

# ENHANCING ENTREPRENEURSHIP IN LEARNERS – AN IMPLEMENTATION AND EVALUATION OF ENTREPRENEURSHIP EDUCATION THROUGH MUSIC EDUCATION

**Lenita Hietanen, Satu Uusiautti, Kaarina Määttä**

University of Lapland, Rovaniemi, Finland

E-mail: Lenita.Hietanen@ulapland.fi, satu@uusiautti.fi, Kaarina.Maatta@ulapland.fi

## Abstract

*Entrepreneurship education is recommended to be a part of education already from the beginning of children's school paths. Often, entrepreneurship education has been defined in a political level and through economic ideologies. However, one of the goals of entrepreneurship education is to achieve entrepreneurial ways of acting regardless of the context or community. This study is a case study of the implementation of entrepreneurship education in music education in basic education. The findings introduce and evaluate the pedagogical solutions in the music education of one Finnish seventh grade. The pupils were given opportunities to set their own goals, experiment multiple options, make decisions and reflect on their actions. They were encouraged and guided to become aware of their entrepreneurial features, skills, and ways of acting. The most important result was that entrepreneurial education can be included in basic education. Suggestions for teachers are given based on the findings.*

**Key words:** basic education, entrepreneurial way of acting, entrepreneurship education, learning environment, music education, non-business school context.

## Introduction

Entrepreneurship education and its various forms have been recognized as a significant target of development at all educational levels in Europe (European Commission, 2012a; 2012b). The developmental action has mostly been focused on higher education, whereas practices in primary and secondary education have included introduction of business life or downright familiarization of entrepreneurship for example in the form of visits in enterprises (see e.g., Hytti & O’Gorman, 2004). Entrepreneurship is one of the eight key competences defined by the European Union and it is based on the turning of innovative ideas into action through the initiative. Entrepreneurship education has been defined in many ways in different countries and various educational levels (European Commission, 2012a). This is why interest is also focused on research on teacher training and the practices and learning environments of basic education (European Commission, 2012b).

In Finland, the Ministry of Education and Culture (2009) and the Finnish National Board of Education (2004) have formulated guidelines for the implementation of entrepreneurship education starting from basic education level (Finnish National Board of Education, 2004). This study focused on the goals of entrepreneurial ways of acting that Finnish pupils are supposed to become familiarized with starting from basic education (Finnish National Board of Education, 2004; Ministry of Education and Culture, 2009). The goal is, according to the Finnish National Board of Education, “to develop the capabilities needed for civic involvement and to create a foundation for entrepreneurial methods” (Finnish National Board of Education, 2004,

38). The study was grounded on the idea of entrepreneurship, being a socially significant phenomenon when it comes to the employment situation (Jack & Anderson, 1999). Furthermore, the understanding that opportunities offered by entrepreneurship are crucial for the realization of individual rights and liberties, especially in case of sparsely-populated areas (Mahlamäki-Kultanen, 2005).

In this study, entrepreneurial action is considered as a growth process and a form of learning in which various opportunities combined with experimenting and reflection are used for practicing entrepreneurial action (see also Pepin, 2012). Fayolle (2013) emphasizes that research on entrepreneurship education needs a strong scientific and conceptual basis that combines elements from the fields of education and entrepreneurship-as was the focus of this study. The study challenges Fayolle's (2013) "truism" by contemplating when the process of developing into an entrepreneur can start by paying attention to how one studies, in other words, to the growth and learning processes of an individual pupil (the possible prospective entrepreneur).

Researchers regard entrepreneurial features and skills partly innate, but most of them agree upon the possibility of developing these skills (Gibb, 2002; Rae, 2007). According to Draycott and Rae (2011), enterprise competency consists of functional entrepreneurship and the so-called soft skills. As the context of this study is basic education, the focus is on the learning of soft skills applicable for all (Finnish National Board of Education, 2004; Ministry of Education and Culture, 2009). The research wants to look into those learning environments that enhance familiarization of entrepreneurial action in basic education. The purpose was to create a model of a music learning environment which provides opportunities for practicing and developing entrepreneurial way of acting in non-business context for 13-year-old students at Finnish general education (see also Garnett, 2013). The eventual model turned out to be applicable to other school subjects and educational levels, too.

