoksessa P. Ruohotie & J. Honka (toim.) *Suomalainen ammattikasvatus*, "Professori Matti Peltosen juhlakirja" 1988. Keuruu Otava, s. 19-27.

<sup>&</sup>lt;sup>11</sup> K. Ristimäki, *Yrittäjyyskasvatus Kokkolan kouluissa, Tutkimus opettajien yrittäjyysasenteista ja –arvoista*, Jyväskylän yliopisto 1998, Chydenius-Instituutti Kokkola.

<sup>&</sup>lt;sup>12</sup> A. Gibb, *The Future of Entrepreneurship Education – Determining the Basis for Coherent Policy and Practice?*, Teoksessa P. Kyrö. & C. Carrier (toim.), *The Dynamics of Learning Entrepreneurship in a Cross-Cultural University Context*, University of Tampere, Research Centre for Vocational and Professional Education, Saarijärven Offset 2005, p. 44–66.

<sup>&</sup>lt;sup>13</sup> A. Fayolle, *Entrepreneurship education at a crossroads: Towards a more mature teaching field*, "Journal of Enterprising Culture" 2008 16(4), p. 325-337.

<sup>&</sup>lt;sup>14</sup> L. Remes, *Yrittäjyys*, "Teoksessa aihekokonaisuudet perusopetuksen opetussuunnitelmassa", Toim. Loukola, M.-L., Jyväskylä 2004, s. 89–90.

and interaction skills in group work are important<sup>15</sup>, <sup>16</sup>. In the school context, the external entrepreneurship is, among other things, doing business ideas, as well as strengthening school-business cooperation.

The goals and aims of entrepreneurship education can be described in a complex way. Entrepreneurship education enables career planning. It provides an entrepreneurial way of seeing and implementing things and can be used to characterize teaching and learning<sup>17</sup>, <sup>18</sup>. Looking at the basics of the Finnish curriculum in education, entrepreneurship education appears to be broad-based. In basic education, entrepreneurship education has been integrated into one of seven themes, and entrepreneurship education emphasizes internal entrepreneurship. The aim of the core curriculum "Working life skills and entrepreneurship" is to help the student to perceive society from the perspective of different actors. School work is organized in such a way that pupils can learn about their working life and learn entrepreneurial ways of working. In addition, pupils must understand the importance of the skills acquired at school and in their leisure time for their own career. The skills of self-employment and entrepreneurship, as well as risk-taking and assessment, are also known through various projects. In school work, pupils learn group work, project work and networking<sup>19</sup>.

In upper secondary education, entrepreneurship education has been integrated into one of six themes. The goals are consistent with basic education, although they have been deepened. The focus of the theme "Active citizenship, entrepreneurship and working Life" is on practical training and on creating personal experiences of participation and influence. The learning environment is being developed in cooperation with social organizations, various organizations and companies. Learning environment is developed in cooperation with organizations and companies. Exercise company activities

<sup>&</sup>lt;sup>15</sup> S. Cooper, C. Bottomley & J. Gordon, *Stepping out of the classroom and up the ladder of learning: an experiential learning approach to entrepreneurship education*, "Industry and Higher Education" 2004 18(1), p. 11-22.

<sup>&</sup>lt;sup>16</sup> T. V. Menzies & J. C. Paradi, *Entrepreneurship education and engineering students, Career path and business performance*, "The International Journal of Entrepreneurship and Innovation" 2003 4 (2), p. 121–132.

<sup>&</sup>lt;sup>17</sup> K. Berglund & A. Johansson, *Entrepreneurship, discourses and conscientization in processes of regional development*, "Entrepreneurship and Regional Development" 2007 19(6), p. 499–525.

<sup>&</sup>lt;sup>18</sup> L. Pittaway & J. Cope, *Entrepreneurship Education: A Systematic Review of the Evidence*, "International Small Business Journal" 2007 Vol. 25, p. 479-510.

<sup>&</sup>lt;sup>19</sup> Opetushallitus, Perusopetuksen opetussuunnitelman perusteet, Vammala 2014.

and joint projects with companies, universities and other educational institutions can also be part of the implementation of the theme. The levels of participation are local, national, European and global<sup>20</sup>.

The current curriculum of vocational education includes 5-10 credits entrepreneurship studies. The basic vocational qualifications were renewed on 1 August 2015. Competence points came to replace the study weeks. They describe skills, not the time spent on learning. In addition to competence, the qualification criteria emphasize working life orientation and individual and flexible study paths for students<sup>21</sup>.

In the Finnish entrepreneurship education, the situation in primary schools is better than in junior high schools and upper secondary schools. The situation is improving when moving to vocational schools and universities. The basic problem of upper secondary schools is that they are largely prepared for student diplomas. In particular, the development of primary school education is critical to the entrepreneurial activity. If the teaching of the coaching skills for starting and running a business is focused only on vocational and higher education, it is too late to achieve real cultural change.

According to Leskinen, entrepreneurship education should start in childhood and should flow through the education system. However, the inclusion of entrepreneurship education in the school environment is not without problems. Entrepreneurship education is a functional and experiential process. It requires long-term integration of several subjects and collaboration between teachers. According to Leskinen, scheduled and preplanned teaching can bring with it problems in creative entrepreneurship education. At its worst, entrepreneurship education can become a "school entrepreneurship" that is far from "real" entrepreneurship<sup>22</sup>.

Arveli defines the objectives of entrepreneurship education in the subclasses of basic education as follows:

- 1. The pupil learns to take responsibility for his/her own actions. The pupil works as well as possible and understands that success requires diligence, vigor, perseverance, creativity and patience.
- 2. Pupils learn to collaborate and solve problems together, realize the importance of the individual in overall activity.

<sup>&</sup>lt;sup>20</sup> Opetushallitus, Lukion opetussuunnitelman perusteet, Vammala 2015.

<sup>&</sup>lt;sup>21</sup> Opetushallitus, Ammatilliset perustutkinnot ja tutkintojen perusteet, Vammala 2014.

<sup>&</sup>lt;sup>22</sup> P-L. Leskinen, *Yrittäjällä on koko elämä kiinni yrityksessä, Opiskelijoiden yrittäjyyskäsitykset ja niiden muutokset yrittäjyysprojektin aikana*, "Liiketaloustiede 27 Johtaminen ja organisaatiot" no. 71, Vaasan yliopisto 1999.

- 3. The pupil learns to appreciate his own and collaborative work.
- 4. Knowledge of the father's and mother's profession and work enables the pupil to have a proper image of the importance of work for the well-being of the family.
- 5. By learning about the work of the school staff, the child learns to appreciate all the work and understands the importance of professional skills for the whole school.
- 6. In addition, the pupil also learns the responsibility for his own behavior for the whole community and realizes that schooling is not free to the society and parents.
- 7. The pupil learns that work and professions are constantly changing. The change is also affecting the society as a whole.
- 8. The student understands the importance of education in working life, and is able to assess his or her own tendencies and opportunities for future working life and self-employment, and deliberately develop his / her tendencies<sup>23</sup>

In upper classes, entrepreneurship education focuses on knowledge and attitudes. Secondary education emphasizes knowledge, skills and attitudes. The development of personal skills goes hand in hand with two other areas. The main means of entrepreneurship education are channeled into the working life through familiarization periods (TETs). Through the periods of familiarization with working life, the school aims to get the student to take responsibility for self-development and civilization. The main priorities are: internal entrepreneurship, initiative, entrepreneurial spirit, external entrepreneurship, internationality and economy.

