

Evaluation and values of entrepreneurship education in basic education

Abstract

The evaluation aspect and its values have been missing in the context of entrepreneurship education and few researches exist on this context. In our article we will focus on the development of evaluation in entrepreneurship education in Finnish basic education. The data was collected in November 2009 through a survey questionnaire, which was distributed to a group of teachers and principals (from basic education, high school and basic vocational training), and to entrepreneurs and representatives of organizations (N 49). The questions dealt with the values and basis of evaluation of entrepreneurship education.

Key words: entrepreneurship education, values, evaluation

1. INTRODUCTION

The impact of evaluation has gained a major role in the development of education. In the context of entrepreneurship education, however, this aspect has been missing (Seikkula-Leino in press). We argue that also the entrepreneurship education in basic level should be evaluated. At this point, however, an evaluation system is missing (e.g. Matlay, 2005; Seikkula-Leino *et al.*, 2009). There is hardly any research available on assessing teaching and learning of entrepreneurship education generally in basic education. There is research on evaluating entrepreneurship education programs and their impact upon new venture creation (e.g. Hytti & O’Gorman, 2004; Fayolle 2005; Barr *et al.*, 2009; Boni *et al.*, 2009), students changing entrepreneurial attitudes (e.g. Frank, 2007) and opportunity identification (DeTienne & Chandler, 2004), but there is a very limited amount of research concerning the teachers’ role in entrepreneurship education, and if so, the focus is on higher education (e.g. Klandt, 2004; Shepherd, 2004; Colette *et al.*, 2005a, b; Fiet, 2001a, b). Therefore we argue that this field needs more in-depth research and development. Education and its evaluation is human action. Setting values for of the subject that is going to be evaluated as well as values for its evaluation is the starting point of the human evaluation process. (e.g. House & Howe 1999).

Our respondents (N 49) come from two different projects of developing entrepreneurship education. They are teachers and principals representing different levels of education (elementary and upper level of comprehensive school, the upper secondary education, basic vocational training) and entrepreneurs and organization representatives.

In this article, we will focus on the evaluation of entrepreneurship education in basic education. The context of our research is Finland, where the government has emphasized entrepreneurship education as one of the topics that should be advanced also in basic education. There is no separated entrepreneurship programmes or courses in basic education. Entrepreneurship education in basic level is kind of teaching method, which can be taught through all school subjects. The purpose of this article is to find out a) what are the main values of entrepreneurship education and b) how the respondents perceive the basis of the evaluation in entrepreneurship education in basic education. In this way we aim to create a foundation for our next research. We begin this paper by defining entrepreneurship education and presenting some values that could be linked to entrepreneurship

education, and after this, we consider the basis for evaluation of entrepreneurship education. After the theoretical review, we offer a thorough introduction to the context of our study along with our research strategy, data, and methods. In the empirical part, we proceed in themes, which are followed by a summary of our findings. We conclude by specifying our contributions to the research and practice of entrepreneurship education.

2. ENTREPRENEURSHIP EDUCATION

Entrepreneurship can be conceptualized in different ways depending on by whom it is defined. For example, entrepreneurship is defined differently by the representatives of behavioral science and economics. Shane & Venkataraman (2000) argue that perceiving opportunities is linked to entrepreneurship. Thus, innovating, evaluating and utilizing opportunities are connected to entrepreneurship. According to this approach, entrepreneurs actively perceive their surroundings, gather information and observe opportunities in the market – and act according to these opportunities.

According to Gartner (1988) entrepreneurship is mainly connected to two aspects: some people believe that entrepreneurship is linked to risk-taking human beings who start innovative and fast-growing enterprises, while others point out that entrepreneurship is connected to the start-up of enterprises. In both ways of understanding entrepreneurship, entrepreneurs deal with reorganizing things or behavior.

Entrepreneurship education is connected to both entrepreneurship and education. Like the ambiguous definition of entrepreneurship, the concept and theory of entrepreneurship education have not been defined. The main concepts of entrepreneurship are internal and external as well as self-oriented entrepreneurship. In the context of educational institutions, entrepreneurship education also deals with knowledge, skills and attitudes. The variety of entrepreneurship education should also be regarded from the point of view of pupils' learning. Then, according to Hytti (2002) learning to understand, learning to become entrepreneurial and learning to become an entrepreneur becomes evident. When this approach is widened with the descriptions of Gibb (2001; 2005), also learning for entrepreneurship, learning about entrepreneurship and learning through entrepreneurship are included. From the point of view of evaluating entrepreneurship education, these categories of Gibb and Hytti should be converted from learning into contents of teaching and actions of teachers. In that way, according to Seikkula-Leino (2006, 2007) entrepreneurship education include the objectives, supporting methods and tools of entrepreneurship and contents dealing with entrepreneurship.

