Entrepreneurial learning in Swedish secondary schools — *The new-found game plan*
Summary

In recent years’ interest in innovation has doubled people’s expectations and innovators have been able to amaze the human race with ground-breaking inventions in both radical and increasingly better innovations. Innovation is being established in the educational area whereby entrepreneurial learning is one of them. Research says that there are two types of learning; the traditional learning that happens through planning where proved principles are used in lessons and digitalized learning(internet) which is the new creative and innovative learning.

Entrepreneurial learning is an innovative learning which has to do with making learning more creative. Entrepreneurship and entrepreneurial learning has increased not only in terms of research being carried out, but also in the extent that entrepreneurial courses are being introduced in schools.

An essential part of entrepreneurial learning is about constructing the unreliable and individualized reality of the entrepreneur. It is vital that students too come to identify and construct that reality so as to give significance to the rest of their learning.

Deakin’s (2005) claimed that entrepreneurial learning emerged as a vital area of analysis in relation to both the academic study of entrepreneurship and the practical development of new entrepreneurs. Nevertheless, it is an area which is not well understood.

The purpose of this paper was to examine entrepreneurial learning. What it examined was what entrepreneurial learning is, how it is implemented as an educational form in schools, what roles the teachers and students have and what motivates the students to learn? A qualitative method with semi-structured questions was used.

The findings show that there is no one common definition of entrepreneurial learning and that entrepreneurial learning is characterized by Meta – learning, responsibility, problem-based learning, collaboration and mentoring. The teachers work with process-oriented work and as mentors in the student’s developmental process. Entrepreneurial learning involves contact with local businesses in the form of project work and field trips. It also means teaching that is characterized by cooperation which the school environment supports. To provide support for entrepreneurial learning, the surveyed schools have long class sessions and this means that two subjects are covered in a day. The long class sessions provide opportunity for progression and analysis for students but can sometimes be uninspiring if the teachers don’t manage to
vary their teachings. Cross-curricular activities or multidisciplinary projects are also common.

**Keywords:** Entrepreneurial learning, collaboration, innovation, motivation, responsibility, innovative learning.

1: Introduction

1.1 Background
Just as any other learning method, entrepreneurial learning needs to be based on
scientific research and proved experiences. What knowledge is and how it occurs has long been discussed by several pedagogues and psychologists. Entrepreneurial learning has been and is still used as an improvement tool for change in schools worldwide. Leffler, Svedberg & Botha (2010), claimed that entrepreneurship has been presented as a means of changing attitudes in schools to work towards development and long-term growth in society. There is no common definition of entrepreneurial learning but some define it as follow

In the Swedish Government’s policy document concerning the new secondary school reform GY11, we can read in the curriculum for secondary schools that:

*Skolan ska bidra till att eleverna utvecklar kunskaper och förhållningssätt som främjar entreprenörskap, företagande och innovationstänkande. Därigenom ökar elevernas möjligheter att kunna starta och driva företag. Entreprenöriella förmågor är värdefulla för arbetslivet, samhällslivet och vidare studier (Skolverket, 2011a, s.7).*

Furthermore, according to *The Government’s strategy policy for entrepreneurship in education* entrepreneurship is now used in the curriculum instead of entrepreneurial learning, but the concept is not about educating entrepreneurs, it is about helping students to develop entrepreneurial qualities such as the implementation of ideas into actions, identifying opportunities and to be initiative.

One of the European Commission’s key competencies for ultimate learning is entrepreneurship and is described as: “*The ability to turn ideas into action. It involves creativity, innovation and risk-taking as well as the ability to plan and manage in order to achieve objectives. The individual is aware of the context of their work and is able to seize opportunities which arises. It is the foundation for acquiring more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance*”. (Rendahl & Åhlström, 2007).

Säljö (2000) says the human species is unique in the way we learn, because we both develop and make use of tools in the learning process and these tools can either be physical or linguistic constructions. The author is a student of the Innovation Program and during her course years have learned about innovation, stumbled upon new words and read about ground-breaking ideas and inventions. When the author discovered the term entrepreneurial learning, she had no idea what it meant. But as times goes by and the concept keep coming up in courses, the author then realized that there is much more behind the concept than she knew from the beginning and that it has a lot to do with entrepreneurship. This raised her curiosity and made her want to find out more about what it is that exactly lies behind the concept of entrepreneurial learning and that several schools seem to work according to this concept. The author wanted to examine what entrepreneurial learning was? What’s the role of the teacher, and the student, in such a learning method and what motivates students to learn?

### 1.2: Aim

The aim of this work is to examine the teacher’s role and the teaching process in the context of entrepreneurial learning at secondary schools and how this learning goes
about. Then the author will propose an innovation contribution on how to make entrepreneurial learning more effective in Swedish secondary schools.

My research questions are:

1. What is entrepreneurial learning?

2. What is entrepreneurial learning in reality?

3. What are the respective roles of the teacher and the student in entrepreneurial learning?

4. What motivates students to learn?

1.3 Limitations

On the question about what motivates students to learn is a broad question but in this essay, the author has limited the research to not interview or send out questionnaires to the students. This is because time was of the essence so the author decided only to interview the teachers and gather data base only on their perspectives in how and what they think motivates students to learn.

2: Method

In this section the author describes the research approach that is applied during the
production of this paper. The aim is to provide the reliability and validity the author thinks the essay requires.

2.1 Research strategy
The author has chosen to conduct a qualitative study. The reason for this is that the author wanted to conduct interviews in which the respondent is relatively free to develop his own opinion. One advantage of using a qualitative study is that the researcher can go in depth and is allowed to focus more on the details of his collected material (Bryman, 2011)

2.2 Data collection method

*Literature*
To gather background information and get some insight into the subject, the author went through a large number of articles and books. These the author found through searches on databases such as google scholar and by looking at keywords such as innovative learning, teachers’ role in the classroom, modern and traditional teaching, motivation etcetera at source lists in research papers. The author took up articles that she considers relevant to her study. Among other things, are a doctoral dissertation and other essays which helped me gain more knowledge and understanding in the earlier research published in the field.

*Interview*
Trost (1997) says that in order to best formulate adequate interview questions, one has to learn more about the appropriate literature before conducting the interview. This principle was embraced partly due to time restrictions and partly because it is considered to be more important to conduct the interview than to go through a large amount of literature in the beginning. He further stated that interviews are characterized as qualitative because simple and straightforward questions give detailed answers.

A semi-structured interview method was used to collect data because it is suited for the exploration of the thoughts and insights of respondents regarding complex and sensitive issues and enables probing for more information and clarification of answers. Second was the varied educational, personal and professional histories of the respondents asked for the use of standardized interview. “The phrasing and categorization of all the questions in a standardized interview are precisely the same for each respondent so that we can be sure that any dissimilarities in the answers is because of the dissimilarities among the respondents rather than the questions asked. (Gordon, 1975).

Denzin (1989) states that in semi-structured interviews, reliability and validity do not depend upon the repeated use of the same words in each question, but upon the
conveying of similarity of meaning”.