### **Entrepreneurial Action as a Part of Entrepreneurship Education**

The theoretical basis of the study leans on, among others, Neck and Green's (2011) research according to which learning a method can be even more important than learning the contents. Methods are also more easily adjustable from one education level to another (Neck and Green, 2011). In addition, Politis's (2005) main factors of entrepreneurial learning-entrepreneurs' career experience, the transformation process, and entrepreneurial knowledge-are referred to in this study. The special features of the music learning environment are viewed from Welter's (2011) research perspective: "when, how and why entrepreneurship happens and who becomes involved". This makes it possible to generalize and apply the model in various contexts.

#### *Entrepreneurial Action as the Key Concept*

Entrepreneurship education has three goals: to understand the societal importance of corporate entrepreneurship, to educate how to manage business skills, and entrepreneurial activity (Frank, 2007; Gibb, 2005). Some of the researchers use the main concept of entrepreneurship education when referring to an individual person's entrepreneurial attitudes and behavior, values and interest in entrepreneurship (Mwasalwiba, 2010). Usually, especially in non-business contexts, derivatives starting with entrepreneur, entrepreneurship, and enterprise are used. Action is often described with the word "behavior" (e.g., Fayolle et al., 2006; Gibb, 2002; Harkema & Schout, 2008; Jones & Iredale, 2010; Uusiautti & Määttä, 2011). And further, Shane and Venkataraman (2000) use the concept of entrepreneurial performance. Some of the researchers use for example the concepts of entrepreneurial behavior, entrepreneurial working, and entrepreneurial action interchangeably (Mwasalwiba, 2010; Rae, 2007). In this study, the term "action" was preferred over "behavior", because the aim was to emphasize the usability of the concept when referring an individual person's entrepreneurial ways of action in all kinds of

organizations and situations. Action orientation is crucial in an entrepreneurial learning process (Kyrö, 2008; Suonpää, 2013). Instead of behavior, activity is the key in this environment.

Here, enterprise action is understood as entrepreneurial behavior based on entrepreneurial attributes and skills (Gibb, 2002; Rae, 2007). According to Gibb's (2002; 2005), for example self-confidence, creativity, and perseverance are entrepreneurial features. Whereas entrepreneurial skills are problem solving skills, ability to make decisions under uncertainty, and negotiation and networking skills. Risk-taking and responsibility represent entrepreneurial behavior (Gibb, 2002; 2005). In addition, the ability to adjust to changes and commitment can be seen as entrepreneurial features (Gibb, 2002; Harkema & Schout, 2008; Henry et al., 2005). Likewise, Neck and Greene (2011) emphasize the social responsibility in entrepreneurship education.

Research has an emphasis on entrepreneurial ways of acting that are based on activities in enterprises, for example in small- to medium-sized (SME) businesses (see, e.g., Gibb, 2002; 2005; Jones & Iredale, 2010), which refers to enterprise-based activity. On the other hand, when the purpose is to stress the practicing of entrepreneurial ways of acting for possible future entrepreneurship, the concept of enterprise-oriented activity is to be used. This concept also fundamentally involves entrepreneurial mindset (see European Commission, 2012). According to Gibb (2005), the entrepreneurial learning process consists of learning about and for entrepreneurship in addition to the enterprise through the entrepreneurial way of acting.

#### *Entrepreneurship Education and Its Implementation in Basic Education*

Entrepreneurship education aims at paying attention to diverse learners and supporting co-operational learning (e.g., Jones & Iredale, 2006; 2010). However, when applying entrepreneurship education to basic education it is especially important that the goals and ideas of entrepreneurship education are in line with the general education objectives (e.g., Harkema & Shcout, 2008). Actually, Ristimäki (2007) has argued that entrepreneurial way of acting is not contradictory with the basic task of basic education because it emphasizes goal-orientation and new kinds of information processing skills in individual learners. Likewise, Gibb (2005) highlights that in general, entrepreneurial behaviors support the notion of active person, getting things done, thinking strategically on one's feet and harnessing resources imaginatively, which are behaviors most commonly associated with the entrepreneur in the literature (see also Jack & Anderson, 1999).

However, it is relevant to critically discuss the connection of enterprise education with the core elements of basic education-what we do when aiming at educating people in entrepreneurship (Fayolle, 2013). Here, three levels are introduced: pedagogy, teachers' role, and learning.