In Finland, entrepreneurship education has been included in the national core curriculum since 1994 and it currently has a certain role in all curricula at every educational level, starting from comprehensive schools. Entrepreneurship education, as in this context among fairly young students, has very broad implications, introducing entrepreneurship as a career choice but also an entrepreneurial way of seeing and doing things and a way of teaching and learning (Finnish National Board of Education 2003; 2004; Steyaert & Katz 2004; Berglund & Johansson 2007).

In Finland, we find teachers having difficulties in finding contents and means to respond to challenges posed by entrepreneurship education (Seikkula-Leino 2007). Since entrepreneurship education has not yet established its position in teacher education and in the continuing professional education of teachers (Seikkula-Leino 2007), there is no doubt that the inclusion of the subject in school curricula is very challenging. The conception of learning is based on constructivism, especially socio-constructivism (Finnish National Board of Education 2003; 2004), and it is closely connected to the pedagogy of entrepreneurship education (see Seikkula-Leino 2007).

2.1. Values on entrepreneurship education

Traditionally in Finnish school system security, systematic, leadership, knowing and certainty have been the basic values of schooling. Values that are connected to entrepreneurship education are for example challenge, creativity, independence, learning new things, independent initiative and orientation to the future. (Seikkula-Leino 2007, 50.) Values are not a genetic feature, but they are absorbed through social interaction, education and schooling (Launonen 2004, 13). Therefore values that are connected to entrepreneurship education can be forwarded also through the schooling system. That demands a discussion of values in the schools.

In a publication published by the Finnish Ministry of Education "Yrittäjyyskasvatuksen suuntaviivat" – "Guidelines for Entrepreneurship Education" (2009) different values that should be promoted by entrepreneurship education are mentioned several times. Innovativeness, ability to take risks, responsibility taking, problem solving ability, catching challenges, thinking and cooperation are mentioned as promoting the development of an entrepreneurship-like attitude in the future of the schools. (Finnish Ministry of Education, 2009).

Hornaday (1982) has created a directory on features that can be connected to entrepreneurs. We have picked the following features from the directory, which we think be promoted through entrepreneurship education: self-confidence, sustainability, learning from mistakes, seeing mistakes as something positive, enduring uncertainty, effectiveness, effective achievement, commitment.

The fundamentals of the curriculum mention the general values of education and schooling which should be taken into account also in entrepreneurship education. These are, among others:: Community, Holistic and multidimensional growth of the human being, Ecologic way of living, Reverence and ability to hear of others, Ability to discuss and Acceptance of difference. (Finnish National Board of Education, 2003, 2004.)

3. EVALUATION OF ENTREPRENEURSHIP EDUCATION

The evaluation of education means the definition of the value or merit of the background, of processes and of the results of education. The defining takes place by comparing processes or results with prerequisites and targets. The evaluation must determine the value of the matter examined. (Atjonen 2007, 19-20.) Evaluation aims to collect information, produce feedback, go forward and build the future (Linnakylä & Atjonen 2008, 80). In addition, evaluation motivates students to study and aims to promote learning.

Evaluation gives a value to its target. It has transformed from an external and quantitative activity towards a qualitative and multi-method one. Evaluation requires ethical reflection, and it always involves care, justice and truthfulness. Evaluation also involves challenging questions related to responsibility, conflict of interest and power. According to Atjonen (2007), an evaluator must be able to be fair. In addition, evaluation must evoke criticism and examine the evaluation target or partner with a critical eye. An ethically sound evaluation also provides care, support and understanding in interaction with other actors. Evaluation has a very significant meaning in understanding one's own skills. An evaluator therefore has an enormous ethical responsibility. Evaluation methods can be divided into external and internal methods. An independent, impartial body carries out an external evaluation. It emphasizes the truth and objectivity and is often quantitative. Internal evaluation often takes the form of self-, pair- and peer- assessment and evaluation panels and is qualitative. (Atjonen 2007, 26-32.) The evaluation processes and results should be justifiable, communicative, general, true (or at least likely), being repaired, striving to objectivity, critical, autonomous and conductive.

Evaluation has also caused a certain kind of relativism, which means rejecting reaction to it. For example the reliability of evaluation and its normative nature have been experienced as a problem. Those who successfully defend evaluation argue that life is too plural to be evaluated systematically. It causes an ethical contradiction. (House & Howe 1999 74-86.) Evaluation has several different challenges.

Entrepreneurship education is a form of civic education, which has an impact on the individual's skills, beliefs and entrepreneurial activity (Seikkula-Leino 2007). These educational effects are shown with a delay, which is why evaluation should be built so that it promotes the development of the individual, both among teachers and learners, also after the education is concluded. We propose that entrepreneurship education should be given a more central role, which in the future will result in a better realization of entrepreneurship education.

3.1. Values in evaluation of education

The aims and contents of education and schooling are selected on the ground of what is valuable. Evaluation and ethic have the shared relevant ground: values. To found a value is a very important part of the evaluation methods and the quality of evaluation is based on that. (See Atjonen 2007; Korkeakoski 2008.)