The author implemented her interviews individually with each respondent. Each respondent was allowed to take the time necessary for the interview. The author asked questions according to her questionnaire (see appendix) and the questions were asked orally. The questions were asked according to a form where the author compiled a series of questions outgoing from David Rae’s entrepreneurial learning model (2015). The respondent’s answers made it possible for me to come up with follow-up questions or brought up opportunity to ask for clarification. The author let respondent’s answer to questions that have not yet been asked just to let them develop their meaning rather than interrupting them to keep to my schedule.

2.3 Selection
The author got to interview six teachers in different secondary schools who worked after the principles of entrepreneurial learning. The author sent out questionnaire to teachers at three schools and the teachers at each school that had time to participate in the interviews volunteered to help me. The teachers worked on various secondary school programs with different subjects and courses and were contacted via email.

The author did not actively select teachers with special courses, characteristics or skills but the author chose the schools and that can certainly be seen as a subjective choice to contact teachers at these schools. In this way, the selection would be more random and more interesting, and the teachers interviewed are those that responded to her request.

Bryman (2011) writes that the term, subjective selection, is used in situations where the researcher has knowledge about the people or events that are to be investigated, and that the researcher deliberately selects some of them because it is considered probable that they will provide the most valuable data.

2.4 Data processing
The first thing the author did was to transcribe the recorded interviews. The author then tried to analyse the material to find similarities and differences in the responses. Then the author tried to summarize responses without generalizing or over-interpreting what the respondents said. Last but not least, the author finally wrote down the results in the next chapter.

2.5 Ethical Stances
The author followed the guidelines from the course Idé och konceptutveckling about the confidentialities and ethics required when making an interview. This means that the participants have been informed that their participation is on a voluntary basis, and that they have the right to decline or cancel their participation. It also means that the author is aware of the requirements that may exist with respect to their confidentiality. Yet still the author decided to keep schools and participating teachers anonymous. I informed the respondents that their participation was voluntary and anonymous before the interviews took place (See annex; information about interviews.)

2.6 Reliability and validity
Reliability refers to the reliability of the survey, and that if anyone tries to repeat this survey that person should come up with similar results and be able to come up with the same conclusions (Bryman, 2011). It is therefore important that I describe my research process as accurately as possible.

Validity refers to the validity of the study that it measured and what it intended to measure. According to Bryman (2011), to be able to strengthen the validity of the research, the researcher can use multiple independent sources to confirm the results. The author believe that this paper can be considered reliable as described above. The reason for this is that the author is careful in her description of this process. For validity reasons the author has chosen to interview so many respondents that could get hold of. The paper would have benefitted more if the respondents were larger in number, but the author however think that six teachers is quite sufficient.

2.7 Methodical Approach

The author did the interviews at the respondents’ premise of work. The author introduced herself as the one who contacted them first via mail and wanted to do an interview about entrepreneurial learning.

Because time was of the essence and the author had a timeframe to follow she then decided to make her decisions around the research’s extent and did as much interviews as possible but unfortunately only to the teachers who answered to her mail request.

2.8 Method discussion

The author chose a qualitative method to find the depth in what she was examining because she did not have any knowledge of the subject entrepreneurial learning before the study. The method choice had helped me to let the respondents to speak freely and lead me right in the subject. It would have been very difficult to implement this using a quantitative approach. Firstly, it would have forced me to get deeper knowledge of the topic before the author began the work. Without deeper knowledge, the author would not have been able to produce a questionnaire with appropriate questions. Thanks to using a semi-structured interview, the author was able to get around this problem. In this essay, the author has taken into account the reliability and validity and was careful in my description of the work with the paper.

For validity reasons, the author tried and selected sufficient number of respondents so that the outcome will not be one-sided. However, problems can occur in any context in which qualitative methods are used. The author however has been careful not to influence the respondents and therefore tried to be neutral. The respondents probably understood my questions and what answers the author sometimes was searching for, which meant that in some cases, the author accidentally created leading questions. Issues are attached to this document for those who want to examine the quality. The number of respondents in this survey is six people. The author believes that the number of respondents is quite enough for the survey but she also recognizes that the
security of the results increases with the number of interviewed people.

The author has also realized that she learned a lot during this work. A flaw in this study is the one-sided perception of entrepreneurial learning. An important group is missing, namely the students. It would have been great to have the results of a focus group of students. It would have been very interesting to see if they have the same view that teachers have on this topic. The author chose to contact teachers from three different schools. This has given me the opportunity to visit teams in different stages in their development of entrepreneurial learning. It has been useful for the study to the extent that the author gained an understanding of the process.

3: Presentation of results

Below you will find the respondents' answers to interview questions. Since the respondents were free to answer openly, the author couldn’t know what to expect when a question is asked. It sometimes means that the respondent could answer a question and then accidentally answer an additional question that I was going to ask later during the interview. I will therefore refer to the respondents as Teacher – U, V, W, X, Y and Z when quoting.

3.1 The role of the teacher

Responses varied on the question of how teachers look at their own role. Teachers X and V said that their role is more of a teacher than tutoring but that it entirely depends on the circumstances of the students. Teacher X further said that he sometimes has the role of tutoring if the class is of smaller size.

A teacher said she definitely works in a more tutor-type way, often like a coach/facilitator.

Teacher W, answered that she sees herself as a facilitator and that she often” relies on the students’ interest, thereby trying to create a context, but also working as a promoter by setting requirements”. On the other hand, teacher Y, describes himself as a guide that helps students achieve course objectives. Teachers U and Z expressed that they both work as” tutors and as lecturers”. Lectures and briefings are generally short but they said that they would lecture more because some students seem to enjoy listening to lectures.

On the question of how teachers respond to questions from students, the responses vary slightly even though most seem to agree that it is often appropriate to give a direct answer, as it is sometimes more appropriate to show them how and what to do in the current situation, but they said “as a tutor you tend to guide your students by throwing questions back to them with clues of helping them dig deep for the answers to their own questions as this helps them to build a strong basis of analytical mentality. They are honest and admit when they do not know the answer to a question.

On the issue of leadership style, the teachers answered that they have a mix of
authoritarian and democratic leadership style. Two of the teachers responded without hesitation that they have a democratic leadership style. They see it as positive that the students want to be part of the teaching and to affect the teaching. Three of the teachers however said that their teachings vary in styles as they possess both authoritative and democratic leadership styles. Teacher V expresses that some classes require a more authoritarian leadership style but in an ideal situation, democratic leadership takes control. Another teacher said that he has more of a democratic approach and is sometimes more of a guide and facilitator.

3.2 Entrepreneurial learning in reality- the classroom

Teacher V claims that his teaching plan is dictated by structured curriculum but executed on a teamwork basis including the full participation of the student.

Two teachers claim that it is the course objectives that have the focus rather than focusing on the learning process and student development.

Another teacher thought that they should work more with learning process and believes that when the students need to learn something specific, then they will have an understanding of why they are in school. A third teacher argues that the national tests and the course goals govern the teaching. Another teacher believes that specifying learning goals gives a certain security, but it is also easy to miss what’s in the curriculum about social development. Teacher X said it varies according to the type of teaching.

All the teachers said that they work with both creativity and problem-solving and that they all use problem-based learning (PBL) to different extents. All the schools in question have an educational approach involving problem-based work. They all said that problem-solving should be used in everything.