Entrepreneurial pedagogy has its roots in the social constructivism and the idea of agency and motivation in learning (e.g., Hickey, 1997; Suonpää, 2013). It also is strongly connected with the relevance of learning and its usability in the world outside school, in other areas of life and especially in work life: Hickey (1997) calls this type of learning "authentic learning experiences" (pp. 188-189).

The teacher's task in education is to enhance learning in students and provide them with learning experiences. All teachers' solutions can be seen as a part of the pedagogy the teacher implements in his or her classroom, in this case enterprise pedagogy. Garnett (2013) has defined the use of pedagogy as follows: "If enterprise learning involves students developing the characteristics of an enterprising individual, enterprise pedagogy is an approach to teaching that creates the conditions for students to develop these attributes and to apply them to learning in subjects across the curriculum" (p. 2).

In practice, in order to ignite entrepreneurial way of acting in students, enterprise education sets certain requirements for the teacher's role. Shane and Venkataraman (2000) and Hanon (2006) emphasize the teacher's role in the arrangement of various options in the learning environment (Mark et al., 2010). Entrepreneurial, experimental search of opportunities neces-

sitates the organization of various options in the learning environment (García-Morales et al., 2006; Harkema & Schout, 2008; Lant & Mezas, 1990). In order to be able to enable entrepreneurial action in pupils, the teacher has to give up his or her controller's role (Seikkula-Leino, 2011) and adopt the role of a mentor in the learning process (Jones & Iredale, 2010) or the role of a coach (Hannon, 2006; Harkema & Schout, 2008; Schelfhout et al., 2004; Shepherd et al., 2004). Most importantly, the teacher's awareness of the entrepreneurial features of his or her own action and attitudes to entrepreneurial action form the basis of pupils' entrepreneurial action (Seikkula-Leino, 2011; Gibb, 2005; 2011). The teachers' have to design learning environments so that they are flexible and tolerate situational changes (Harkema & Schout, 2008; Shulman & Shulman, 2004). Like in all other action, also entrepreneurial action has to be in line with the teacher's work values and ethics (Anderson & Smith, 2007; Seikkula-Leino, 2011) and with the tasks of basic education (Valli, 1997).

When it comes to the learning processes, enterprise education highlights students' own action and experiences as the foundation of learning (Jack & Anderson, 1999; Neck & Greene, 2011) but also involves observation and studying of literary material (Holcomb et al., 2009). However, what is often emphasized by experts of entrepreneurship education is the process of learning (see, e.g., Mitchell et al., 2002). Learning takes place through interaction within the entrepreneurial classroom, but also it is a very personal process. In entrepreneurial education, the learning process consists of goal-setting, self-observation and self-regulation, and evaluation of the achieved goals. Actually, these goals are very much in line with many developmental theories emphasizing children's learning through active action and children as capable and motivated subjects who can set and mold their own learning goals (see e.g., Bransford et al., 1999; Zimmermann & Schunk, 2008).

### *How to Implement Entrepreneurship Education in Music Education?*

Music education sets interesting surroundings for entrepreneurship education. For example, Garnett (2013) applied enterprise pedagogy to the context of the 11-14 music curriculum and summarized the practices in music education by the features of enterprise pedagogy. These features included for example more giving students control over their work, encouraging them to use their imagination, allowing mistakes, and seeing the teacher as a facilitator of guide of learning.

In this study, music was considered "just" an example of a school subject in which entrepreneurship education can be taught. The method of studying music and arrangements made by the teacher are the main idea. The contents of music education support this action because the aim is to build creative relationships with music and musical expressions through inventive musical action. Entrepreneurship was present in the music learning environment as a method in all goals and objectives.

Here, the focus was on the physical arrangements and pedagogical solutions of the learning environments of music education. The purpose of this article to describe the implementation of entrepreneurship education in basic education through providing a natural situation, the teaching arrangements and pedagogical solutions (Cohen et al., 2003; Yin, 2009).

## **Methodology of Research**

### *General Background of Research*

The purpose of this study was to describe and evaluate the implementation of entrepreneurship education in the learning environment of music education. The research question set for this study was: How to enhance entrepreneurial ways of acting in pupils in the learning environment of music education?