Arveli summarizes entrepreneurship education in upper classes as follows:

- 1. The pupil learns to make choices and understands the significance and risks of choices.
- 2. The pupil is guided to the right working habits and to appreciate and evaluate the quality of one's own work.
- 3. The pupil will learn about the company and business.
- 4. Pupils are familiarized with starting a business, a production and marketing process, and are given an image of entrepreneurship as a profession.

<sup>&</sup>lt;sup>23</sup> E. Arveli, *Yrittäjyyskasvatus ala- ja yläasteella*, Teoksessa, *Yrittäväksi koulussa - kasvatus yrittäjyyteen*, Opetushallitus Helsinki 1993, s. 25 – 27.

- 5. Students understand the importance of the employee as part of the company and also understand the importance of internationality for the employee and the company.
- 6. The student understands the importance of an internationalizing business life for the Finnish economy and for himself.

According to Leskinen, entrepreneurship education cannot be carried out by force independently of the will of teachers and students. "Forced Entrepreneurship" does not create a positive attitude towards entrepreneurship. Entrepreneurship education, in addition to content-based planning, requires strong pedagogical planning. New learning perspectives, experiential learning, and student activation are strongly related to entrepreneurship education. Entrepreneurship education requires integrated teaching beyond the boundaries of subjects and timetable.

According to Leskinen, the following changes are needed to implement entrepreneurship education:

- 1. Entrepreneurship education should be passed through the school system. Students must have the capacity for self-directed learning before continuing to secondary and tertiary education.
- 2. Teachers need further training in both pedagogical skills and subject-specific studies. It is unreasonable to require a teacher to teach something he or she is not familiar with or has no experience with.
- 3. The learning perspective should get rid of traditional class-room learning. This learning is largely based on remembering the text of the textbook, which determines decisively the survival of the course. The key to learning is to focus on functionality.
- 4. The subject-based teaching, which is tied to the timetable, should gradually cast off. Studying should increasingly build on themes and modules that are bound to the context of living life. This requires a lot of collaboration between teachers.
- 5. Creativity and entrepreneurship are intertwined, so creativity must be clearly present at all levels of the education system. Creativity can be taught both as a passing and a separate course.
- 6. Contacts and networks related to the environment are of vital importance. Each school has to choose a responsible person to handle these connections. Collaboration with business requires that business representatives are also familiarized with this activity. Entrepreneurship education requires change in school structures

- and culture. A classroom-centred situation should be sought towards team-centred work.
- Entrepreneurship education in every school needs its own vision, mission and strategy. Commitment by management, teachers and students is important. It would also be sensible to build teams of different experts for schools<sup>24</sup>.

Leskinen's proposals are good and cover the whole school system. On the other hand, traditional classroom teaching should not be completely ignored. Lecture teaching is also an effective method, for example, when teaching external entrepreneurship. Even today, teaching is too much tied to the classroom. The developing of creativity cannot be tied to a specific course. On the other hand, when acting on the principle of permeability, there is always the danger that the thing will be "forgotten", no teacher will take it. Contacts and networks related to the environment are important, and there should be a responsible person in school for managing contacts. Teachers should take on a new role as a developer of working life without separate responsibilities. The division of labor is, of course, need to be agreed.

Seikkula-Leino has thoroughly studied the implementation of entrepreneurship education in a Finnish school. In her view, the following factors should be included in the planning and implementation of entrepreneurship education at regional level:

- 1. Identify the concept and objectives of entrepreneurship education.
- 2. Creating a vision of the situation (mapping the situation in which school is and what school wants to get to).
- 3. Creating goals (select a few essential goals at a time).
- 4. Developing a strategy (mapping the target group, i.e. learners, collaborators, integration into subjects and culture, pedagogy, learning environments).
- 5. Consider how to make the structure work (internalisation of the plan, material and financial resources, teachers and organization management work in a meaningful way, create a realistic timetable).
- 6. Planning an evaluation (for the development of entrepreneurship in the region, schools and individuals, creating interaction, dealing with risks and problems, creating and taking into account creative ideas, and learning about entrepreneurship awareness)<sup>25</sup>.

<sup>&</sup>lt;sup>24</sup> Ibidem.

<sup>25</sup> Ibidem.

Further, Seikkula-Leino notes that at the educational level, entrepreneurship education can be developed as follows:

- 1. Identify the concept and objectives of entrepreneurship education.
- 2. Check out the national and local curriculum.
- 3. Identify materials and ideas related to entrepreneurship education.
- 4. It would be a good idea to create a material bank for your own institution.

In addition, a plan for entrepreneurship education will be drawn up, which will include:

- 1. Goals for the development of internal (and self-motivated) entrepreneurship.
- 2. Objectives for external entrepreneurship.
- 3. Planning a learning environment.
- 4. Applying for co-operation partners (business life, home school, etc.).
- 5. Integration into subjects, operational culture.
- 6. Versatile ways of working, such as interactivity, interoperability, and ways to solve the problem.
- 7. Evaluation from the perspective of individual and community development<sup>26</sup>.

The international perspective of entrepreneurship education has been studied among others by Panula & Routamaa. They conducted a survey on the perceptions of entrepreneurship education among representatives of vocational schools in Spain, Portugal, Austria and Finland. Entrepreneurship education is perceived in Spain to teach business-related topics. On the other hand, some teachers and students were able to combine business-related topics and life management skills with internal entrepreneurial skills. According to the Portuguese, the educational institutions want their students to become self-initiated, active and self-confident individuals. Thus, the abilities and skills of students correspond to the demands of working life. However, there were respondents who considered entrepreneurship education as synonymous with the teaching of commercial subjects. According to the responses, the opinions of the leaders and teachers of Austrian vocational schools are strongly focused on external entrepreneurship. In Finland, entrepreneurship education is more comprehensively understood as an educational method

<sup>26</sup> Ibidem.

in which, in line with the objective of the teaching plans, external entrepreneurship is taken into account<sup>27</sup>.

The importance of entrepreneurship as part of the school system seems not to have been observed in Spain, Portugal and Austria. It is more integrated into the private sector. Most of the responses from all countries reflected the view that students are being educated for paid employment and are not encouraged to pursue an entrepreneurial career. On the other hand, it depends on the field of education; for example, students in the field of agriculture and forestry are more likely to become entrepreneurs than students of technical schools. The most common reason for this is probably that land and forestry students usually continue their parents' farm.

### Teaching methods and working practices in entrepreneurship education

Entrepreneurship education is accompanied by a large number of different teaching and working methods<sup>28</sup>. It is often suggested that learning in entrepreneurship education should take place through entrepreneurial processes as entrepreneurs learn<sup>29</sup>, <sup>30</sup>. Concepts *entrepreneurial pedagogy* and *entrepreneurial learning* have established a foothold<sup>31</sup>. Critically-minded voices have also been presented, cf. Komulainen et al. 2010<sup>32</sup>.

A long time ago, Schumpeter recognized intuitive and opportunity-oriented actions related to entrepreneurial learning<sup>33</sup>. The model of *experiential learning* developed by Kolb is also strongly involved in entrepreneurial

<sup>&</sup>lt;sup>27</sup> T. Panula & V. Routamaa, *Eurooppalaisia näkökulmia yrittäjyyskasvatuksesta*, "Opetusministeriön EU-rakennerahastot –julkaisu" 10/2002, Opetusministeriö, EU-rakennerahastot, Valtioneuvosto.

<sup>&</sup>lt;sup>28</sup> H. Neck & P. G. Geene, *Entrepreneurship Education: Known Worlds and New Frontiers*, "Journal of Small Business Management" 2011 no. 49, p.55-70.