Teacher V said that teaching is only effective when it results in learning. Teaching should always be principally about learning and process and achieving goals comes after that. This teacher strongly believes certain forms of teaching focus more on achieving goals than learning and process, as schools and institutions are pressured more to look good in exam league tables.

One teacher further commented on problem-solving and believed that it is always problem-solving in different degrees for different individuals, and that some students may have problem in finding the task they should be working on. He further stated that students are poorly trained in general as far as problem-solving is concerned and that they have a lot to do within this area.

Teacher U claims that” weaker students” can’t get as much as possible in a problem-based approach. They often cannot learn much in a group and the teachers must therefore think about group formations and compositions. Another problem is created since the teachers would want to train the students to join various group formations. This is important so that all students will fit and that the teachers can then see to every individual.

Teacher W, talked about brainstorming exercises and that his subject area requires lots of problem-solving activities. This gives the students opportunity to take some responsibility for their own learning. Half of each lesson is dedicated to problem
solving and brainstorming. At some times problems are solved individually and at other times all is done in groups.

Teacher Z said:” I often use brainstorming sessions to find out how much a group of learners already know about something.”

Several of the teachers believe that brainstorming exercises are included in some of the subjects and therefore easier to train. When it comes to examination, it varies a lot depending on how it looks. What the teachers described here are tests, oral and written presentations, discussion protocol and interdisciplinary teams.

One teacher said that series of tests do take place during term time to measure students’ levels of comprehension and understanding of lessons. Exams are taken at the end of each term to gauge students’ general understanding of lessons taught during the term or school year.

Teachers X and Y, said they use a lot of group work where the students write discussion notes.” They thought it involved too much writing, but we thought it worked well and that those who learn by writing learn more”.

All teachers agreed that problem-solving should be involved in everything.

The teachers also answered the question about how the classroom’s layout and design works with the teaching. Most of the teachers’ teaching rooms are designed from a teacher’s perspective so that there will be four groups of 5-6 students. There are therefore about six students around a table and each classroom has about 30 students and the teachers’ will be in the middle of the classroom. Here the teachers compare with the traditional classroom furnishings with tables in rows for the students and a table at the front of the classroom. All teachers think that it works well with the design of classrooms mentioned above. They describe that there are advantages when working with collaborative exercises, group works and discussions. Students that are more introverted can more easily take advantage of the discussions in a simpler way and participate because it is easier to learn from each other.

One teacher said his classroom design is always dictated by the topic of the day. Students play a big part in both design and layout of the classroom.

There are also disadvantages as one teacher describes that it can be a little bit strange to have your back towards some of the students. Another teacher said it would be better with another kind of furnishing when students work on individual tasks. He wished that the groups could have been smaller as students might get uninterested. One teacher also thinks that there should be more material available in the classrooms. All teachers are in agreement that there are significant benefits to long class sessions; a morning session and afternoon session. This means that a subject or course has one complete session weekly. Compared to traditional teaching methods with short lesson durations, it is overwhelmingly positive to have long sessions. Among the benefits cited are that the students avoid homework and there is an opportunity for progression in the subjects one handles and that it gives the students more choices regarding among other things, the teaching method and how deep you want to go in the subject.

The disadvantages mentioned are that if a student becomes ill during a session, then that student will miss the entire week’s lesson and that it will put more pressure on the student’s attention span/ability. It also sets requirements on the teacher that he/she
should vary their teachings. Teacher Z said among other things that “you cannot run book exercises in three hours”. She continued to say that it would be better with two shorter passes a week in one of the subjects to get a better continuity in the teacher.

3.3 The role of the Student
In this chapter I will summarize the results of teachers regarding the student’s opportunity to influence, how teachers look at motivation and Meta learning. I will also summarize the results of business contact, cooperation and social skills. In addition to what I previously described about influence, teachers mentioned that they also work with evaluations and let students gain influence in their learning experiences. Teacher X talked about his choice to allow students to participate in the planning process. He said that he in the beginning was more focused on the implementation of planning the schedule on his own, rather than letting the students participate in the planning. But now, he has changed his routine and starts every course by introducing the syllabus and then jointly plans which tasks to be done in order to achieve the objectives with the students. There are many desires, but then they have participated and influenced the course content. They interpret the curriculum and they may have different opinions than me but then again, three teachers can also have different opinions about a curriculum. Of course I have the last word, but they too are involved in the planning and interpretation of the curriculum.

Other ways that the teachers refer to letting students participate in the course work is by constantly having recurrent evaluations.

Teacher X also said that he tries to be responsive and have a dialogue and change the layout of the curriculum plan if needed but another teacher told me he let the students choose the report forms and the planning made together. As regards to motivation, their answers varied, teacher Z said that students’ show motivation when the teacher shows that he/she believes in the student. One problem about this is that the teacher does not have time for all the students’. In subjects that are experienced as difficult, the students need more tutoring and it can be hard to keep up with those students’ who have not yet asked for help.

Teacher U said that motivation increases with authentic projects where there is a real client and what they do will be used in the real world. She further stated that competitions and much positive feedback can raise motivation and that the long passes are good after all because they let the teachers work more as coaches.

Teacher W, on the other hand, said that motivation improves when teachers mention that the knowledge the students acquire in the current moment is something they will find useful in their future professional life.

Teacher Y said that students ‘become motivated when they have fun and in order to achieve this she tries to vary her teaching.

In the case of Meta learning, all teachers’ mentioned that they work with some form where students reflect on their own learning process. Teacher X said that he uses log
books in which students may write what they’ve done and learned and sometimes he gets reflections through e-mail.

Teacher V said he works a lot with feedback and improvement tips and linking tasks together. He also stated that tests and reports are good occasions for students to showcase their own learning.

Teacher Z mentioned evaluation and that student’s sometimes put ratings on their own initiatives.

Teacher X described the problem of responsibility as follows “Since it is a group process, the student is given a specific responsibility. They know how the process goes and the evaluations will show whether or not the work went well. This places demand on their responsibility, however, not everyone takes this responsibility”.

Regarding cooperation, 4 teachers said that they allow students to collaborate on individual tasks so they can learn together. All the teachers mentioned that they work with students’ own responsibility. Teacher V, however, believes that students should take more responsibility and said,” the students should be allowed to take more responsibility. As a mentor, you can call and ask why the students did not show up but if you do so, the administration takes a lot of time on that issue. So it is up to each and every one to know what they have missed if they have been sick or had a doctor’s appointment. They can look in their folders as they sometimes have deadlines to follow. It is then up to the students to deliver on time and take responsibility when it comes to practice. That goes for contact within the school. Contact the principal or the teacher who can answer to your query and give you the information you need. Many lack social skills and that’s something that they will have to train. They may ask questions at trade fairs and also keep their own mentor’s call, that is they should check with the teacher about their performances and then call to a mentor’s call for more feedback and evaluation.”

The teachers further said that students get a connection to the surrounding business and an insight into future careers through field trips, implemented projects and private contacts that students made with for example newspapers.

A teacher described it this way:” In practice, they may call and arrange for internship, but the teachers arrange the distinct projects. But during the projects, students should keep in touch with the companies and book meetings and more. Yes, we try to work as if it is for real and therefore a link to future professional roles”.