The main values of evaluation according to Atjonen (2007) are fairness and justice, validity and reliability, transparency and motivation to learn. Furthermore evaluation should be demanding and it should contain a possibility to show one's excellence. (Atjonen 2007, 34-36.) Apart from justice also impressiveness, effectiveness, acceptability and aesthetical integrity and harmony have an effect on the decision of values. In Finland the basis for all schooling politics and through that the basis for improving the evaluation is equality. (Lyytinen & Nikkanen 2008, 26-38.) Equality comes true by using different kind of assessing methods.

A meta-evaluation ensures the quality of evaluation with regard to its criteria. It is the evaluation of the quality of evaluation, which charts the strengths and weaknesses of the evaluation by using either self-assessment or external evaluation. Smith and Glass (1987, 29-32) have listed meta-evaluation criteria. They include technical sufficiency or validity and reliability, sufficiency and scope of description (all viewpoints, interests of different groups), timing, cost effects, communication (understandability, credibility, usability), usefulness and the expertise of the evaluators.

3.2. Basis of evaluation of entrepreneurship education

Evaluation should be a genuine part of learning. Usually evaluations are done at the end of learning process. According to Pickford and Brown (2006, 4), the end-results of learning should be considered first, after which the content and the aims of learning should be taken from these end-results.

Table 1, adopted from Pickford & Brown (2006, 4), presents questions that can be useful in evaluation and take many different facets into account. Although ethical questions are very interesting and important, we are not discussing them in this article.

Table 1 Basic questions for evaluation (Pickford & Brown 2006, 4)

WHAT are we going to evaluate?
WHY do we evaluate?
HOW do we evaluate?
WHO evaluates?
WHEN do we evaluate?

These questions are essential and create the basis for evaluation. We will therefore present these themes more thoroughly in the next chapters.

WHAT are we going to evaluate? is a question that concerns the theory versus practice, process or learning results, progress or teamwork, the standards of evaluation (Pickford & Brown (2006, 4). In general, the objects evaluated by the teacher stem from the cultural and pedagogical context of the school. It is obvious that regarding education, the learner and his learning results are evaluated, but also the teaching and the quality of education should be evaluated. The teacher's work has a number of areas to be evaluated, and are divided by Korkeakoski (2004) into five groups:

1. The teacher's professional expertise, which includes e.g. deep knowledge and understanding of targets, contents and their evaluation, and of the teacher's own internalized and renewed approach to teaching.
2. Learning environments, which include the physical and mental learning environment and teaching materials, teaching time, etc.
3. Teaching plans, i.e. official curricula and the teacher's own teaching plan.
4. Teaching, which includes pedagogical and didactic expertise.
5. Learning outcomes, such as the quality and quantity of competences, how they relate to the aims and the individual learning styles of learners.

Teachers can test how the objects of evaluation materialize in their own work. It is a question of self-assessment, although verification is more reliable if also colleagues, the supervisor, parents and other partners in cooperation take part in the evaluation. (Korkeakoski 2004, 167-170).

According to Korkeakoski (2004) the teacher should in addition to learning results evaluate own professional competences, which means e.g. thorough understanding of the objectives of teaching and the ability to renew teaching. In addition, also the physical and psychological learning environment, curriculums and the pedagogical and didactic teaching solutions should be evaluated. (Korkeakoski 2004, 167-170).

WHY do we evaluate?

According to Bickford and Brown (2006, 4-5) the purpose of evaluation is to motivate, give feedback, fix mistakes, re-evaluate values, give information to the teacher and develop the schooling. Evaluation aims to collect information, produce feedback, go forward and build the future (Linnakylä & Atjonen, 2008b, 80). In addition, evaluation motivates students to study and aims to promote learning. Evaluation has different kind of functions. Chelimsky (1997) subdivides functions of evaluation into three types: profit responsibility, provision of information and improvement (Chelimsky 1997, 21).

In schools, the subjects that are evaluated are learned and acquired by learners. (e.g., Virta 1999; Pickford & Brown, 2006; Atjonen, 2007; Silvennoinen, 2008). That is why also the entrepreneurship education should be evaluated.

In empowerment evaluation the ones who are being evaluated are participating in the decision making, and good decisions are based on knowledge that is enhanced through systematic evaluation information. (Fetterman 1996, 5-6.)

HOW do we evaluate?

The methods and approaches of evaluation are essay, portfolio, test, debate, verbal or oral assessment, self-assessment, peer-assessment, and teamwork (Pickford & Brown 2006, 4).

It is ethically desirable to use multifaceted assessment methods. Improving evaluation is formative evaluation, which emphasizes attendance and ongoing interaction between action and assessment (Patton 1997, 68). Improving evaluation supports development and change. Therefore, it belongs to the group “evaluation for development”. Improving evaluation has no clear starting and ending points – it is continuing.