<sup>&</sup>lt;sup>29</sup> N. Birdthhistle, B. Hynes & P. Fleming, *Enterprise education programmes in secondary schools in Ireland: A multi- stakeholder perspective*, "Education + Training" 2007 49(4), p. 265-276.

<sup>&</sup>lt;sup>30</sup> I. Richardson & B. Hynes, *Entrepreneurship Education: towards an industry sector approach.* "Education + Training" 2008 no. 50(3).

<sup>&</sup>lt;sup>31</sup> B. Jones & N. Iredale, *Enterprise education as pedagog*, "Education + Training" 2010 no. 52(1), p. 7-19.

 $<sup>^{\</sup>rm 32}\,$  K. Komulainen, S. Keskitalo – Foley, M. Korhonen & S. Lappalainen, Yrittäjyyskasvatus hallintana, Vastapaino 2010.

 $<sup>^{\</sup>rm 33}$  J. Schumpeter, The Theory of economic development, "Harward University Press" 1934 Cambridge MA.

learning practices<sup>34</sup>. For example, Rae and Carswell define entrepreneurial learning to be about how well individuals can utilize their abilities to identify and develop the surrounding potential. According to them, learning is a dynamic process that enables entrepreneurial behavior to be activated<sup>35</sup>.

According to Ruskovaara et.al, the working methods chosen according to the objectives of entrepreneurship education are to develop the knowledge and skills of learners. Working methods should promote active participation of learners, interaction skills, social skills and problem solving skills<sup>36</sup>. Jones & Iredale claim that at least two changes in traditional school culture are needed to achieve the goals of entrepreneurship education: curriculums should be changed and teaching and learning methods developed<sup>37</sup>. Many researchers, including Richardson & Hynes 2008, have reported good learning outcomes and teaching experiences with businesses or in close collaboration with them. Tasks performed with or on behalf of these companies are considered to develop learners' diverse interaction and design skills required in teamwork, to bind uncertainty, problem solving, and to develop understanding of potential risks. Also, the evaluation practice in which peer review and self-assessment are involved has brought new depths to the tasks and their performance. Out-of-class activities are also said to have opened up the learner's view of their own influence and opportunities for action<sup>38</sup>. At the same time, the role of different actors in society has become clearer. In addition to these lessons, using entrepreneurial stories, Rae & Carswell also report an increase in self-confidence and knowledge. Learning games simulating the real world also seem to gain a foothold in entrepreneurship education<sup>39</sup>.

According to the curriculum of basic education (National board of education 2014), the teaching must use methods which are specific to the subject and diverse working methods. The purpose of working methods is to develop learning, thinking and problem solving skills, working skills and social skills, as well as active participation. Working methods should also

 $<sup>^{34}\,</sup>$  D.A. Kolb, Experiental Learning, Experience as the Source of Learning and Development, New Jersey 1984. Prentice-Hall.

<sup>&</sup>lt;sup>35</sup> D. Rae & M. Carswell, *Toward a conceptual understanding of entrepreneurial learning*, "Journal of Small Business and Enterprise development" 2001 8(2), p. 150-158.

<sup>&</sup>lt;sup>36</sup> E. Ruskovaara, T. Pihkala, T. Rytkölä ja J. Seikkula-Leino, *Opettajat yrittäjyyskasvatuksen toteuttajina – käytäntöjä ja taustatekijöitä* 2013.

<sup>37</sup> Ibidem

 $<sup>^{38}\,</sup>$  B. Hynes, Entrepreneurship education and training – introducing entrepreneurship into non- business disciplines, "Journal of European Industrial Training" 1996 20(8), p. 10-17.

<sup>39</sup> Ibidem.

contribute to the development of ICT skills. The choice of working methods is based, among other things, on the tuning of the learning desire, on the activation of goal-oriented work, on the acquisition of developing knowledge and on the application and evaluation of knowledge. In addition, it is important to support interaction learning, promote social flexibility, the ability to work constructively, take responsibility for others, get feedback for reflecting on one's own activities, and the ability to help the student to understand and apply his / her own learning in new situations<sup>40</sup>.

Hynes believes that the teaching of entrepreneurship education should include didactic methods, skills building methods, and discovery methods. Didactic methods aim to strengthen skills such as acquiring, applying and evaluating knowledge. Skills-building methods are used to enhance the effectiveness of learners. Such methods include projects, simulations, group discussions, and presentations<sup>41</sup>.

Lavonen groups the working methods and tasks of entrepreneurship education into four groups:

- 1. Personality development (e.g. creative problem solving, independent projects).
- 2. Developing social interaction (e.g. business simulation, role play, debate, collaborative learning).
- 3. Development of school-enterprise co-operation (e.g. business visits, getting to work, functional study visit).
- 4. Development of information gathering (e.g. company representative at school, IT)<sup>42</sup>.

According to Gibb, the pedagogy used in entrepreneurship education should be based on the active role of learners in the learning process and thus on the use of non-traditional learning methods. The information is created together and failure is accepted as part of the learning process. Teaching methods should thus activate learners' common learning process and reflection<sup>43</sup>. According to Seikkula-Leino, communal education, problem solving, learning from mistakes, creativity and reflection must be reflected in the implementation of entrepreneurship education. Such methods or ways of working include collaborative learning, team learning, project work,

<sup>40</sup> Ibidem.

<sup>41</sup> Ibidem

 $<sup>^{\</sup>rm 42}$  J. Lavonen,  $Yritt\ddot{a}jyyskasvatus$  peruskoulussa, Taloudellinen tiedotustoimisto 1997 Helsinki, s. 28-39.

<sup>43</sup> Ibidem.

learning by doing, learning diaries, pedagogical drama, training entrepreneurship, getting to know the world of work and students' visits in companies<sup>44</sup>. Fiet presents a series of teaching methods and working methods that can be used in entrepreneurship education. Fiet argued that both teachers and learners can be bored in the classroom if the teaching is unpredictable and the learners do not experience any kind of surprises. Fiet encourages teachers to use versatile ways of working. Teaching should take place in pairs and groups, where the teacher participates in the discussion, guides and acts as an enabler. According to Fiet, theoretical and problem-based learning guides teacher's activity more towards a coach and mentor than towards a "traditional" lecturer. This also offers students better conditions for genuine learning process<sup>45</sup>.

It can be seen that there are no inconsistencies between the aims, methods and working methods of entrepreneurship education presented by curricula (National board of education 2003, 2004, 2014 and 2015). Researchers (see Birdthistle et al.) have highlighted the need for training that the methods and working methods described above can be realized and successful implementation of entrepreneurship education in educational institutions is possible: Teachers and principals should receive the necessary information on entrepreneurship education in their initial education. Subsequently, in-service training should provide up-to-date information on the opportunities and ways of implementing entrepreneurship education<sup>46</sup>, <sup>47</sup>.

The Danish Ministry of Education Danish White Paper 1995, cf. Seik-kula-Leino 2007, summarized the following five pedagogical principles as key principles for entrepreneurship education:

- 1. The learning process should be defined as far as possible from the learners themselves; learners are therefore responsible for their own learning.
- 2. The problem-oriented approach, which means learning to work with real and realistic problems that motivate the knowledge thirst.

<sup>44</sup> Ibidem.

<sup>&</sup>lt;sup>45</sup> J.O. Fiet, *The Pedagogical Side of Entrepreneurship Theory*, "Journal of Business Venturing" 2000b 16(1), p. 101-117.

<sup>46</sup> Ibidem

<sup>&</sup>lt;sup>47</sup> J. Seikkula-Leino, *Kumppanuusmallia vahvistamassa, aikomuksia yrittäjyyskasvatukseen, Yrittäjyyskasvatuksen muotoutuva maisema -yrittäjyyskasvatuksen identiteettiä rakentamassa.* "Julkaisuja" 2009 no. 176, Jyväskylän yliopisto.