3.4 Motivation

On the question concerning students’ changing attitude and behaviour to their own learning, that is motivation as a driving force, the teachers’ reasons were based on student’s passivity. They said that with all these students, it is tough to have care conferences with every passive student.
Some students become passive because they feel bad or had managed so badly so they become passive to avoid making mistakes. It then ends up with finding levels so all students can develop and make things to feel that they are growing. By growing, they get motivation and motivation is the reason why it works. Students are not always aware of what opportunities they have and it is an important part of a teacher’s duty to increase this awareness to further strengthen the youth’s faith in themselves and thus motivation.

Constantly giving feedback on performed work increases their self-confidence and self-esteem and makes the students feel that they are good enough and can perform more.

The discussion continues regarding student’s ability to adapt their studies after other important activities such as sports etc. They must be able to offer flexible solutions and work out action programs to help students to achieve their respective goals. Requirement level and who is responsible for what must be communicated clearly so that no doubts will exist.

The importance of creating good relations with the students and a good working climate in the classroom is emphasized as part of achieving good results.

Regarding the question about how the teachers see students’ current motivation towards their learning, teacher Z said “it has dropped over the years, but at the same time there both are unmotivated as well as the highly motivated and talented ones”.

Furthermore, I asked why they think students apply for programs that they are not interested in. Two teachers reason around student’s choice noting that it is sometimes a friend’s choice that determines or that the program is considered to be “easy”. This team of teachers who have worked entrepreneurially for a long time have difficulty seeing any changes with student’s motivation just because they now got a name on how to set up their teaching.

To the question about how the teachers see their students in school and their own learning, teachers’ U and X said that “far too many seem to experience it as a playground and many are not highly motivated”.

Most of the teachers said that we discuss individual learning outcome in one-to-one situations and common outcomes in a general open way. In this way each student can see and diagnose their learning.

3.5 Results Summary

The results of the interview show that the teachers mainly look at their role as a mentor even if they sometimes change between being a tutor and a lecturer.

The teachers have largely a democratic leadership style in which they listen to feedback and allow the students to participate in the planning. Some of the teachers periodically switch between authoritarian and democratic leadership styles. The planning is done together with the team and individually. The planning of theme projects and larger projects are done within the team whereas the individual planning is on respective course or subject and it is more detailed.
Teachers engage students to participate in the syllabus because creating an overall syllabus is important to most teachers. The work is conducted further with cross-curricular activities and this is done in the form of theme works and distinct project works with authentic buyers from industry. Three of the teachers claimed that they focus more on learning processes than the course objectives. All teachers work with brainstorming exercises and problem-based teaching as a whole. Examination is carried out in a very diverse way, but largely in the form of oral and written assignments in the group. Classroom design and the long lesson passes provide good support for entrepreneurial learning. The classroom offers good opportunities for discussions and the long passes provides the opportunity for concentration in the moment. The disadvantage of those long passes is that it becomes more difficult for the student to make up for the loss if he / she is absent because of illness. The collaborative project based curriculum used in classrooms helps students to develop effective communication skills, gain more knowledge through knowledge transfer and higher thinking skills that help them to think outside the box.

Students are prepared for Meta –learning by writing logbooks, by reflecting and by participating in evaluations of the courses. The teachers see various origins to the student’s motivation. What motivates students’ is among other things working together on special projects, that the supervisor/tutor shows confidence to the student and that what they are learning has an application in their future professional careers. Students will always need teachers both inside and outside the classroom either in research difficulties or whatsoever. Student’s own responsibility is central to the teachers and the students are trained in this by finding out for themselves what they have missed in their absence. They also have to contact the project leader, and other teachers.

4: Literature and earlier research
In this section, I define the terms and refer to a number of articles and theses that describe both the research questions and proposed solutions, all of which revolve around entrepreneurial learning. The first part focuses on entrepreneurship and entrepreneurial learning. The second takes up the description of entrepreneurial learning from a practical perspective and lastly motivation.

4.1: Entrepreneurship
Entrepreneurship has been in Swedish schools since 1980, when it was introduced in the form of young enterprise, UF, a training concept for young people in secondary schools. The concept is based on problem-based learning (PBL), which is similar to entrepreneurial learning. The aim is that young people should be prepared for and be
attracted to self-employment in the future. Since its origin, several young people have undergone the training, and the idea has spread to numerous secondary schools around the country. Several studies have been performed on this successful concept and it’s a well-known method of working in schools. (www.schooleducationgateway.eu)

The concepts of entrepreneurship are numerous and have completely different meanings depending on who you ask. Different views of this common concept are explained in the study "Entrepreneurship & School – what do teachers do when they do entrepreneurship education" (Berglund & Holmgren 2007). The survey seeks answers on what meaning the schools have given the term entrepreneurship.

Economic and development agency NUTEK, had on behalf of the Swedish Government conducted a national entrepreneurship program for the years 2005-2007. The program's objective was to increase awareness and interest in entrepreneurship in schools. NUTEK defines entrepreneurship as follows: “Entrepreneurship is a dynamic and social process, where individuals, alone or in collaboration, identify opportunities and make something with them to transform ideas into practical and targeted activities in the social, cultural or economic context” (Peterson & Westlund 2007, p. 3)

4.2 Entrepreneurial competencies

The word entrepreneurial derives from French ' entrepreneur ' which characterizes a person who is active and get something done. In Swedish, the term links entrepreneurial learning together with the characteristics of an entrepreneur, that is taking initiatives, solve complex problems, make wise choices, self-motivation and motivating others, to be social and obliging, be flexible and effective. Peterson & Westlund (2007) have been involved in several different projects for the development of entrepreneurship within schools. Their definition of traditional skills and characteristics that can be attributed to an entrepreneur is to have strong will and drive, high motivation, sense of responsibility, ability to cooperate and form networks, capacity for independent learning, innovative and creative, problem-solving and developing ideas.

Otterborg (2011) described in her dissertation some of the competencies that the students are expected to develop in entrepreneurial learning. Otterborg stated that in entrepreneurial learning, a collaboration between a company and school where the students are allowed to work with real exercises are created, whereby helping the student develop competencies such as taking responsibility, using initiative, being creative and flexible and being able to collaborate with others.

Larsson (2012) also in her thesis came up with similar findings as Otterborg as to what competencies the students are expected to develop under entrepreneurial learning. “students are expected to use their initiative, learn critical thinking, to act and do things so that they can make good decisions irrespective of which situations they find themselves in” (Larsson 2011)

4.3 Entrepreneurial learning in definition

By looking at entrepreneurial learning as a teaching method in schools, students’ interests and experiences are exploited to control the activities. This method integrates education, occupational psychology and entrepreneurship to concrete forms of work
and that these forms support students in releasing their natural potential and promotes greater motivation and belief for the future as entrepreneurial learning is about revealing one’s own drive. Entrepreneurial learning is about the processes, signals, activities and actions which stimulates the student’s entrepreneurial competencies. They do not think that entrepreneurial learning is the ability to educate entrepreneurs but rather a teaching method to stimulate the student’s motivation and engagement in school subjects. For them, it is more important to be able to develop the entrepreneurial competencies to be able to be ready for the employment market. (Petersson & Westlund 2007).