Improving evaluation emphasizes that the object of assessment takes part in the planning of the assessment, the assessment itself and improving education through the results of the assessment. The criteria of assessment are set democratically and each actor has an opportunity to be heard in the dialogue. (Räisänen 2005, 110-116; Patton 1997). Improving evaluation is not only one method, but there are several different kinds of methods. Applying different methods at the same time by all key groups generates a certain consensus.

1. *Self-assessment* belongs to all three groups of evaluation’s functions although it is mostly evaluation for development. It contains self-criticism and reflection, but some values or criteria may come from exteriors. One big problem is that self-assessment contains a lot of description and less evaluation (Saari 2002, 97). Therefore, it is very important to set certain frames and criteria for self-assessment.
2. *Peer assessment* means that students on the same level make an agreement on the points to be assessed, criteria, reciprocal of assessment and how to advance in the process. It is based on co-operative and reciprocal benefits: I will give you and at the same time I get from you.
3. *Compare dyad* means that both make an own evaluation and then they compare them.
4. *Evaluation discussion*: A theme discussion is based on conclusions and further questions of self-assessment. A group discussion and interview is led by the leader of the group and it is also based on self-assessment.
5. *Evaluation seminars and moderation* are communications that end to the agreement of a certain case.
6. *Individual and community portfolios* are authentic evaluations. Their goals are to advance student’s learning from his/her own actions. The educator creates leading and parse questions for the self-assessment, but the organizing of the portfolio is more loosely instructed.
7. *Compare-assessment* fits to self-assessment and continuing improvement of quality. It means comparing two or more issues to each other, followed by an interpretative analysis of this comparing. For example, a benchmarking-process means an analysis of one’s own action, which is compared to one’s own best action. In this way it is possible to develop one’s own actions. (Räisänen 2005, 116-125.)

Entrepreneurship education is mostly teamwork, and the work is distributed based on the strengths of the individuals involved. Peer assessment and compare dyad are well suited to the evaluation of a teams’ actions. Each team is able to do a peer review and a compare dyad concerning the work of the team. Evaluation discussions, evaluation seminars and moderations are useful in the end of the analysis of the learning process. Students can keep a learning diary about their own activity and compile portfolios and comparison assessments based on these diaries.

Therefore, even a poor achievement can be improved, and a successful achievement can be strengthened.

WHO evaluates?

An evaluator can be a teacher or an educator, a fellow student, a learner, an entrepreneur, parents or a community (Pickford & Brown 2006, 4). In entrepreneurship education it is very important that also other facets such as students/pupils themselves, parents and especially entrepreneurs take part in the evaluation process.

Multifaceted evaluation and individual evaluation are both evaluations that demand the participator's attendance. Improving evaluation demands participation of all parties involved, interaction between all parties and consensus among them (Rönnholm & Räisänen 2005, 23). Improving evaluation, when it is conducted well, allows the empowerment of both individuals and communities. It is teamwork, and there are only winners in that game. The reliability of improving education is based on self-assessment. (Huusko 2008, 134-137)

WHEN do we evaluate? In the end of the learning process, during the process, in the middle of the process or after delay (Pickford & Brown 2006, 4).

The interest group of the evaluation is students, whose feedback should be considered also in the long term. Usually assessment takes place at the end of the education process. We do not have access to feedback about the efficacy of education on a longer time span. (Laine & Malinen 2008, 21) Räisänen (2005) emphasizes that evaluation is improving if all of the parties and individuals learn during the process, and the evaluation is utilized also afterwards. (Räisänen 2005, 118) Especially in entrepreneurship education, efficacy will be seen with a delay. In improving evaluation the criteria for evaluation is set democratically and all parties are heard. Thus, the criteria for evaluation should be set already before the learning process starts.

4. CONTEXT AND METHODS

4.1. Methodological approach and data collection

The research was conducted as a survey (translation in appendix 1.) in Finland in November 2009. The survey was an internet-based webropol-survey. It was sent to 60 people. There were teachers and principals, who are involved in two different development projects of entrepreneurship education in Finland and entrepreneurs and representatives of organizations. All of them are involved or interested in developing entrepreneurship education. Responses were received from 49 of them and among them were 26 (54%) women. They were from 28 to 61 years of age, with an average of 45 years. What comes to their work assignments there were ten (21%) subject teachers (mainly grades 7-9), nine (19%) class teachers (grades 1-6), six (12,5%) vocational teachers, five (10%) principals, four (8%) guidance counselors, six (12,5%) entrepreneurs, six (12,5%) representatives of organizations and two (4%) other persons who chose their professions: "other". All the respondents are interested in developing entrepreneurship education. The respondents represent ten different municipalities and educational organizations and come from different parts of Finland.

4.2. Method of analysis

The collected quantitative data was handled by using a computer program used for statistical analysis (SPSS). The values got all together 238 mentions and the percentage for each value was

calculated. Then a frequency analysis was made on which values got the most mentions of number 1., most important, which values were seen as the second most important ones and so on.