The study was a case study conducted in a Finnish middle school. The teacher as a researcher was selected as the means of addressing the phenomenon. This was considered suitable because the teacher-as-a-researcher movement has encouraged teachers to develop their work through research (Kincheloe, 2006). Reflection is an important part of the movement, and the development of reflection is supposed to improve teachers' ability to see phenomena simultaneously from different points of view and evaluate the meanings of various actions from the pupils' perspective (Shulman & Shulman, 2004). For example, to take various learners into account means that the teacher provides optional ways of studying the same issue (Nakata, 2011). Likewise, this study leaned on the perception that there is not just one right practice that suits every pupil and in every situation (Sagor, 2009).

### *Sample of Research*

The learning environment in music education on which this case study concentrated was organized in one Finnish middle school during the study year 2006-2007. The pupil group consisted of seventh-graders (N= 26). They studied music for two hours per week (= one double lesson a week). This article describes the solutions the teacher made to enable entrepreneurial ways of acting in pupils.

The National Core Curriculum for Basic Education, 2004 defines a learning environment as follows: "The term learning environment refers to the entirety of the learning-related physical environment, psychological factors and social relationships. In this setting, study and learning take place" (Finnish National Board of Education, 2004, p. 16.) As the learning environment in music education is in the focus of interest, the study represents an intrinsic case study (Silverman, 2010; Stake, 1995). To a certain extent, the pedagogical solutions are generalizable to other learning environments of music education in basic education. The features of enterprise action as the viewpoint of growth and learning and as a study method are also applicable in other school subjects and education levels (see Cohen et al., 2003). In addition, the teacher's diary formed one part of the research data. The teacher wrote down all the phases of teaching design and various pedagogical solutions.

### *Instrument and Procedures*

In this research, the data were acquired in a diversified form, including students' own evaluations and perceptions, the teacher's diary and notes, videoed lessons, the written curriculum, and practical actions and pedagogical solutions. This article in particular is focused on the practical implementation of entrepreneurship education and its evaluation. Therefore, it can be stated that the analysis started first by analyzing the contents of curriculum and carefully planning how to implement entrepreneurship in practice in order to meet also the general goals of education. Select methods that are described in the results section were chosen and operationalized into practical action. As the teacher was also the researcher; the research period was simultaneously a part of students' school year. Therefore, the teacher had to constantly and consciously analyze the practice and how students responded to the teaching arrangements and the learning environment.

### *Data Analysis*

At the end of the research period, the teacher-researcher returned by the versatile data and evaluated the experiment in the light of students' reports and assessments, in relation to the goals provided in the curriculum, and based on her personal experiences, notes, and understanding of the success of entrepreneurship education in the learning environment of music education. Therefore, the analysis formed a cycle that followed the course of the action research: after carefully familiarizing with the preconditions and possibilities, the teacher-researcher designed



practical measures, implemented them in practice simultaneously observing their influence, and finally evaluating the outcome (see also Altrichter, Posch, & Somekh, 2005; Carr & Kemmis, 1986; Peltokorpi, Määttä, & Uusiautti, 2013).

When it comes to the reliability of the study, the teacher's position in the research is probably the most important issue. The need for this study emerged from the teacher's desire to develop music education into a more pupil-oriented direction. The ideas of entrepreneurship education seemed to correspond to this need. The study proceeded from careful operationalization of the core concept of entrepreneurial ways of acting and how they could be implemented in practical music education. The written curriculum was analyzed for this purpose. It appeared that the concepts used in the national core curriculum were quite wide and left room for the researcher's interpretations (see e.g., Krippendorf, 2004). These pedagogical solutions are described in this article in detail. Each lesson was documented rigorously by the teacher and also the pupils were asked to write diary in which they evaluated their action and kept records of their learning. These were to support the teacher's observations and provide information about pupils' perceptions of entrepreneurial ways of acting. As the study proceeded, it seemed that the teacher-pupil instructional conversations should have been documented better (for example by an outsider) in order to be able to evaluate the influence of teacher's instructions. In all, the teacher's action has been critically reflected, and the reliability of the study was enhanced by data triangulation (e.g., Silverman, 2010) and careful reporting of the learning environment. In all, the study provided a rich description of one example of pupil-centered, entrepreneurial learning environment.