- 3. Truth experience, which means that the learner's own experiences should be linked as much as possible to teaching and discussed in detail in the learning process.
- 4. Differentiated teaching and learning style, which means that each learner is given the opportunity to learn in their own way in collaboration with others.
- 5. Project orientation and self-direction, which means that the learner has to face the tasks he / she has determined over the boundaries of matter<sup>48</sup>.

Solomon, Tarabishy, Winslow and D'Onofrio looked at entrepreneurship education in the United States (external entrepreneurship). The business plan formed the core of entrepreneurship education in the United States. The curriculum also included the use of visiting lecturers, literature-based narratives and interviews with entrepreneurs. The method was also working with an entrepreneur or in a small company started by a class<sup>49</sup>. According to Christensen, the best methods of entrepreneurship education were the use of visiting lecturers and the use of case studies. The significance of the lectures was perceived to be contradictory when the lectures were accepted by the same number of teachers as they were against. All in all, the use of other different methods was sporadic. Seminars and workshops were used to some extent. Practices, projects, role-playing games, simulations, work experience, field research, teamwork, peer learning and evaluation were also named as useful methods in entrepreneurship education<sup>50</sup>.

# Contributions to basic education, upper secondary school and vocational education institutions for entrepreneurship education and training in Southern Ostrobothnia and Teuva municipality

The same distribution of lessons in the basic education of the province guarantees a level playing field for all students. It also facilitates the transfer of pupils between municipalities when moving. The preparation has been made in accordance with the national goals of the Basic Education Act and the distribution of lessons. The entrepreneurial approach means that all 19 municipalities and cities in the province invest one hour a week in

<sup>&</sup>lt;sup>48</sup> Danish White Paper, A Coherent Educational Strategy on Entrepreneurship 1995.

<sup>&</sup>lt;sup>49</sup> G.T. Solomon, A. Tarabishy, E.K. Winslow & S. D'Onofrio, *A Comparison of the Empirical Investigation into Entrepreneurship Education in the United States and International* ~ "Contribution paper" 44 th ICSB World Conference 1999, Naples Italy, ICSB 118.

 $<sup>^{50}</sup>$  M. A. Christensen, Messages from the front line,  $_{``}$  A Survey of entrepreneurship educators in Canada" 1994.

entrepreneurship studies in their 7th grade primary education. The entrepreneurial approach runs through elementary school and one optional subject at elementary level must be the entrepreneurial approach. The National Board of Education has ensured that the entrepreneurial approach can be a separate subject in the provincial curriculum<sup>51</sup>.

The provincial emphasis "Entrepreneurial approach" crystallizes in the Teuva school system: "Everything you do, do as well as you can." Students are helped to identify their own strengths and weaknesses. Learning and schoolwork must be goal-oriented. In the seventh grade, entrepreneurship is marked as one weekly hour. The goal for the students is to build a portfolio of their own strengths or create their own blog. At Teuva municipality, entrepreneurial approach means being entrepreneurial. The procedures are recorded in the work plan<sup>52</sup>.

Upper secondary schools have in their own way incorporated entrepreneurship into the curriculum. Entrepreneurship as a career option and way of working, as well as motivational issues in entrepreneurship, are included in the curriculum of psychology at Teuva High School. The importance of entrepreneurship for the European Union and for the economic development of the region is included in the courses of social studies. Business and technology development are included in history courses. The importance of entrepreneurship for the economic development and well-being of the region, as well as the importance of company law and the single currency, are also included in social studies courses.

In addition to theory, Teuva High School has invested in practical entrepreneurship. Students are offered an annual entrepreneurship course that includes, among other things, business plan making in the groups of 3-4 students. About 20% of students choose the course each year. The Adult Education Center of Teuva and entrepreneurs in the area help students with their business plans. Companies in the area sponsor the group that makes the best plan. Business ideas for student companies include, among other things, care services for the elderly. Other business ideas for student companies include catering, food transportation, cleaning, exercise and recreation services, and various cultural services.

Teuva High School has also taken part in a nationwide project for the development of entrepreneurship education and entrepreneurship school (Y-love) organized by the National Board of Education. The development

<sup>&</sup>lt;sup>51</sup> Perusopetuslaki 11§ 2 momentti", Opetusministeriö 2012.

<sup>&</sup>lt;sup>52</sup> Teuvan perusopetuksen opetussuunnitelma 2016. Teuvan kunta.

project was involved in 23 high schools from all over Finland. South Ostrobothnia was represented by four other high schools in addition to Teuva. The goal of the project was to develop networking, share knowledge and develop a high school entrepreneurial portfolio. Access to the network was conditional on the high school committing itself to conducting at least one course of entrepreneurship studies each year. The condition was that every high school in the network had to hold at least one entrepreneurship course every year.

According to Nevanperä, the Y-Love goal of the five upper secondary schools in South Ostrobothnia was well fulfilled. Entrepreneurship courses were most offered at Kauhava and Lappajärvi high schools. Teuva had the highest number of entrepreneurship students (50%) and Lappajärvi the second largest (19%). The above-mentioned high schools were not involved in the national JA Finland's activity (Junior Achievement Finland). Teuva High School had the highest number of student companies (5), but Kauhava High School had the highest number of entrepreneurship teachers (36%). The other 15 upper high schools in South Ostrobothnia have conducted entrepreneurship studies on an occasional basis. Entrepreneurship studies were mainly about raising money for students to travel abroad and for international projects. Individual companies and / or municipal entrepreneurial organizations worked as the partners of high schools in projects. Seinäjoki and Lapua high schools planned to start JA Finland's activity<sup>53</sup>.

South Ostrobothnia high schools have become more interested in entrepreneurship in recent years. In 2016, Jalasjärvi and Nurmo high schools won the competition for dare to doing business, which is a part of JA Finland's activity. Jalasjärvi High School boys won the Best Seller team competition and Nurmo High School boys won the Best Service final. The national competition was attended by 15 to 19-year-olds who have run their real money businesses during the academic year as part of their NY Business as an Entrepreneur program. In recent years, various educational institutions at the Suupohja Vocational Institute have invested heavily in entrepreneurship. Teuva municipality is one of the owners of the Suupohja Vocational Institute. Several student companies have been established at the Institute. Every year rural entrepreneurs, caretakers, gardeners and green experts graduate from the college of agriculture, which is one of colleges in Suupohja Vocational

<sup>&</sup>lt;sup>53</sup> E. Nevanperä, Etelä-Pohjanmaan toisen asteen koulutuksen kehittämis- ja koordinaatiohanke, Vaihtoehtoiset mallit toisen asteen koulutuksen järjestämisessä Etelä-Pohjanmaalla, "Etelä-Pohjanmaan liiton julkaisuja" 2012.

Institute. The Agricultural College cooperates significantly with companies, farms and horse stables in the Suupohja area. A new and modern EUR two million educational cowhouse was completed in autumn 2015. The cowhouse is equipped with a milking robot for 60 cows. A modern biogas factory of approximately EUR 1.5 million was built near the cowhouse. The factory produces transport gas, heat and fertilizer for its own use and for sale. Gas and fertilizer are made from cow manure, potato shell waste and dry feed. Thanks to the investments, the number of students in the college has increased considerably.