The results include the ten values which were mentioned most often by the respondents. As a next step a frequency distribution was done on which value had received the most responses as the first/most important (1.) and which values had received the most responses for being second/second most important (2.) etc. This gave us the answers in the order of importance for the first six values. Based on these two analysis methods we composed the twelve most important values.

We analyzed the fundamental entrepreneurship education questions what, why, how, who and where using a frequency distribution, which reports which response alternative had received the most notifications as most important (1.) and which were chosen as second most important (2.) and so on. For the other questions we used a percentage distribution for the response alternatives and open responses which clarified the questions.

Since the sampling in this research was so small, we did not compare the responses in terms of age, gender, education, job or residency.

5. MAIN FINDINGS AND DISCUSSION

5.1 VALUES in entrepreneurship education

In the questionnaire 33 alternatives of values were mentioned. These values were chosen from different literature sources on entrepreneurship. In addition, the writers of this article had a think-tank based on their own work and experience on values especially strongly linked to entrepreneurship education.

The respondents had to put six of the values in order of importance, the first one is the most important one and so on. 48 respondents of 49 answered the question. The values got a total of 283 responses from the 48 respondents. The value alternatives and their percentages of all responses are presented in appendix 2.

The value “responsibility taking” was mentioned the most: 25 responses, which is 8,8% of all responses. The value “Creativity” received the second most responses, 17, which is 6,0%. The next values “being cooperative” and “commitment” both were mentioned 16 times (5,7%). The value “sustainability” was the fifth one and the sixth one was “problem solving ability”. The values “initiative” and “self-confidence” were seen as the seventh most important. The values which received the next most responses were “holistic and multidimensional growth of human being” and “learning from mistakes, seeing mistakes as something positive.

“Holistic and multidimensional growth of the human being” received most responses for being the most important value. It received six (6) responses, which is 12 % of the total. “Being cooperative” received the second most responses, also six (6), which is 12 %. “Responsibility taking”, received the most responses as being the third most important value, with seven (7) responses, which is 14%. “Commitment”, “responsibility taking”, “problem solving ability” and “enduring uncertainty” were chosen the most as the fourth most important values. Each of them was mentioned four (4) times (8%). The values chosen as the fifth most important value was “self-confidence”, with five (5) responses, which is 10%. The values chosen as the sixth most important values were “problem solving ability”, “enduring uncertainty” and “catching challenges”. Each of them was mentioned four (4) times as a sixth most important value, which is 8% of the total.

As a summary, according to the questionnaire the most important values of entrepreneurship education, which are not in order of importance, were:

- Responsibility taking
- Problem solving ability

- Being cooperative
- Commitment
- The holistic and multidimensional growth of the human being
- Enduring uncertainty
- Self-confidence
- Catching challenges
- Creativity
- Sustainability
- Initiative
- Learning from mistakes, seeing mistakes as something positive

Since there were many values as response alternatives and the number of the respondents was quite small, the responses for each value were quite few. This affects the generalisation of the results by diluting it. For the same reason we decided not to do a more specific analysis in the framework of this research. Each value, however, was chosen as a response more than once, which tells us that all values chosen for this research could well be connected to entrepreneurship education.

A clear deficiency was that the respondents did not have a chance to bring out a value from outside the list. In that way a value important for entrepreneurship education and overlooked by the researchers could have emerged from the responses of respondents.

The end result with the group of 12 values was not put in order of importance, since it is both difficult and partly also unnecessary.

5.2 Basis of evaluation of entrepreneurship education

Entrepreneurship education and its evaluation needs commonly accepted values which should be agreed upon among different actors/instances and researchers. A common value basis directs the goals, the planning and the implementation of the activities and also gives a basis for evaluation criteria. This article is the first step to creating the basis of evaluation for further development, although it is hard to do exact assessments on the effects of education, since human phenomena cannot be researched and measured in laboratories, but the effects of evaluation can be discussed. 48 of 49 respondents answered to the following questions:

WHAT should be evaluated in entrepreneurship education?

In the questionnaire there were six options to the question. The respondent was able to answer: "It is unnecessary to evaluate at all" or they could choose five other alternatives in order of importance. Those five alternatives were a) the process b) the learning outcomes c) the commitment, will and motivation of the learner d) the activity, enthusiasm and independent initiative of the learner e) something else, what?

According to the questionnaire the most important target to evaluate was the process. The second most important target was to evaluate the commitment, will and motivation of the learner. The third most important target was to evaluate the process and the activity, enthusiasm and independent initiative of the learner. The fourth most important target was to evaluate the learning outcomes. Six (6) respondents chose something else.