## Results of the Implementation of Entrepreneurship Education

Basically, the key pedagogical solutions that were to enable entrepreneurial action consisted of two areas: (1) Pupils were taught to pay attention to entrepreneurial working methods, and (2) Pupils were encouraged to independent action and control over their choices. To support pupils' choices, the learning environment of music education had separate learning environments for (a) playing-oriented, (b) listening-oriented, and (c) singing-oriented entrepreneurial studies.

### *Teaching Entrepreneurial Working Methods*

The practical implementation of entrepreneurship education in music education started by igniting pupils' active action and giving responsibilities. This means that pupils were asked to set goals in music studies, and in addition, after every lesson, the teacher asked them to reflect upon which entrepreneurial ways of acting or features each student had experienced the strongest during studying music. The concepts were based on Gibb's (2005) tables introducing systematical definitions of entrepreneurial behaviors (e.g., opportunity seeking and grasping, solving problems creatively, managing autonomously), entrepreneurial attributes (e.g., achievement orientation and ambition, self-confidence and self-belief, action orientation), and entrepreneurial skills (e.g., negotiating, strategic thinking, networking, intuitive decision-making under uncertainty).

In addition, the ability to adapt to changes and engagement are entrepreneurial features (Gibb, 2002; Harkema & Schout, 2008; Henry et al., 2010). To enhance pupils' reflection, the teacher molded Gibb's lists by simplifying them and omitting business terms: eventually, 12 concepts that illustrate innovativeness and goal-orientation were chosen from the list. This select group of concepts was named "entrepreneurial way of acting":

### Innovativeness

1. Problem-solving skills
  - Try to find the information or solution by yourself first
  - Do not be afraid of asking help when necessary
2. Creativity / Inventiveness
  - Try new ways of playing and singing songs
  - Also random effects are music
  - Try to find your own music style
3. Adaptability in changes
  - Situations change fast – try to make a good use of them
4. Learning from mistakes
  - Learning of a new skill happens through mistakes
  - If you keep doing the same mistake frequently, ask for help to work it out.
5. Tolerance of uncertainty
  - If you want to learn new, you have to be able to throw yourself into new, unknown situations.
6. Risk-taking
  - You can try new things only by taking risks.
  - If the experiment did not feel good, return to the familiar – and then try again or something else.

### Goal-orientation

7. Commitment
  - Do yourself a favor and work determinedly.
8. Perseverance
  - Learning and strengthening of skills require multiple repetitions.

### Innovativeness and Goal-orientation

9. Initiative
  - Starting to work is the most important step toward your goal.
10. Self-confidence
  - Trust that your attempts will pay off.
  - Trust in your capability of developing.
11. Responsibility
  - For your own working.
  - No one else can learn on your behalf.
12. Ability to co-operate
  - Fulfilling your own goals within the group work.
  - Learning also by listening and observing others.

Pupils were explained the content of each concept. In addition, the concepts were written in cardboards hung on the classroom walls, and thus, they were easy to refer to during lessons. The cardboard was also to help pupils' evaluations of their action as they were supposed to report their learning and activities after each lesson. The pupils had to pay attention to the following entrepreneurial ways of acting. The items are grouped according to the Gibbs's (2002) and Rae's (2007) definition and based on the teacher's interpretation. The teacher explained the concepts (see the specifying sentences after each concept). The definitions were to help pupils to understand what these concepts can mean in the non-business context, and eventually, they became encouraged to freely describe how for example selecting a song in the singing test could manifest risk-taking and tolerance of uncertainty. At that time, the teacher's definitions

were removed from the walls and only the concepts remained. The teacher also referred to the concepts and entrepreneurial action consciously making comparisons with working life and how especially small entrepreneur acts and benefits from these types of skills and attitudes.

### *Encouraging Independent Action and Control over One's Choices*

The opportunity of acting otherwise, set goals, and make choices formed the basis for physical arrangements of the learning environment. This case study included three learning environments which each had their specific goals set for music education, learning areas of playing, listening, and singing. However, the pupils' self-regulative action was supported through these arrangements. Each of them is next introduced separately.