The curriculum of the School of Business Administration was revised in 2014 to better reflect the needs of working life. Development activities have focused on team entrepreneurship and business cooperation. Students have set up several YE (young entrepreneurship) businesses whose services have been offered during open days, on the Internet and through various media. Some YE companies have also participated in various trade fairs each year. Part-Time PTW YE was selected as the Best YE Company in the province and was invited to the National YE Business Competition in spring 2014. All 3rd grade students took part in YE business, with a special focus on team entrepreneurship. The students also conducted a needs survey of companies in the area. The survey showed that companies are willing to work collaboratively, especially on scholarly thesis and on-the-job learning. YE Company Promen sells and markets the products of Laidun Hereford Company in autumn of 2014. Pesux YE sells its services to businesses in the area and Calenda YE partnered with day care centers.

In autumn 2013, a new game training program was launched in connection with the ICT training program. There has been an oversupply of students. Students are interested in regional business cooperation. About 60% of third-year students completed a software production demonstration during their on-the-job training period. Graduated system designers also took part in the nationwide learning environments Prope project in 2013-2014. The aim of the Prope project is to implement and evaluate the application of the gaming companies' production process as a learning environment for the industry. A new learning environment ("Cloud") was designed and built for teaching, as close as possible to real working life. These development projects and business cooperation have yielded good results. As many as two gaming teams advanced from the nationwide semi-final to the final of the Taitaja 2017 competition.

The undergraduate degree in cultural audiovisual communications, media assistant training, has also increased the entrepreneurial focus,

particularly in their theses. Media assistants have participated in Taitaja-2014 Finnish Championships and their theses have been made more work-oriented. In 2015, the college's media assistant team won the South Ostrobothnia Young Entrepreneurship Regional Championships and qualified for the national final.

Significant reforms have taken place in Finnish vocational and adult education since 1 January 2018. Vocational education reform was one of the flagship initiatives of the previous government. The funding, guidance, operational processes, qualification system and organizational structure of vocational education have been reformed. Knowledge-based and customer-oriented are key starting points. Work-based learning and individual study paths have been increased and deregulation has been introduced.

The success of growth companies in South Ostrobothnia and Teuva is a significant point in the region's tax revenue and well-being. To be successful, a company needs a well-trained workforce. As regional trainers, Teuva High School and various units of the Suupohja Vocational Institute will play a key role in this development. In the future, it would be important for young people graduating from high school and vocational training to have an entrepreneurial attitude, not only knowledge and skills.

### Impact of entrepreneurship education, education and training on entrepreneurial intentions in the light of research

According to Hirsjärvi et al., upbringing, education and training are intrinsically linked. They all influence the development of the individual. The term upbringing is the widest of them. Teaching is needed for both upbringing and training. The key to training is to teach knowledge and develop skills. Training ends at some point, upbringing is continuous and lifelong<sup>54</sup>. Entrepreneurship education is central to entrepreneurship. It's a part of upbringing. Entrepreneurship education and civic education are inherently close concepts. The purpose is to influence skills, beliefs and entrepreneurial behavior. Entrepreneurial willingness and acceleration of growth can be promoted. Among other things, the general entrepreneurial atmosphere, the home environment, teachers and the school all influence the growth of entrepreneurship, see Harthorn and Hannon<sup>55</sup>.

<sup>&</sup>lt;sup>54</sup> S. Hirsjärvi & J. Huttunen, *Johdatus kasvatustieteeseen 1995* 4.-5. painos, Juva WSOY.

<sup>&</sup>lt;sup>55</sup> C. Harthorn, P.D. Hannon, "Paradoxes in entrepreneurship education: chalk and talk or chalk and cheese, A case approach", "Education + Training" 2005 vol. 47 Iss. 8/9, pp.616 – 627

As an educational objective, entrepreneurship must not be narrowly understood to refer only to external entrepreneurship. Entrepreneurship courses and the training of entrepreneur are not entrepreneurship education. The role of entrepreneurship education is to develop a positive attitude towards entrepreneurship and work. Growth in entrepreneurship is largely about mental growth and it makes entrepreneurship education a challenge. Entrepreneurship education is an ongoing process that progresses through life and the school system. In entrepreneurship education, teaching methods should be entrepreneurial, learner-centered, social interaction-focused and student-centered. Cooperation with the business community is also essential. Training in companies and students' own business are perhaps the best entrepreneurship education. According to Lassila, several research results show that entrepreneurship education can influence entrepreneurial attitudes<sup>56</sup>. Entrepreneurship education also significantly increases students' entrepreneurial intentions, cf. Kirby<sup>57</sup>.

According to Turunen, teachers do not know enough about the goals, contents and working methods of entrepreneurship education. Teachers had to be obligated to in-service training and entrepreneurship education should be included in teacher training<sup>58</sup>. According to Diensberg, entrepreneurship education should use methods that support experiential, creative, critical thinking and active behavior. The process of developing entrepreneurial identity also seems to be important<sup>59</sup>. According to Hägg, the importance of entrepreneurship coaching in the process of developing entrepreneurial identity has not been well studied<sup>60</sup>. Aaltio emphasizes pedagogical solutions and processes in which identities are important<sup>61</sup>. According to Turner, en-

 $<sup>^{56}\,</sup>$  H. Lassila, AMK-opiskelijoiden käsityksiä yrittäjyydestä, "Julkaisuja" no. 176/2009, Jyväskylän yliopisto

<sup>&</sup>lt;sup>57</sup> D. A. Kirby, Entrepreneurship Education: Teoksessa Fayolle, A. ja Klandt, H., International Entrepreneurship Education 2006" Issues and Newness" Edward Elgar, Cheltenham UK.

<sup>&</sup>lt;sup>58</sup> T. Turunen, *Yrittäjyys – mitä se merkitsee? Yrittäjyyden ja sen sukulaiskäsitteiden käyttö koulutuksessa, tutkimuksessa ja politiikassa*, "Jyväskylä Studies in Business and Economics" 102, Jyväskylä 2011.

<sup>&</sup>lt;sup>59</sup> C. Diensberg, *Towards Entrepreneurial Regions: Ten Propositions for Successful Entrepreneurship Promotion and Education*, Rostock Working Papers on Economic and Human Recource Development", no. 29 Rostock: Universität Rostock 2008, HIE-RO, 2. 1-8.

<sup>&</sup>lt;sup>60</sup> O. Hägg, *Yrittäjäidentiteetin kehittyminen yrittäjyysvalmennuksessa*, "Jyväskylä yliopiston taloustieteiden tiedekunnan julkaisuja" no. 176/2009.

<sup>&</sup>lt;sup>61</sup> I. Aaltio, Yrittäjän uudet identiteetit talouselämän muuttuvassa toimintaympäristössä - koulutuksellisia näkökulmia, Teoksessa P. Kyrö & H. Lehtonen & K. Ristimäki (toim.),

trepreneurship coaching is a transition phase in which the individual moves from one social status to another, such as from employee to entrepreneur<sup>62</sup>.

According to Colette et al., there are three levels of entrepreneurship education. Getting to know about business ("about"), that is, raising awareness and getting to know a business at a theoretical level. The "for" level seeks out individuals who are interested in starting a business, encouraging them, acting in entrepreneurial skills, and preparing business plans. The 'in' level is used to teach business in practice<sup>63</sup>. Mwasalwiba emphasizes the importance of entrepreneurship education in developing the entrepreneurial qualities of future entrepreneurs. The effectiveness of entrepreneurship education has generally been demonstrated by measuring the impact of education on entrepreneurial intentions, attitudes and activity<sup>64</sup>. Fayolle et al.<sup>65</sup>, Lee et al.<sup>66</sup> and Sandhu et al.<sup>67</sup> have examined the impact of entrepreneurship education on entrepreneurial intentions. According to Wilson et al.<sup>68</sup> and Jones et al.<sup>69</sup>, entrepreneurship education positively influences entrepreneurial intentions. According to Marques et al., entrepreneurship education does not affect entrepreneurial intentions<sup>70</sup>. Pihkala and Miettinen showed a negative

*Yrittäjyyskasvatuksen monia suuntia.* Tampere: Tampereen yliopiston Kauppakorkeakoulu 2007, s. 62–77.