The response options included the learning process, the learning results, the motivation and commitment of the learner and so on. Factors listed by Korkeakoski (2004), such as the professional skills of the teacher, the learning environments, curriculums, the teacher's planning of the teaching event, and the teaching itself with its pedagogical and didactic solutions, were not listed as options in the survey. Instead we were hoping to get more exact answers to the open question: "something else, what?". Unfortunately we did not get this question answered, which

indicates that teachers need more explicit directives for the evaluation of entrepreneurship education. One respondent answered that it would be important to evaluate the teacher's motivation, and everything else can come after that. This is a very interesting response, which should be highlighted even though it was the opinion of one respondent only. Four respondents were of the opinion that entrepreneurship education should not at all be evaluated, which they put as the most important (1.) option, and two others chose this option as number 4. and 5 in importance. This is a surprising result for a survey conducted through elite sampling. One respondent claimed that evaluation is not necessary in the first years of school.

WHY entrepreneurship education should be evaluated?

In the questionnaire there were six options to the question and the respondents were supposed to put the alternatives in order of importance. Those six alternatives were a) the motivation to learn increases b) to develop the schooling through evaluation c) evaluation assembles information d) evaluation gives feedback to the teacher e) evaluation aims forwards and supports future improvements, f) for some other reason, why?

According to the respondents the most important reason to evaluate entrepreneurship education was; because the motivation to learn increases. The second most important reason to evaluate was; to evaluate because evaluation aims forwards and builds the future. The third most important reason was; to evaluate because evaluation gives feedback to the teacher. Also the fourth most important reason to evaluate was; to evaluate because evaluation gives feedback to the teacher. The fifth most important reason to evaluate was; to evaluate because evaluation assembles information. The sixth most important reason to evaluate was; to evaluate because it is possible to develop the schooling through evaluation. The response number 6, "some other reason" received six (6) responses.

The WHY-responses were quite expected. The motivation for learning grows through evaluation. The popularity of elective entrepreneurship education courses in second level education can according to one respondent suffer if they are not evaluated.

HOW entrepreneurship education should be evaluated?

In the questionnaire there were seven options to the question and the respondents were supposed to put the alternatives in order of importance. Those seven alternatives were a) self-assessment b) peer assessment c) portfolio d) learning diary e) form f) discussion g) something else, what?

According to the respondents the most important method for evaluating entrepreneurship education was self-assessment. The second most important method to evaluate was also self-assessment. The third most important method was peer assessment and the fourth most important method was portfolio. The fifth most important method was discussion and the sixth most important method was testing. The seventh most important methods were both self-assessment and form. The alternative nr. 7 "something else" received four responses. One of respondents clarified his answer by writing: empowering feedback. That is a very good observation, which should be taken into account in the future.

19% of the respondents were familiar with tools fitted for evaluation of entrepreneurship education. Assessment can be numerical, verbal or oral. That is why we wanted to ask what our respondents think that evaluation of entrepreneurship education should be like: more verbal or numerical assessment. 43 respondents answered the question and only one respondent (1), that is 2%, answered numerical and all the others answered verbal assessment. 38% of the respondents answered that the development of entrepreneurship-like abilities such as "behaviour and meticulousness" should be graded.

WHO should evaluate entrepreneurship education?

In the questionnaire there were six options to this question and the respondents were supposed to put the alternatives in order of importance. Those six alternatives were a) the learner b) the teacher c) the parents d) representatives for organizations and business e) entrepreneurs f) somebody else, who?

According to the respondents the most important evaluator to evaluate entrepreneurship education was the learner. The second most important evaluator was the teacher and the third most important evaluators were the parents. The fourth most important evaluators were the entrepreneurs and the fifth most important evaluators were the representatives for organizations and business. The sixth most important evaluators were also the parents.

The answer 6 "someone else" received 5 answers and one of the respondents answered "The learner group", a response which should be taken into account in further research.

Among the HOW – responses self-evaluation was clearly seen as the most important tool. This is also supported by the WHOM-responses, according to which the most important evaluator in entrepreneurship education is the learner himself. Self-evaluation is a good evaluation tool if it is created correctly. Self-evaluation should have clear criteria and it should be based on the evaluation framework set up for entrepreneurship education. Thus a common evaluation frame for entrepreneurship education should be created. On the basis of these it is easier for the educator and the learner to set up evaluation criteria for each task targeted at self-evaluation. The second most important evaluator was the teacher or educator, which in turn indicates that the learner should not be left alone with the evaluation. Ultimately the educator has the responsibility for evaluation. It was interesting that a fourth (27%) of the respondents considered parents to be the third most important evaluators in evaluating entrepreneurship education. Regarding these responses the respondents probably had the younger learners on their minds, whereas the fourth most important evaluators, entrepreneurs, were probably seen responsible for evaluating older learners. A fourth (25%) considered entrepreneurs the fourth most important evaluators.

Different methods of evaluation, such as self-assessment, peer assessment, portfolio, discussion and a test are very suitable for entrepreneurship education. One should also take into account that the evaluation methods should be used in the same connection only where they are applicable. As Korkeakoski (2008, 208-209), Linnakylä and Atjonen (2008, 82-83) state, it is methodologically necessary also to evaluate and compare the use of different methods in the evaluation of the same topic. For this reason methods suitable for entrepreneurship education should be developed and tested in the future.