Falk- Lundqvist et al. 2011 stated that entrepreneurial learning focuses on the teacher’s way of working and their skills in motivating and engaging the students in their learning processes.

According to Läroplanen 94 the school's main duties are to convey knowledge and create opportunities for students to acquire and develop skills. In entrepreneurial learning these preconditions are created by students actively participating in the learning process and together with educators and authorities plan how course objectives are to be reached. The curriculum states that teachers must assume that students can and will to take personal responsibility for their learning.

Entrepreneurial learning is said to be based on activities that the school planned and is implemented through multi-disciplinary approach. But a multi-disciplinary approach is not automatically a given solution if this is top-controlled. As long as the teacher maintains power and control over the chosen method and content and sees the student as a passive recipient, then the students’ are denied their responsibility (Petersson & Westlund 2007). This means that the motivation and enjoyment of learning is lost when the student is expected to do as they are told. In order to achieve a real sense of responsibility, entrepreneurial learning must be based on actual influences that have impact on the business. However, it is the teacher's responsibility that the student's free choice fits within the framework of the course and program objectives. Motivation means someone will do something because they want to and not because they have to do it.

David Rae (2005) identifies three major areas that play a factor in the entrepreneur’s learning; negotiated enterprise, contextual learning and personal and social emergence. Negotiated enterprise is the process of engaging with other people to exchange labour, learned strategies, ideas or capital. Contextual learning is the use of one’s experience and knowledge within a community to recognize opportunities that ventures can be formed around and personal and social emergence is the creation of the individual’s self-perception as an entrepreneur. He came to the conclusion that entrepreneurial learning needs a holistic model which can help students to make use of their own learning practice and development.

On the other hand, Berglund et.al (2007) proposed a model of entrepreneurial learning as a way to clarify how entrepreneurs influence entrepreneurial learning. They explain that it is onward swaying between two modes namely hermeneutic learning and hypothesis testing. They stated that hermeneutic learning occurs experientially and is to the actions the entrepreneur makes, whilst hypothesis testing is to come up with a hypothesis and then prepare and experiment to test the validity of the hypothesis, thereby leading to learning.
Erdelyi (2010) claims that entrepreneurial learning has two branches; collective learning and personal learning. He explains that collective learning arises from the interaction of individuals within a company, whereas personal learning focuses on the individual and his experiences and is the process of opportunity recognition and creates the cognitive mechanisms for identifying entrepreneurial business prospects and making decisions about them.

Boumová (2008) argued that entrepreneurial learning is complex. She meant that the traditional form of education can be combined with entrepreneurial teaching mode for a better result.

4.4 Entrepreneurial learning in reality- the classroom

Svedberg (2007) examined how entrepreneurship in an educational context can be understood and implemented at local level with the aim to describe, analyse and gain knowledge of what entrepreneurship can mean in practice. The result of the study shows that students who work entrepreneurially learn to manage complex tasks, take responsibility for their learning, work together and see each other as resources.

Johannisson & Madsén (1997) described what they perceive as problematic at school, but they also described what they see could serve as the opposite, namely a future school with entrepreneurship as the key words. This will be characterized by student-controlled teaching in greater degrees, problem solving, cross-curricular work in project form and more frequent contacts with industries and their neighbourhood. Focus is put on working in teams, to experiment and then evaluate what they've learned. They also claimed that we learn from our mistakes by reflecting on what went wrong and that if you fail and understand why, then you have learned how to manage a situation. The teacher's role will endure a change in the entrepreneurial school where interaction and conversation is a key element. Students will also be forced to adopt a more active role than in the past. This loosens up the previously rigid roles and the teacher and student companionship goes back and forth in the learning process. The classroom and the interaction that occurs can then be described in the form of dialogues.

Students are thus able to link their new-found knowledge with what they already knew and are forced to be active just as the teachers. The teacher must be active in their work; organizing the learning process and helping the students make progress in their development.

Furthermore, Johannisson & Madsén (1997) described in their study that the students develop complete strategies for how to cope with their performances in school. Metacognition is highlighted as an essential tool in the possibility of a deeper learning. If students do not see their studies as a conscious process that is built upon their own past experiences, then new knowledge will not be well processed. Therefore, according to the authors, the already learned strategies change into a more entrepreneurial learning.

Leffler (2006) claims that a distinct teacher role is demanded in the entrepreneurial classroom, as leadership. This means that the teachers should be professional and personal simultaneously. There is always a risk of destructive behaviour for the student if he/she has difficulties in understanding the teacher as the teacher has the
power to judge whether or not the student understands.

In their Bachelor’s thesis the authors wrote that entrepreneurship/entrepreneurial learning is not a new phenomenon in Sweden. In their study, they concentrated on what entrepreneurial learning and entrepreneurship is and how they can be defined. The result of the study is based on qualitative interviews with school leaders and politicians. The questions are about teachers’ and politicians' view of entrepreneurial learning and what entrepreneurial learning in comparison with entrepreneurship, means for politicians and school leaders. The result of the study shows that school leaders to some extent have a clearer approach to entrepreneurial learning / enterprise learning as a pedagogic concept than municipal politicians. School leaders define entrepreneurial learning to be stimulating the students to develop responsibility as their own drive and motivation is activated since the learning process is being more individualized. Teachers act as mentors in student progress whilst the politicians found it more difficult to distinguish the concepts of entrepreneurial / enterprise learning. They concluded that if there’s no clear definition of entrepreneurial/ enterprise learning from both the parliamentary level and school leaders and municipal politicians then it seems difficult to implement in schools. (Greenster & Peterson 2010).

Dysthe (1996) said that the dialogical classroom on the other hand is based on more democratic and social interactions where dialogue occurs both in writing and in conversation. The monolithic classroom, in this context, is a classroom where one-way communication controls the teaching. The teacher controls the communication and conveys his message. The teacher may eventually ask questions which can only be answered with a right answer. According to the authors, teaching must be put in a context.

The survey carried out in the thesis by Svedberg (2007) shows that students’ ability to take responsibility is a priority at the schools that were investigated. The importance of putting education into context for students to understand and create comprehensive information is described as well. The teachers in the survey also believe that exercises with a perspective that raises students interest motivates students to study. Contact with the business community shows that both schools are in close contact with the surrounding business community.

4.5 The teacher’s role in entrepreneurial learning

The teacher’s role in entrepreneurial learning changes from the traditional knowledge-sharer to the role of a process leader. The teacher then has both a shorter perspective, to meet students and see that the work is going well, as well as a long term perspective in which he or she looks at the pupil’s development over a longer period of time.

Process leadership should be taken into account in the planning, the current teaching and after work such as reflection and evaluation. The planning part, for the longer term, is optimal in the teaching team and will provide the best conditions for the learning process. Peterson & Westlund (2007) argues that the teaching team could be forced to take the battle to provide resources that are required for an optimal learning process. These measures are outlined in an annual plan that also describes projects and activities. Changes in the physical environment, customized schedule, recruitment
of guest speakers and participation in trade fairs and conferences are examples of actions that may require specific resources in the book.