#### (a) Design of playing-oriented studying

According to the teacher-researcher's experience in music education, pupils usually learn phases of playing by looking at the teacher's model. To offer pupils an opportunity of setting their own goals and developing autonomously in music skills, the teacher composed written directions about the skill levels and phases of each instrument and these directions were hung on the walls of the music classroom. Pupils could interpret these independently and together with peers. Only the easiest levels were the ones each pupil was expected to try. After that, pupils could decide whether or not they would study more about the instrument. Pupils could choose which instruments they would play. They also know the schedule of the whole study period. Playing-oriented lessons were scheduled along the whole study period making it possible that every pupil could plan when they would like to study playing and when observe others work.

The instruments of the music classroom, provided a relatively diverse range of options. Pupils could play the following instruments:

- electronic drums with sound reproducers
- four choir microphones with stands and a mixer
- an electric bass guitar and amplifier, and training bass guitar without an amplifier
- two electric guitars with amplifiers
- ten acoustic guitars
- a piano, a digital piano, and keyboards
- rhythm instruments: claves, bongo drums, rhythm eggs, tambourine, guiro, bells

Songs in textbooks were composed so that they could be accompanied by four instruments which are the so-called band instruments: guitar, drums, bass, and keyboards or piano. Each pupil was given a three-phased plan of studying these instruments which was concretized with plus signs. Thus, the pupils had 12 options. When seeing the phases and plus signs they would acquire when reaching a new skill level, pupils could regulate their own studying being aware of how their progress would be noticed in their evaluation. Pupils also knew the schedule of music education. Therefore, they could choose not only what and how much they would study but also when they would study playing, listening, or singing.

#### (b) Design of listening-oriented studying

In listening-oriented studying, pupils had to be able to concentrate on the music they listen and give reasoned arguments about what they had heard. This is one of the goals of music education curriculum (see also Finnish National Board of Education, 2004). Pupils were asked to write about their observations and therefore, every student had an opportunity to bring out his or her viewpoint.

The design of listening-oriented studying included three different tasks: the emphases were on the music pupils liked to listen, local culture, and knowledge of various eras and styles. Pupils' listening and observation were evaluated by two "Juke Box Jury" experiments. To the



first Juke Box Jury lesson, pupils got to bring music that they found somehow meaningful to them. This was also considered a means to expand the learning environment outside the school. Local culture was introduced by having pupils listen and evaluate local, northern Finnish music. Various eras and styles were covered by a musical identification tasks, and the samples were chosen by the teacher.

### (c) Design of singing-oriented studying

Every student has probably had more chances practicing singing more than playing and listening. Indeed, sing-along is one of the most natural ways of having music education. It is also pupil-centred because pupils can suggest songs and every pupil can decide, for example the volume of their own singing in each song.

According to the guidelines of music education, the teacher has to evaluate the pupil's ability to follow rhythm and melody. In a group situation, it is easier to practice rhythms than control each pupil's melody. However, evaluating necessitates that each pupil is listened individually. Therefore, the teacher had a singing test at the end of the semester. Likewise, playing and listening-oriented lessons usually included one or two sing-alongs, a song chosen by pupils themselves. This was to guarantee that pupils could practice singing sufficiently before the singing test.

One week before the singing test, pupils could practice their test songs. In all, singing-oriented studying was emphasized before the test and on the day pupils took the test. The only limitation for choosing a test song was that the teacher had to know the song in order to be able to evaluate a pupil's skills.

### *Summary of the Experiments*

In sum, the aforementioned pedagogical solutions provided students with options. However, as it became obvious that students are not always aware of their strengths and skills that would function as the basis for their choices, some of the tasks in music lessons were obligatory, in other words, tasks that everyone had to do. Students' right to set their own learning goals and ability to follow their own learning processes were enhanced by a follow-up form, that the teacher conducted for them. Students could write down their plus signs and estimate how they had progressed and what would their grade in music be. The form covered all the aforementioned three learning areas.

### *Evaluation of the Entrepreneurial Learning Environment of Music Education*

The pedagogical solutions introduced in this article illustrate one way of bringing entrepreneurial ways of acting in music education. The basis of the designs of the learning environment was found through careful reading and interpretation of the national core curriculum for basic education. The elements of goal-orientation and innovativeness can be found in these official documents.