WHEN entrepreneurship education should be evaluated?

In the questionnaire there were four options to this question and the respondents were supposed to put the alternatives in order of importance. Those four alternatives were a) before the process b) during the process c) immediately after the process d) in delay after the process.

According to the respondents the most important moment to evaluate was during the process. The second most important moment was to evaluate immediately after the process. The third most important moment to evaluate was before the process and the fourth most important moment to evaluate was in delay after the process.

Respondents (17) who answered in delay after the process specified their answer by answering the question "After how long?". The responses vary from one week to 1-2 years. Additionally we received two noteworthy responses: first "The evaluation depends A LOT on the target group and its size and age distribution" and second "The evaluation should be ongoing, as should development be".

In the WHEN – responses clearly the most important (55%) evaluation moment was during the process and the second most important right after the process. Even though the education effects of

entrepreneurship education are often seen with a delay, they are hard to evaluate when a long time has passed since the teaching. This problem should be researched and a solution should be created.

5.3 OTHER findings

Most of the respondents, 36 (88%), needed more information about methods of evaluation. More information about theories of evaluation was wanted by 13 (32%) respondents. One respondent wanted to know if the education has had some effect on the economic life.

Another question was: "Does the evaluation of entrepreneurship evaluation differ from other evaluation?" There were two alternatives: No and Yes, how? 41 respondents answered the question as follows: About half of them, 21 (51%) respondents answered no, and the other half of them, 20 (49%), answered yes. We want to present a few noteworthy, clarifying answers: 1) Process and /or aim is emphasized more, 2) Self-assessment and verbal assessment are emphasized, 3) Demands strong reflection, 4) There is no clear criteria at the moment, 5) attitudes are difficult to evaluate.

The third question was: "Should the fulfillment of entrepreneurship education be evaluated by evaluating learning requirements and outcomes?" A quarter (25%) of the respondents, answered no and some of them specified their answer as follows: "There is no need to emphasize entrepreneurship" and "Only few have enough time". We think he/she meant only few teachers have enough time. The rest of the respondents (75%) answered yes and two of them specified their answer: "Because entrepreneurship education should have effect" and "Teachers should use more modern methods and evaluation tools". These answers should be recognized in further development of the evaluation of entrepreneurship education.

6. CONCLUSIONS AND FUTURE RESEARCH

Since earlier research on the themes in this article, such as defining the values of entrepreneurship education and the canvases for the evaluation of entrepreneurship education have not been found, the goals for this research were met. A foundation for further research was created. Now some values linked to entrepreneurship education were mapped, from which teachers, entrepreneurs and organization representatives who were interested in the subject chose the values they considered to be the most important ones. Additionally the canvases for entrepreneurship education were surveyed: what should be evaluated, why should it be evaluated, who evaluates and when does the evaluation occur. Since this survey had several different questions and the number of respondents was relatively low, we could not go into a deeper analysis of the themes.

This research involved basic education and basic vocational level. It should involve also in higher education. The results were collected in Finland in Finnish school system. It would be appropriate to extend the same research also outside of Finland.

A broader research could be conducted about the importance of values in entrepreneurship education, and a deeper analysis could be made on the basis of the results from a broader research. The values which were chosen as the most important (1.) and second most important (2.) ones and so on could be analyzed, and the respondents could explain the underlying factors that affect the values. In addition to a value foundation, also an evaluation frame based on evaluation theory and a common understanding among the entrepreneurship education educators should be created.

The evaluation methods of entrepreneurship education still need to be developed in order for goals to be realized in practice. Research should be conducted on which evaluation methods

produce knowledge that develops entrepreneurship education. Additionally, new evaluation methods should be developed and their functionality in real life should be tested. There should be a value discussion in the learning institutions about the values, the goals and the necessity and importance of evaluation in entrepreneurship education.

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Appendix 1.

QUESTIONARY OF EVALUATION OF ENTREPRENEURSHIPS EDUCATION

1. Have you participated in the creation of an entrepreneurship education curriculum?

No Yes

2. Have you participated in the planning of lectures or teaching sessions which were implemented through methods supporting entrepreneurship?

No Yes, how?

3. Have you carried out lectures or teaching sessions through methods supporting entrepreneurship?

No Yes, how?

FOLLOWING QUESTIONS (4-13) CONCERN student-/pupil-assessment.

4. Are you familier with the evaluation methods of entrepreneurship education?

No Yes, what methods?

5. WHAT should be evaluated in entrepreneurship education? Set alternatives in order of importance (1.-5.) or choose the alternative f), if you think that it is unnessessary to evaluate it at all.