The need for reflection arises under the normal education and after work. Here the teachers can focus their work on different parts of the process. One can among other things focus on the student's behaviour, how the teachers cooperate, the level of teaching and how students' motivation is started and developed.

To be a process leader also means to be a coach. Tutoring, mentoring and coaching are three concepts that have similar meaning. In this book, the term coaching is used and it means providing the students with support in their project work as well as attracting every single student's inner motivation and personal growth (Peterson & Westlund, 2007). Coaching means that the teacher adopts a number of strategies and applies them when needed, and are described in the book as: be questioning, be silent and waiting and be supportive and cheering.

The first strategy means that the teacher questions the work or the performance of the students so that they will gain insight if they overlooked any part of the content. The second involves a way of enabling students to take responsibility, to organize the work and find their way to the target (goal), without talking about what should be done. The third variant, to be supportive and cheering, means that the teacher delivers a number of clues as to how the student can solve their task. The teacher can, for example, set up a framework for how the process should go, and then in the course of the work make points to support the student. The Students must, if this strategy is widely used, possess the ability to receive feedback without taking this as negative criticism. A particular trust must also be between the students and the coach. These strategies can be used individually or combined in different situations.

Rae (2005) states that the conceptual model can be important to practitioners/teachers as it proposes social and personal emergence and that the corresponding transition in identity is an essential aspect of the entrepreneurial experience, not simply skills and knowledge which are adapted cognitively.

Svedberg (2007) commented on entrepreneurial learning, the teacher's role changes towards a more supervisory role than that of a traditional teacher’s role. In practice, students are actively encouraged to work in groups and learn from each other, whilst the teacher's role has changed to that of a supervisor.

4.6 Motivation

Motivation is a key concept in entrepreneurial learning and should be defined. Extrinsic motivation, which is controlled by punishment and reward, does not belong in this method of learning. When we talk about motivation, we aim for internal motivation, an inner need that underlies a specific behaviour, which may also be associated with our drive or ambition. Drive or motivation is what creates internal movements or changes. It is reasonable to believe that all students should find their own motivation in information and content that is created by a teacher? It seems obvious that the individual must find understanding through their own interpretation of the different goals and the ways to achieve these goals through their own choices. Peterson & Westlund (2007) mean that by stimulating the students to make their own needs out of a specific knowledge, it stimulates curiosity and their competencies become visible. According to the curriculum the school should promote pupils’
motivation, which also becomes possible by an entrepreneurial approach. Students are given the opportunity to reach the course objectives at the same time as they reach their individualized targets, which can be different according to their individual needs. Individuals become motivated by unmet needs (Evenshaug & Hall, 2001). With motivation, in this study is the urge to learn depending on the individual needs for a particular knowledge.

4.7 Students motivation for Learning
Learning is a hidden process where the custom activity is important for learning. The teacher’s responsibility at school is to help the students identify targets for their own work and learning as well as making goals for the students. Stensmo (2000) says that motivation is the pusher that leads certain people towards their goals and that "the student must own their targets to perceive them as important."

Students who have come to realize their target see a point in learning which manifests itself in joy and faith for the future motivation. Svedberg (2006) says that students carry with them experience of diverse art from previous school year which colours the perception of one's own and others’ learning. Svedberg asks the question how one really teaches a person to learn in a meaningful way? To refine his question, he talked about knowledge as a product and knowledge as a process in which the perception of the human being and knowledge is different. If human beings see knowledge as a product, then they will be recipients of given knowledge, where diligence, compliance and capacity for reproduction is an approach that facilitates learning.

Knowledge is theoretical and for the learning individual, it’s in books and with experts where they seek their knowledge. On the other hand, if you see knowledge as a process, then one is seeking for active, creative knowledge. The perception of knowledge is that the “world is whole” and cannot be divided into topics. Knowledge grows in man through an active approach to the outside world, a qualitative view of knowledge in which knowledge is immeasurable. Working methods vary and man constructs his own knowledge through active participation. In consistency with what Lendahls & Runesson (1995) wrote, they claim that many learning scientists agreed that situations where students are allowed to work with problem-solving are of great importance for learning. In schools where time, space and knowledge are fragmented, it is then difficult to create meaningful learning processes. No matter how good the knowledge and ability a teacher possesses in teaching is, it is only the student that can acquire knowledge by themselves. Svedberg suggests from an educational perspective that the school and pedagogue’s primary duty is not to teach but to offer an environment and create a surrounding where teaching can take place and they believe that teaching in schools should encourage students to reflection.
5: Analysis

5.1 Entrepreneurial Learning

Boumová (2008) found out that entrepreneurial learning is not a simple concept but a relatively complex one. Entrepreneurial learning should give support to the learning process that the students are undergoing. This means that learning becomes process-oriented and be seen as an ongoing process. The teacher’s role is vital here as the teacher should not only see himself as a lecturer but also as a mentor to provide support for the process (Peterson & Westlund 2007).

Johannison & Madsén (1997) even pointed out that the teacher’s role, just like the student’s, will and should change and that entrepreneurial learning has a particular focus on personal responsibility and meta-learning.

The results of my survey show that the teachers work this way. It also shows that they sometimes vary and act as lecturers too. On the other hand, some of the teachers think that there is more focus on the course objectives than on the process itself.

The teachers in this survey work with meta-learning in the form of logbooks and constantly recurring course evaluations. Students are given the possibility to see their own learning and the process they constantly are in. Peterson & Westlund (2007) described that this is an important part in entrepreneurial learning. The results show that the teachers in this survey work consciously with the learning process and development even if they do not only see themselves as mentors.

The survey also show that all teachers work in connection with the surrounding business community. This is particularly expressed in cross-curricular projects, distinct project with authentic clients and contact with the local press.

Personal responsibility is one of the entrepreneurial abilities that should be trained in school according to Peterson & Westlund (2007). According to the authors, this has not been enough in the past traditional teachings. This is actually something that all schools should already be working with because it is clearly expressed in the curriculum (Läroplanen 1994).

When it comes to personal responsibility, this survey shows that a lot of work is put into the issue and its awareness is great on the teachers. The interesting thing here is that a teacher thought that teachers should provide students with greater responsibility to manage their absence. Leffler (2006) means that entrepreneurial learning is about
giving students power or their own learning and that the teacher should be and is aware of his or her power and that the meaning of that is to give power to others.

Peterson & Westlund (2007) discussed that entrepreneurial learning also means that students are trained in problem solving and creativity. Teachers in this study described their schools as having problem-based learning (PBL) as a basic pedagogical term. This means that there is support for this in the school environment and that the teachers receive training in this form of teaching. One of the teachers expressed how she wants and aims to work more with this method and two teachers mean that the school traditionally has been bad on this and that students are ill-prepared for problem-solving from elementary school. Interestingly, a teacher expressed that a class of first year are demanding more of a problem-based learning.

Most teachers believe that they work with brainstorming exercises but above all that they do this because the subject requires it. The exception is that the teacher who trains students specifically in problem-solving and creativity gets help in collaboration with a local college.

5.2 Entrepreneurial learning in reality - the classroom

Teaching characteristics and planning varies in entrepreneurial learning. The teachers have democratic characteristics both through how they see themselves and how they work, even though a few of the teachers feel they need to show their authority occasionally, in particular to give order to a disruptive classroom. According to some of the teachers in the survey, this can also be understood as a process in which the groups which had worked a longer period be allowed to have freer forms of work. The teachers also claimed that in many contexts, they challenge the students to think outside the box rather than just giving a direct answer to a question.