 $<sup>^{\</sup>rm 62}\,$  V. Turner,  $\it Rituaali,\ rakenne\ ja\ communitas,\ Helsinki 2007,\ Kustannusosakeyhtiö Summa.$ 

<sup>&</sup>lt;sup>63</sup> H. Colette, H. Frances, L. Claire, L., "Entrepreneurship education and training: can entrepreneurship be taught? "Part I", Education 2005.

 $<sup>^{64}</sup>$  E. Mwasalwiba, Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators. "Education + training" 2010 52 (1), p. 20-50.

<sup>&</sup>lt;sup>65</sup> A. Fayolle, B. Gailly & N. Lassas- Clerc, *The long-term effect of entrepreneurship teaching programs on entrepreneurial intention*, RENT XIX Conference, 17-18 November 2005, Naples Italy.

<sup>&</sup>lt;sup>66</sup> L. Lee, P. Wong, M. Foo & A.Leung, *Entrepreneurial intentions: the influence of organizational and individual factors*, "Journal of business venturing" 2011 6 (1), p. 124-136.

<sup>&</sup>lt;sup>67</sup> M. Sandhu, S. Sidique & S. Ria, *Entrepreneurship barriers and entrepreneurial inclinaton among Manalysian postgraduate students*, International journal of entrepreneurial behavior & research" 2011 17 (4), p. 428-449.

<sup>&</sup>lt;sup>68</sup> F. Wilson, J. Kickul, D. Martino, S. Barbosa & M. Griffiths, *An analysis of the role of gender and self-efficacy in developing female*, "Journal of developmental entrepreneurship" 2009 14 (2), p. 105-119.

<sup>&</sup>lt;sup>69</sup> P. Jones, A. Jones, G. Packham & C. Miller, *Student attitudes towards enterprise education in Poland: a positive impact*, "Education + training" 2008 50 (7), p. 597-614.

<sup>&</sup>lt;sup>70</sup> C. Marques, J. Ferreira, D. Gomes & R. Rodriques, *Entrepreneurship education: how psychological, demographic and behavioural factors predict the entrepreneurial intention,* "Education + training" 2012 54 (8/9), p. 657-672.

effect<sup>71</sup>. Pajarinen and Rouvinen have also received a negative result on the effectiveness of entrepreneurship education<sup>72</sup>.

### National and regional entrepreneurship education actors in Finland

JA Finland's (Junior Achievement Finland) goal is to advance entrepreneurial attitude and an active lifestyle among Finnish youths by increasing their knowledge of entrepreneurship, providing entrepreneurial experiences, enhancing readiness for working life and financial management skills. JA aims to fulfill its goals by providing programs supporting entrepreneurship and consumer education for 7- to 25-year-olds through schools, universities, and other educational institutions. The programs are carried out as a part of the schools' own curricula. JA receives most of its funds from foundations' and companies' support and from the European Social Fund coordinated by Finnish National Board of Education.

The JA Entrepreneurship Education Path is a combination of ten degree programs. JA offers hands-on forms of cooperation to strengthen young people's entrepreneurial attitude, working capacity and financial management. In line with its policy, JA supports educational institutions in its coordinated programs, provides training and provides educational materials for use by schools and educational institutions.

The Young Entrepreneurship Association is a part of the international JA-YE (Young Achievement - Young Enterprise) network. It is world's largest organization for entrepreneurship and consumer education for young people. The network reaches over 10 million students in 121 countries each year. JA-YE Europe network reaches more than three million pupils in 39 countries every year. *JA* Finland's programs are mainly available in Finnish and Swedish language, but opportunities exist to include English-speaking students and volunteers in our activities. The non-profit association started its operations in Finland in 1995<sup>73</sup>.

### **Programs**

The Year as Entrepreneur (JA Company Program) is aimed for the 9th grade students of basic school, as well as high school and vocational

<sup>&</sup>lt;sup>71</sup> J. Pihkala & A. Miettinen, *Exploring changes in entrepreneurial intentions – a follow-up study in two polytechnics*, Proceeding of international entrepreneurship conference IntEnt, 5-7 July 2004, Naples Italy.

 $<sup>^{72}\,</sup>$  M. Pajarinen & P. Rouvinen, *Mistä yrittäjät tulevat?* Tekes. "Teknologiakatsaus" 198/2006. Helsinki.

<sup>73 (</sup>www https://nuoriyrittajyys.fi/)

school students. The program is conducted as part of the teaching of the institution. According to the study program, a real-money mini-company (JA Company) will be established throughout the academic year. During the academic year, students go through all the stages of a business from start to finish. Young people are allowed to spontaneously plan their business idea and carry out their business activities during the school year. In addition to running the company during the school year, an action plan and an interim report are prepared. The company will also be featured at regional JA Dare to Attempt semi-finals. In addition, financial statement and an annual report are prepared. At the end of the year, the jury will select the most successful company in the national JA Dare to Attempt Finals. The best companies in different regions of Finland will be selected for the finals.

The NY Company provides young people with a learning environment where they can experiment with putting their skills into practice. The skills to be learned come from doing through learning and self-realization. More than 4,000 young people from all over Finland participated in the JA Year of the Entrepreneur Program during the academic year 2014-2015, and nearly 1,500 JA companies were established during the academic year.

Learning Objectives for the JA Year of the Entrepreneur Program:

- Learning working skills, entrepreneurial attitudes and entrepreneurial ways of working;
- 2. Developing young people's own ideas and learning the process from idea to product in practice;
- 3. Finding young people's own strengths through doing;
- 4. Development of interaction, teamwork and leadership skills;
- 5. Developing economic thinking;
- 6. Learning how to operate your business in practice;
- 7. Problem solving and coping with challenging situations;
- 8. Understanding the importance of business competencies such as marketing, financial management, management, and learning the basics; www. https://nuoriyrittajyys.fi/.

JA Finland (Junior Achievement Finland) is in a direct partnership with the YES Network. Its collaboration ensures training and support for JA programs. It is available throughout the country. YES organizes training for teachers participating in JA programs (in Finnish and Swedish), advise them in carrying out our programs, and help to find volunteers. YES offices also organize program-related regional events, such as Dare to Attempt semifinals, where the best JA Companies are chosen to attend the national NY Dare to Attempt final (Finland's JA Company Program final). YES offices

also provide other tools on topical themes for teaching staff fast and easily. More on YES offices: www.yesverkosto.fi.