According to the teacher's pedagogical diary from June 2006, the arrangements in the learning environment should be based on the curriculum emphasizing pupils' opportunities of learning through alternative tasks selected according to their own interests. The study showed that pupils could plan, observe, and evaluate their own action (see also Bransford et al., 1999). It was also evident that their knowledge of music and entrepreneurial action increased during the research period. Remarkably, regardless of their different skills and interests, each and every pupil could participate in learning situations, both individually and together, and advance their skills, too. Everyone could also make independent decisions over their study paths concerning what, how, how much, and with whom they would study music. In addition, the playing-oriented design allowed pupils to decide when they would study.

Entrepreneurial ways of acting necessitate that one can find information by trying innovative solutions. Therefore, a pupil just independently doing tasks designed by teacher is not entrepreneurial action as such. Instead, intrinsic motivation is needed to creative and innovative action (e.g., Reeve, 2008). If a pupil is motivated only by the extrinsic reward, his or her action is merely goal-oriented. Given this viewpoint, in this study, the teacher had to constantly deliberate who to ensure that pupils were not just collecting plus signs in order to have a better grade in music but actually worked in an entrepreneurial way. Pupils' diaries were chosen a means to control this: their diary notes expressed the manifold experiences of enjoyment and wish to learn new things. It was worth pointing out that this was manifested especially in playing-oriented learning environment which also included most options. Therefore, the pupils' entrepreneurial ways of acting were the most evident in learning situations with highest optionality. According to the teacher's observations, seemed that this kind of learning environments also supported various learners the best as they provided not only options for learning contents and levels, but also for the pace of learning.

## Discussion

In this study, the fundamental preconception was that already pupils in basic education can learn to reflect upon the ways of action of their own and their communities. Also learning from model and decision to exploit existing opportunities were seen as familiarization of entrepreneurial ways of action. Indeed, the findings of this case study are in line with the fact that the existence of opportunities is salient in entrepreneurial action (Rae, 2007): one can either make use of the perceived chances or not (Shane & Venkataraman, 2000). Opportunities can exist or one can create them (Politis, 2005; Venkataraman et al., 2012) which means that providing pupils with optional contents, materials, or methods to experiment creates opportunities of doing otherwise in the learning environment (García- Morales et al., 2006; Harkema & Schout, 2008; Lant & Mezias, 1990; Politis, 2005). As pupils try the options and opportunities, they can reflect on the information which is in accordance with the education purposes (Draycott & Rae, 2011; Neck & Greene, 2011). Having the chance to decide between various options, pupils can have the feeling of ownership over their learning and even control over their learning paths (Gibb, 2008; Jones & Iredale, 2010). Some researchers perceive the discovered possibilities merely as resources and necessitate that participants create options in order to be able to talk about an entrepreneurial process (Korsgaard, 2011). According to Holcomb et al. (2009), observation of others' action can make a part of the entrepreneurial learning process.

The data gathered in this study in the form of pupils' reports and diaries, as well as the teacher's diary, showed and confirmed that reflection is a crucial part of the phenomenon of entrepreneurial action and a tool to practice entrepreneurial ways of action (Neck & Greene, 2011; Sarasvathy & Venkataraman, 2011). Reflection in pupils was ignited by the pedagogical solutions and kept up with ever-available reminders of the important concepts and with self-reporting activities. Reflection, therefore has to be consciously prompted. Reflection is a process aiming at awareness of what has happened and development of new ideas to test in new experiences and situations (Cope & Watts, 2000; Neck & Greene, 2011). Draycott and Rae (2011), define the entrepreneurial learning process as a distinct pupil-centered journey that has its value when pupils experience and reflect on situations.

It is also important to evaluate the contribution of this study in the light of the general goals of education. The guideline for the Finnish basic education is that the arrangements of learning environments have to promote pupils' activity, self-direction, and creativity, and to guide them in setting their own goals and evaluating their own action. Methods used in learning situations are supposed to develop pupils' readiness to take responsibility over their own learning and acquire feedback in order to reflect on their action (Finnish National Board of Education, 2004). This study showed that the aforementioned general guidelines can also support pupils' familiarization with entrepreneurial ways of action. Core prerequisites of entrepreneurial

action, such as pupils' self-directed activity and goal-orientation, were consciously supported by the pedagogical solutions introduced as in the results section. Equally important was to strengthen pupils' learning by gaining insights and discovering, and to support pupils' trust in their own abilities. It seemed that as pupils were given opportunities of making decisions and choosing between various options, responsibility and encouraged to take conscious risks (Gibb, 2005; Jones & Iredale, 2010), their entrepreneurial ways of acting became activated.