Scheduling also differs a little between the teachers in this study. Detailed scheduling is generally made in a short time perspective while there seems to be a longer operational scheduling. The planning is sometimes controlled by the cross-curricular project works or similar theme works. It is interesting that the team is taken advantage of for making a common schedule, in particular everything concerning theme planning, which is understandable because the team started out to make a common cause. Both teaching and examination varied among the teachers. Most of the teaching is cross-curricular and /or in forms of project, this gives the students greater ability to go deeper and have the freedom of choice to choose things that are of interest to them. The teacher’s role then goes over to being a supervisor.

The students need to be challenged in their ideas and thoughts to get a good active learning in the classroom. Likewise, the learning climate in the classroom is of great significance if they want to make the challenges constructive and a source of important learning.
Stensmo (1997) stated that collaboration is widely used in the teaching in an entrepreneurial classroom. Even teachers who use individual examination can allow collaboration to occur until the time of the examination. Classroom design also provides support for cooperation and discussions in a natural way. This gives the students training in social skills as well as motivation. However, there are some disadvantages. For example, it is mentioned that it can be a disadvantage when students work independently; it can become unsettling and difficult for students to concentrate on their own task. One of the teachers thought that it is a less suitable teaching method for the weaker students; whilst another teacher pointed out that the less extrovert students had advantage and opportunity to take part in discussions and collaborations thanks to table placements. Room design and furnishings provide support in teaching according to the teachers based on what I described in the result summary. Above all, it provides support for discussion and collaboration but sadly enough gives less support for more traditionally designed teaching where the teachers lecture students to perform individually.

Peterson & Westlund (2007) stated that the long lesson passes used in entrepreneurial learning allow students to examine their curiosity and also provides opportunity for progression. The students then have time for thought and an opportunity to analyse what they are doing. This gives the teachers time to catch up and reason with the students. The downside may be that students who are not accustomed to these long classes can have difficulty concentrating during the whole lesson. This also sets higher demands on the teacher who need to vary their teachings.

5.3 Students motivation for learning

The teachers see problems with students as lack of motivation, more time is spent on student care conferences which does not solve the problems. They emphasized the importance of developing a flexible system to meet each individual student needs, knowledgeably as well as emotionally. To remedy this problem which is the basis of many students’ failures with their studies, the teachers require good relations with the students and a good working climate be created to help minimize the problem.

They furthermore feel that the motivation of many students has fallen as they at the same time experience a widening gap between the motivated students and the unmotivated ones. They also believe that some students are not offered enough challenges and so they see the school as a “playground”. All teachers agree that learning that is associated with activities outside the school increases motivation.

By creating work exercises that are related to the student's world life, they tend to draft their own goals, which Giota (2002) says will result in the students perceiving the objectives as important, and that motivation for learning becomes noticeable and lively when we succeed in capturing their interest. This objective leads to a knowledge-based process which in accordance with Svedberg (2006) characterizes
that the individual is active, creative and engaged in his learning.

In conformity with entrepreneurial learning one can thus take advantage of the student’s individual interests and experiences and let that guide the activities that will result in increased motivation. According to Maslow’s needs theory (Evans, Foxall & Jamal 2008) individuals get motivated by unmet needs. Succeeding in helping the students to see and articulate their own unmet needs helps light that inner glow which is the key to meaningful knowledge seeking. Inner motivation is a fact, when the students become aware of the fact that it requires knowledge to solve the problems that they formulated.

5.4 Role of teachers and students in entrepreneurial learning

The teachers mainly look at their role as a mentor even if they sometimes change between being a tutor and a lecturer. Teachers engage students to participate in the syllabus because creating an overall syllabus is important to most teachers. The work is conducted further with cross-curricular activities and this is done in the form of theme works and distinct project works with authentic buyers from industry. The teachers claimed that they focus more on learning processes than the course objectives. All teachers work with brainstorming exercises and problem-based teaching as a whole. Examination is carried out in a very diverse way, but largely in the form of oral and written assignments in the group. The teacher’s role in entrepreneurial learning changes from the traditional knowledge-sharer to the role of a process leader. The teacher then has both a shorter perspective, to meet students and see that the work is going well, as well as a long term perspective in which he or she looks at the pupil's development over a longer period of time.

Students are prepared for Meta –learning by writing logbooks, by reflecting and by participating in evaluations of the courses. Meta-learning means to learn about your learning which means that the students get to have a feeling about the process they are going through as they develop and learn something new. I think it is interesting to see how much the teachers actually work with this in the survey. I did not have any sense of my own learning during my schooling and I think in retrospect that it was a major flaw. If I had an understanding of how I learn, I could have not only learned more effectively but I probably would have greater motivation to learn new things. The students take responsibility of their own learning and should be able to ask questions if they misunderstand anything. This means that the students should be able to acknowledge when they don’t understand ask be brave enough to demand explanations from the teachers. Students will always need teachers both inside and outside the classroom either in research difficulties or whatsoever. Student’s own responsibility is central to the teachers and the students are trained in this by finding out for themselves what they have missed in their absence. They also have to contact the project leader, and other teachers.
6: Discussion

6.1 Results discussion
The author will be discussing things that she found interesting such as entrepreneurial learning, meta-learning, student cooperation and student responsibility.

Entrepreneurial learning as a whole is wide and complex. In entrepreneurial learning, focus is on students learning tactics as all people learn in different ways and styles. The entrepreneurial learning process from the students is led by questions and thoughts, which are termed as circular learning processes, that begin with an interest in both the relations between the students and the subject.

Meta-learning means to learn about your learning. This means that the students get to have a feeling about the process they are going through as they develop and learn something new. The author thinks it is interesting to see how much the teachers actually work with this in the survey. The author did not have any sense of her own learning during her schooling and thinks in retrospect that it was a major flaw. If the author had an understanding of how she learns, she could have not only learned more effectively but probably would have greater motivation to learn new things.

In the survey, the teachers work with students’ reflection and feedback in form of logbooks, evaluations and conversations. It shows that it is well thought out, what the
teachers do and that it is just not any kind of training in study technique which I think may be a risk otherwise. When a teacher works with meta-learning, it is important to provide a fast and accurate feedback to students, at least at the beginning of such work. This is because the student should not lose interest in writing, such as in their log books.

In the literature review and the teachers’ responses in this survey, the author can see that student’s own responsibility for his/her education is central to both the entrepreneurial theory and in schools that work with it. In addition, it comes forward in the survey that student’s responsibility in some respect is not trained at all. A teacher said that this means that teachers may spend a lot of time to call parents or the student himself if he does not show up at school. The teachers want to train the students in taking their own responsibility and may be shall not if they want to be consistent in calling after the student when he is not present. But as said, the school has a responsibility to ensure that students receive their education. Students should be able to achieve the goals and targets, thus they must in most cases come to school where the teaching occurs. What is the solution to this problem then? Unfortunately, the author has no solution to the problem, but she thinks it would require hard work and there is a risk that you might and will lose someone along the way. What I mean is that the teachers, in order to be consistent, should let the students take full responsibility and this should be done in all situations related to school work.