#### **References:**

- Aaltio, I, *Yrittäjän uudet identiteetit talouselämän muuttuvassa toimintay-mpäristössä koulutuksellisia näkökulmia*, Teoksessa P. Kyrö & H. Lehtonen & K. Ristimäki (toim.), *Yrittäjyyskasvatuksen monia suuntia*. Tampere: Tampereen yliopiston Kauppakorkeakoulu 2007, s. 62–77.
- Anttila, P., *Tutkimisen taito ja tiedon hankinta, Taito-, taide- ja muotoilualojen tutkimuksen työvälineet,* Helsinki 1996.
- Arveli, E., *Yrittäjyyskasvatus ala- ja yläasteella*, Teoksessa, *Yrittäväksi koulussa kasvatus yrittäjyyteen*, Opetushallitus, Helsinki 1993, s. 25 27.
- Berglund, K. & Johansson, A. W., Entrepreneurship, discourses and conscientization in processes of regional development, "Entrepreneurship and Regional Development" 2007 no. 19(6), p. 499–525.
- Christensen, M.A., *Messages from the front line*, "A Survey of entrepreneurship educators in Canada" 1994.
- Colette, H., Frances, H., Claire, L., "Entrepreneurship education and training: can entrepreneurship be taught? "Part I", Education 2005.
- Birdthhistle, N., Hynes, B & Fleming, P., *Enterprise education programmes in secondary schools in Ireland: A multi- stakeholder perspective*, "Education + Training" 2007 no. 49(4), p. 265-276.
- Cooper, S., Bottomley, C. & Gordon, J., *Stepping out of the classroom and up the ladder of learning: an experiential learning approach to entrepreneurship education*, "Industry and Higher Education" 2004 no. 18(1), p. 11-22.
- Danish White Paper, A Coherent Educational Strategy on Entrepreneurship 1995.
- Dewey, J., Koulu ja yhteiskunta, Helsinki 1957.
- Diensberg, C., *Towards Entrepreneurial Regions: Ten Propositions for Successful Entrepreneurship Promotion and Education*, "Rostock Working Papers on Economic and Human Recource Development", no. 29 Rostock: Universität Rostock 2008, HIE-RO, 2. 1-8.
- Fayolle, A., *Entrepreneurship education at a crossroads: Towards a more mature teaching field*, "Journal of Enterprising Culture" 2008 no. 16(4), p. 325-337.
- Fayolle, A., Gailly, B. & Lassas- Clerc N., *The long-term effect of entrepreneurship teaching programs on entrepreneurial intention*, RENT XIX Conference, 17-18 November 2005, Naples Italy.

- Fiet, J.O., *The Pedagogical Side of Entrepreneurship Theory*, "Journal of Business Venturing" 2000b no. 16(1), p. 101-117.
- Gibb, A., The Future of Entrepreneurship Education Determining the Basis for Coherent Policy and Practice?, Teoksessa P. Kyrö. & C. Carrier (toim.), The Dynamics of Learning Entrepreneurship in a Cross-Cultural University Context, University of Tampere, Research Centre for Vocational and Professional Education, Saarijärven Offset 2005, p. 44–66.
- Gibb, A., Entrepreneurship and enterprise education in schools and colleges: Insights from UK practice 2006. https://www.researchgate.net/.../285977203\_Entrepreneurship\_and\_...
- Harthorn, C., Hannon P. D., "*Paradoxes in entrepreneurship education: chalk and talk or chalk and cheese, A case approach*", "Education + Training" 2005 vol. 47 iss. 8/9, pp.616 627.
- Havula, J., Kauhajoelta kaksi joukkuetta pelialan Taitaja 2017-finaaliin, Semifinaalissa joukkueet olivat niin ylivoimaisia, että voitosta on odotettavissa keskinäinen kamppailu, Ilkka-lehti 21.2.2017, Saatavilla: www.Ilkka.fi
- Heikkinen, V., *Yritteliäisyyteen kasvattamisesta, Käsitteitä ja ajattelutapoja,* Teoksessa P. Ruohotie & J. Honka (toim.) *Suomalainen ammattikasvatus,* "Professori Matti Peltosen juhlakirja" 1988. Keuruu Otava, s. 19-27.
- Hirsjärvi, S. & Huttunen, J., *Johdatus kasvatustieteeseen 1995* 4.-5. painos, Juva WSOY.
- Hood, J. & Young, J., Entrepreneurship's Requisite Areas of Development: a Survey of Top Executives in Successful Entrepreneurial Firms, "Journal of Business Venturing" 1993, p.8.
- Hynes, B., Entrepreneurship education and training introducing entrepreneurship into non- business disciplines, "Journal of European Industrial Training" 1996 no. 20(8), p. 10-17.
- Hägg, O., Yrittäjäidentiteetin kehittyminen yrittäjyysvalmennuksessa, "Jyväskylä yliopiston taloustieteiden tiedekunnan julkaisuja" no. 176/2009.
- Jones, B. & Iredale, N., *Enterprise education as pedagog*, "Education + Training" 2010 no. 52(1), p. 7-19.
- Jones, P., Jones, A., Packham, G. & Miller, C., *Student attitudes towards enterprise education in Poland: a positive impact*, "Education + training" 2008 no. 50 (7), p. 597-614.
- Kananoja, T., *Teknologian ja sen opetuksen historiaa ja kehitystä*, "Oulun yliopiston kasvatustieteiden tiedekunnan opetusmonisteita ja selosteita" 56, Oulu 1994.

- Kirby, D. A., Entrepreneurship Education: Teoksessa Fayolle, A. ja Klandt, H., International Entrepreneurship Education 2006 "Issues and Newness" Edward Elgar, Cheltenham UK.
- Kivi, T., Oppimisen ytimessä, Tummavuoren Kirjapaino Oy, Vantaa 1995.
- Kolb, D. A., *Experiental Learning, Experience as the Source of Learning and Development*, New Jersey 1984. Prentice-Hall.
- Komulainen, K., Keskitalo Foley, S., Korhonen, M. & Lappalainen, S., *Yrittäjyyskasvatus hallintana*, Vastapaino 2010.
- Lassila, H., *AMK-opiskelijoiden käsityksiä yrittäjyydestä*, "Julkaisuja" no. 176/2009, Jyväskylän yliopisto
- Lavonen, J., *Yrittäjyyskasvatus peruskoulussa*, Taloudellinen tiedotustoimisto 1997 Helsinki, s. 28-39.
- Lee, L., Wong, P., Foo, M. & Leung, A. 2011., *Entrepreneurial intentions: the influence of organizational and individual factors*, "Journal of business venturing" 2011 no. 6 (1), p. 124-136.
- Leskinen, P-L., Yrittäjällä on koko elämä kiinni yrityksessä, Opiskelijoiden yrittäjyyskäsitykset ja niiden muutokset yrittäjyysprojektin aikana, "Liiketaloustiede 27 Johtaminen ja organisaatiot" no. 71, Vaasan yliopisto 1999.
- Marques, C., Ferreira, J., Gomes, D. & Rodriques, R., *Entrepreneurship education: how psychological, demographic and behavioural factors predict the entrepreneurial intention*, "Education + training" 2012 no. 54 (8/9), p. 657-672.
- Menzies, T. V. & Paradi, J. C., Entrepreneurship education and engineering students, Career path and business performance, "The International Journal of Entrepreneurship and Innovation" 2003 4 (2), p. 121–132.
- Mehtäläinen, J., *Elämää akvaariossa*, *Kokemuksia koulukohtaisen opetussuunnitelmatyön ensivaiheista*, "Kasvatustieteiden tutkimuslaitoksen julkaisusarja" B 88, Jyväskylä 1994.
- Mwasalwiba, E., Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators. "Education + training" 2010 no. 52 (1), p. 20-50.
- Neck, H. & Geene, P.G., Entrepreneurship Education: Known Worlds and New Frontiers, "Journal of Small Business Management" 2011 no. 49, p.55-70.
- Nevanperä, E., Yrittäjyys Suupohjan opiskelijanuorten ajattelussa, Tutkimus Suupohjan seudun nuorisoasteen opiskelijoiden yrittäjyysnäkemyksistä sekä yrittäjyysopetuksen opetussuunnitelman kehittämispyrkimyksistä, Väitöskirja, "Studies in Business and Economics" 2003, Jyväskylä University.