- a) the process
- b) the learning outcomes
- c) the commitment, will and motivation of learner
- d) the activity, enthusiasm and independent initiative of learner
- e) something else, what? *)
- f) it is unnesserary to evaluate it at all

***) 5.1 If you answered above 'something else', what?**

6. WHY the entrepreneurship education should be evaluated? Set alternatives in order of importance (1.-6.).

- a) the motivation to learn increases
- b) to develop the schooling through evaluation
- c) evaluation assembles information
- d) evaluation gives feedback to the teacher
- e) evaluation aims forwards and builds the future
- f) for some other reason, why? *

***) 6.1 If you answered above 'for some other reason', why?**

**7. HOW the entrepreneurship education should be evaluated?
Set alternatives in order of importance (1.-7.).**

- a) self-assessment
- b) peer assessment
- c) portfolio
- d) learning diary
- e) form
- f) discussion
- g) something else, what?

***) 7.1 If you answered above 'something else', what?**

8. Should the evaluation of entrepreneurship education be
a) verbal
b) numerical?

9. Do you feel that the development of entrepreneurship-like abilities such as "behaviour and meticulousness" should be graded?

No

Yes

**10. WHO should evaluate the entrepreneurship education?
Set alternatives in order of importance (1.-6.).**

- a) the learner
- b) the teacher
- c) the parents
- d) Representatives for organizations and business
- e) entrepreneurs
- f) somebody else

***) 10.1 If you answered above 'somebody else', who?**

**11. WHEN the entrepreneurship education should be evaluated?
Set alternatives in order of importance (1.-4.).**

- a) before the process
- b) during the process
- c) immediately after the process
- d) in delay after the process

***) 11.1 If you answered above 'in delay after the process', how long after the process?**

12. What kind of information do you need about evaluation of entrepreneurship education?

- Information about methods of evaluation
- Information about theories of evaluation
- Something else, what?

13. Does the evaluation of entrepreneurship education differ from other evaluation?

- No
- Yes, how?

14. Should the fulfillment of entrepreneurship education be evaluated in evaluating learning requirements and outcomes?"

- No, why not?
- Yes, why?

VALUES OF ENTREPRENEURSHIP EDUCATION

Lastly a question which surveys opinions on values, around which entrepreneurship education should be constructed

15. Which do you think are the most important values that entrepreneurship education should promote in the society? Mark the six most important ones in order of importance (1.-6).

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

- 1. Equality (between humans)
- 2. Justice (treatment of human)
- 3. Communalinity
- 4. Holistic and multidimensional growth of the human being
- 5. Ecologic way of living
- 6. Effectiveness, effective achievement

7. Competitiveness
8. Specialization, concentrate on own know how
9. Knowledge, thinking
10. Criticality, arguableness
11. Awareness of quality
12. Control of whole
13. Creativity
14. Empowerment of human and community
15. Will power
16. Initiative
17. Being cooperative
18. Commitment
19. Responsibility taking
20. Sense of direction
21. Self-confidence
22. Sustainability
23. Ability to take risks
24. Learning from mistakes, seeing mistakes
as something positive
25. Problem solving ability
26. Enduring uncertainty
27. Tolerance of change
28. Reverence and ability to hear of others
29. Ability to discuss
30. Acceptance of difference
31. Catching challenges
32. Future orientation
33. Innovativeness

RESPONDENT INFORMATION

As follows we ask you to give information regarding yourself. We guarantee that the information remains anonymous throughout the research.

16. Age:

17. Sex: male female

18. Profession:

class teacher, grades 1-6
subject teacher
vocational teacher
guidance counselor
principal

entrepreneur
representative of organization
other

19. Education:

comprehensive school
the upper secondary education
university of applied sciences
university

Appendix 2.

The value alternatives and their percentages of all responses

1. Equality (between humans): 2,1%
2. Justice (treatment of human): 2,5 %
3. Communality: 2,8%
4. Holistic and multidimensional growth of the human being: 4,2%
5. Ecologic way of living: 1,8%
6. Effectiveness, effective achievement: 1,1%
7. Competitiveness: 0,7%
8. Specialization, concentrate on own know how: 1,1%
9. Knowledge, thinking: 1,8%
10. Criticality, arguableness: 1,1%
11. Awareness of quality: 0,7%
12. Control of whole: 2,5%
13. Creativity: 6,0%
14. Empowerment of human and community: 1,8%
15. Will power: 0,7%
16. Initiative: 4,6%
17. Being cooperative: 5,7%
18. Commitment: 5,7%
19. Responsibility taking: 8,8%
20. Sense of direction: 3,9%
21. Self-confidence: 4,6%
22. Sustainability: 5,3%
23. Ability to take risks: 2,1%
24. Learning from mistakes, seeing mistakes as something positive: 4,2%
25. Problem solving ability: 4,9%
26. Enduring uncertainty: 3,5%
27. Tolerance of change: 1,8%
28. Reverence and ability to hear of others: 3,2%
29. Ability to discuss: 1,8%
30. Acceptance of difference: 1,1%
31. Catching challenges: 3,2%
32. Future orientation: 1,8%
33. Innovativeness: 3,2%