The pupils were directed to try options designed by the teacher and find out creative interpretations when it came to listening to music and finding suitable singing tasks for themselves. Then, if the pupils wanted to work responsibly for their learning, they had to tolerate uncertainty and take risks. All these are entrepreneurial action, at least according to Gibb's (2005) tables. The pupils brought out these behaviors also in their reflective diaries when they evaluated their action for entrepreneurial action-reflection as such being one of the entrepreneurial ways of action as well (Draycott & Rae, 2011; Neck & Greene, 2011).

Based on the experiences of this study, teachers should be encouraged to divide the study contents into basic and advanced levels, and to add optionality however simultaneously paying attention to the entity. In music education, this was natural to design and adjust along with the general content areas of music education defined in the curriculum (see Finnish National Board of Education, 2004). Therefore, it seems relevant to compile curriculum around these themes providing pupils with learning experiences in every element and from various points of views. According to the experiences of this study and in the light of similar practices from abroad (e.g., Garnett, 2013; Hytti & O'Gorman, 2004; Kleppe & Looney, 1996; Pepin, 2012), entrepreneurial ways of action can be ignited in pupils through the carefully designed practices.

However, we want to emphasize that the teacher must be very flexible and sensitive, and to create a secure atmosphere in the classroom. That is the most important precondition for pupils to be able to try open-mindedly new things, make choices, and take conscious risks without being afraid of making mistakes (see Nakata, 2011) - to learn and act in an entrepreneurial way. Therefore, these ideas should be familiar to teachers already during their training (see also Haataja & Hietanen, 2011).

## Conclusions

As a whole, the curriculum allows possibilities to design student-centered and entrepreneurial learning environments. In the case of music education, every pupil could participate in all study activities regardless of their talents. However, the evaluation of learning still seemed to limit the opportunities of action-based studying, and it is rather difficult to evaluate whether music education was equal to all. Careful designing of learning environments is therefore needed. Likewise, it is important to pay attention how pedagogical solutions and learning environments affect for example individual pupils' problem-solving skills.

The especial contribution of this research is in the practical knowledge it provided. As such, it presents an example of how to apply entrepreneurship education in primary and secondary education, in non-business education. In this study, entrepreneurial ways of acting was dissected in three levels: in the written curriculum, in the realization of curriculum (the learning environment of music education), and in the way pupils perceived the curriculum. It seems that in Finland, regardless of all guidelines, teachers' understanding of how to realize entrepreneurial action in basic education varies considerably. More often than not, entrepreneurial ways of action are seen as the obligation to include an extra perspective of business in learning and teaching. This study contributed an example of how entrepreneurial action can be employed in the teaching; music education set also a unique viewpoint on the theme because of the special nature of the school subject.

Further research is needed to bring practical and theoretical foundations for entrepreneurship education in various school subjects. In addition, what remained unexplored in this research was how entrepreneurial action in education could be connected to real SME. Likewise,

it would be relevant to study how the basic education could lay the foundation for all areas of working life. In today's world, entrepreneurial ways of acting do not just concern business life but all work fields and occupations: employees have to be ready to develop themselves and their skills all the time, adopt new methods and attitudes, and act actively and initiatively. Therefore, it seems that the development of entrepreneurial contents in all education levels is topical and necessary for preparing children for the rapidly-changing modern world.

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<b>Lenita Hietanen</b>	PhD, University Lecturer, University of Lapland, PO Box 122, 96101 Rovaniemi, Finland. E-mail: <a href="mailto:Lenita.Hietanen@ulapland.fi">Lenita.Hietanen@ulapland.fi</a>
<b>Satu Uusiautti</b>	PhD, Researcher, Adjunct Professor, University of Lapland, PO Box 122, 96101 Rovaniemi, Finland. E-mail: <a href="mailto:satu@uusiautti.fi">satu@uusiautti.fi</a>
<b>Kaarina Määttä</b>	PhD, Professor, Vice-Rector, University of Lapland, PO Box 122, 96101 Rovaniemi, Finland. E-mail: <a href="mailto:Kaarina.Maatta@ulapland.fi">Kaarina.Maatta@ulapland.fi</a>