- Nevanperä, E., Etelä-Pohjanmaan toisen asteen koulutuksen kehittämis- ja koordinaatiohanke, Vaihtoehtoiset mallit toisen asteen koulutuksen järjestämisessä Etelä-Pohjanmaalla, "Etelä-Pohjanmaan liiton julkaisuja" 2012.
- Nuori Yrittäjyys 2019., Saatavilla: www. https://nuoriyrittajyys.fi/.
- Opetushallitus, *Lukion opetussuunnitelman perusteet 2003*, Vammalan Kirjapaino Oy. Vammala.
- Opetushallitus, Perusopetuksen opetussuunnitelman perusteet 2004, Vammala.
- Opetushallitus, *Ammatilliset perustutkinnot ja tutkintojen perusteet*, Vammala 2014.
- Opetushallitus, *Perusopetuksen opetussuunnitelman perusteet*, Vammala 2014. Opetushallitus, *Lukion opetussuunnitelman perusteet*, Vammala 2015.
- Pajarinen, M. & Rouvinen, P., *Mistä yrittäjät tulevat?* Tekes. "Teknologiakatsaus" 2006 no. 198, Helsinki.
- Panula, T. & Routamaa, V., *Eurooppalaisia näkökulmia yrittäjyyskasvatuksesta*, "Opetusministeriön EU-rakennerahastot –julkaisu" 10/2002, Opetusministeriö, EU-rakennerahastot, Valtioneuvosto.
- Perusopetuslaki "11§ 2 momentti", Opetusministeriö 2012.
- *Perusopetuksen opetussuunnitelman perusteet 2014*, Opetushallitus https://www.oph.fi/.../163777\_perusopetuksen\_opetussuunnitelman\_perusteet\_2014.pdf
- Pihkala, J. & Miettinen, A., *Exploring changes in entrepreneurial intentions a follow-up study in two polytechnics*, Proceeding of international entrepreneurship conference IntEnt, 5-7 July 2004, Naples Italy.
- Pittaway, L. & Cope, J., Entrepreneurship Education: A Systematic Review of the Evidence, "International Small Business Journal" 2007 vol. 25, p. 479-510.
- Rae, D. & Carswell, M., *Toward a conceptual understanding of entrepreneurial learning*, "Journal of Small Business and Enterprise development" 2001 no. 8(2), p. 150-158.
- Remes, L., *Yrittäjyys*, "Teoksessa aihekokonaisuudet perusopetuksen opetussuunnitelmassa", Toim. Loukola, M.-L., Jyväskylä 2004, s. 89–90.
- Richardson, I. & Hynes, B., *Entrepreneurship Education: towards an industry sector approach.* "Education + Training" 2008 no. 50(3), p. 188-198.
- Ristimäki, K., *Yrittäjyyskasvatus Kokkolan kouluissa*, *Tutkimus opettajien yrittäjyysasenteista ja –arvoista*, Jyväskylän yliopisto 1998, Chydenius-Instituutti Kokkola.

- Ruskovaara, E., Pihkala, T., Rytkölä, T, ja Seikkula-Leino, J., *Opettajat yrittäjyyskasvatuksen toteuttajina käytäntöjä ja taustatekijöitä*, 2013.
- Sandhu, M., Sidique, S. & Riaz, S., *Entrepreneurship barriers and entrepreneurial inclinaton among Manalysian postgraduate students*, "International journal of entrepreneurial behavior & research" 2011 no. 17 (4), p. 428-449.
- Seikkula-Leino, J., *Opetussuunnitelmauudistus ja yrittäjyyskasvatuksen toteuttaminen*, "Opetusministeriön julkaisuja" 2007 no. 28.
- Seikkula-Leino, J., Kumppanuusmallia vahvistamassa, aikomuksia yrittäjyyskasvatukseen, Yrittäjyyskasvatuksen muotoutuva maisema -yrittäjyyskasvatuksen identiteettiä rakentamassa. "Julkaisuja" 2009 no. 176, Jyväskylän yliopisto.
- Schumpeter, J., *The Theory of economic development*, "Harward University Press" 1934, Cambridge MA.
- Solomon, G.T., Tarabishy, A., Winslow, E.K. & D'Onofrio, *A Comparison* of the Empirical Investigation into Entrepreneurship Education in the United States and International ~ "Contribution paper" 44 th ICSB World Conference 1999, Naples Italy, ICSB 118.
- Suonperä, M., *Työkasvatuksen perusaineksia*, "Tampereen yliopiston Hämeenlinnan opettajankoulutuslaitoksen Julkaisuja" 1988 no. 20.
- Teuvan perusopetuksen opetussuunnitelma 2016. Teuvan kunta.
- Turner, V., *Rituaali, rakenne ja communitas*, Helsinki 2007, Kustannusosakeyhtiö Summa.
- Turunen, T., *Yrittäjyys mitä se merkitsee? Yrittäjyyden ja sen sukulaiskäsitteiden käyttö koulutuksessa, tutkimuksessa ja politiikassa,* "Jyväskylä Studies in Business and Economics" no. 102, Jyväskylä 2011.
- Wilson, F., Kickul, J., Martino, D., Barbosa, S. & Griffiths, M., *An analysis of the role of gender and self-efficacy in developing female*, "Journal of developmental entrepreneurship" 2009 no. 14 (2), p. 105-119.
- YES Network, Saatavilla: www.yesverkosto.fi

Edukacja w zakresie przedsiębiorczości w Finlandii oraz w kontekście międzynarodowym. Badanie habilitacyjne w kontekście międzynarodowej edukacji w zakresie przedsiębiorczości

Celem niniejszego artykułu jest przedstawienie obecnego stanu edukacji w zakresie przedsiębiorczości w Finlandii oraz w kontekście międzynarodowym. Zaprezentowano w nim podstawy edukacji w zakresie

przedsiębiorczości oraz odnoszące się do niej koncepcje, kwestie związane z wprowadzeniem edukacji w zakresie przedsiębiorczości do programów nauczania, celami i treściami edukacji w zakresie przedsiębiorczości, a także metodami nauczania i pracy w zakresie edukacji w zakresie przedsiębiorczości. Ponadto w artykule przedstawiono wkład edukacji w zakresie przedsiębiorczości i nauczania w kształcenie podstawowe, oraz w kształcenie w szkołach średnich i instytucjach kształcenia zawodowego w prowincji Ostrobothnia Południowa (South Ostrobothnia) i w gminie Teuva. Artykuł przedstawia także – w świetle przytoczonych badań – wpływ edukacji i szkoleń w zakresie przedsiębiorczości na zamierzenia przedsiębiorcze. Przedstawiono w nim również krajowe i regionalne podmioty edukacji w zakresie przedsiębiorczości działające w Finlandii.

**Słowa kluczowe:** edukacja i szkolenia w zakresie przedsiębiorczości, program nauczania, zamierzenia przedsiębiorcze, nauczanie i metody pracy w edukacji w zakresie przedsiębiorczości, podmioty.

### Entrepreneurship education in Finland and in an international context. Post-doc –study in the context of international entrepreneurship education

The purpose of this article is to introduce the current state of entrepreneurship education in Finland and in the international context. This article introduces the basics and concepts of entrepreneurship education, the introduction of entrepreneurship education in curricula, the aims and contents of entrepreneurship education and also teaching and working methods of entrepreneurship education. In addition, the article presents the contributions of entrepreneurship education and teaching in basic education, upper secondary schools and vocational education institutions of South Ostrobothnia province and Teuva municipality. The article also introduces the impact of entrepreneurship education, education and training on entrepreneurial intentions in the light of research. National and regional entrepreneurship education actors in Finland are presented too.

**Keywords:** entrepreneurship education and training, curriculum, entrepreneurship intentions, teaching and working methods of entrepreneurship education, actors.