For example, it would mean that students will not write a test if they do not have a pen with them, that they themselves had to find out what happened when they were absent from school and so on. It is natural that students may take this responsibility but the author thinks that the exercise should start already in early ages, for instance in elementary school.

Students need to be trained in taking responsibilities for themselves and their studies in elementary school. Support for this is found in the curriculum, but according to responses from teachers in the survey and from the literature, it shows that this not properly done. When it comes to planning, the teachers said that most of the scheduling is done jointly in the teams. Some teachers feel controlled by the curriculum and national tests. This is something that is not particularly positive if the teacher wants to work with entrepreneurial learning. It is also something that Johannisson & Madsén (1997) described when they mentioned the conflict with subject-oriented grading and short courses.

It seems that conditions differ between teachers who have characteristic approaches for a given subject for example IT courses, and those who have core subjects such as language and mathematics. Core subject teachers feel that they have difficulty in
achieving all goals unless they can work with their subjects in a specific order. This becomes worrisome when one wants to create thematic, multidisciplinary projects where the ordinary schedule is interrupted for a while. One way to deal with this problem might be to simply work more with this way or work in the team so that all teachers will have a habit to both plan and carry out these projects. It also gives teachers the opportunity to predict at what point during each semester it is appropriate to carry out these projects.

However, this survey does not give a proper answer to that question. During entrepreneurial learning with the right conditions, the students are given opportunity for deeper analysis of a subject but also greater choice to select parts that interests them as well as the order in which the student takes on the issues.

Boumová (2008) argued that entrepreneurial learning is complex. She meant that the traditional form of education can be combined with entrepreneurial teaching mode for a better result. I both agree and disagree here because I believe that entrepreneurial learning is more than just a method. Entrepreneurial learning should involve everything that is done in teaching to be successful, if one follows what is described by the authors of the texts featured in the literature review. This means that, as it is described in the literature review teachers should work with problem-solving, act as supervisors, be aware of meta-learning and act in an action-oriented manner (Peterson & Westlund, 2007).

The respondents in this survey suggest that it needs more effort from the teachers when working entrepreneurially than when working more traditionally. They argue that teachers need to provide students with stimulating tasks to work on, maybe in the form of meaningful exercises to keep them active and motivated to want to learn more. It is this which the respondents cite as factors that motivate students. Cooperation is important both in theory and in practice linked to entrepreneurial learning. Students in this survey are allowed to cooperate extensively. It is interesting to see that examination can take place in forms of cooperation, such as group presentations and projects that are similar to corresponding work life exercises.

The author has often thought that written tests lack much of a learning component. For example, one can see that during a written test, no one is allowed to ask the help of a fellow student, the student may not seek out to other sources (books, etc.) and the student may not seek the help of the teacher during the test as well. All these would have been natural to do in an authentic situation as at a workplace. That is why the results of this survey is interesting, where teachers vary their examination form so much, but use examination in groups extensively. This even mimics the working place’s way of presenting a task. Students are able to learn a lot more by the report than the written tests given, but unfortunately this survey does not measure that paragraph.

As regards the classroom, designs come through in the interviews that it provides a lot
of support for the teaching in the form of collaboration and discussions. The individual independent work then suffers. There is not much described on the autonomous forms of work in connection with entrepreneurial learning. This of course is due to the fact that entrepreneurial learning is based on socio-cultural theories in which social development and cooperation is highly prioritized.

In the curriculum (Lpf, läroplanen 94) it is stated that schools should provide support for both individual and group work. Since the curriculum is designed in this way, the author cannot say anything other than that this could be a flaw in the surveyed schools. That is to say, a lack of ability to let the students solve tasks independently. The author can also see that this must be exceptional because it is natural to work problem-based in groups or in projects as this will enable knowledge transfer and permit brainstorming to generate more ideas.

6.2 Conclusion
Entrepreneurial learning is a great concept and an educational format that includes different parts, but there is still no clear or common definition about what entrepreneurial learning is. This means that the teaching is done in a different way than what has been traditionally common in Swedish schools and worldwide. In entrepreneurial learning, one of the focuses is on the student’s learning strategies. The learning process is managed by thoughts and questions from the students, which are described as circular learning process.

The key concepts within entrepreneurial learning are meta-learning, responsibility, problem-based learning, collaboration and mentoring. Students work with solution-oriented exercises and teachers work with process-oriented and are supervisors as well as mentors in the student’s development. An essential part of entrepreneurial learning is about constructing the unreliable and individualized reality of the entrepreneur. It is vital that students too come to identify and construct that reality so as to give significance to the rest of their learning. Entrepreneurial learning is just not about bringing the real world into the classroom but also bringing the classroom into the real world of the entrepreneur.

Entrepreneurial learning involves contact with local businesses in the form of project work and field trips. It also means teaching that is characterized by cooperation which the school environment and classroom design provides support to. To provide support for entrepreneurial learning, the surveyed schools have long class sessions, which means that two subjects are covered in a day. The long class sessions provide opportunity for progression and analysis for students but can sometimes be uninspiring if the teachers don’t manage to vary their teaching. Cross-curricular activities or multidisciplinary projects are also common. The difficult thing to implement when it comes to entrepreneurial learning is implementing the curriculum in the teaching and at the same time offer students a holistic view and an interesting
problem-based learning with contact from the surrounding professional life.

7. Innovation contribution
After all research been done and questions been answered, the challenges of
entrepreneurial learning are numerous such as that entrepreneurial learning is put into contrast to traditional education, the dilemma of the concept, connection to local business (Leffler, 2009) and the author would like to contribute innovatively by giving suggestions on how to make this learning concept more effective.

Since Entrepreneurial learning is already in an innovation phase, my contribution would be a continuous development of how to make it more effective. The author’s contribution is that the teachers themselves need to undergo studies whereby researchers/authors of entrepreneurial learning will teach them what the term and definition of entrepreneurial learning is. In this course, the teachers should also work with projects and do practical on how entrepreneurial learning should be taught and what expectations the students are expected to gain from these teachings. Undergoing these courses or practice periods can enable the teachers to have more abilities, learn strategies on how to teach and motivate students in the entrepreneurial classroom and change their attitudes toward entrepreneurial learning. Briefly, all teachers should understand what entrepreneurial learning is, why it works best and how to create an atmosphere that encourages it. This project can be seen as Johansson’s” Medici effect” whereby the project would be their intersections were ideas are being generated and implemented on.

The teachers in order to make entrepreneurial learning effective and successful, they should try to teach students to have both an inquisitive and analytical mind with critical thinking which will help enable them to gain the confidence required to ask questions and to also be able to handle criticism and self-criticism and see criticism as constructive and not negative.
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Otterborg, A. (2011) *Entreprenörriellt lärande- gymnasieelevers skilda sätt att uppfatta entreprenörriellt lärande*


Appendix 1

Interview questions

Introduction/facts
Subject, program, Education

Experiences- experiences as a teacher and experiences in the business world

Questions

(1) What role do you have more, the role of a tutor or lecturer?

(2) How do you in general answer if you get questions? Do you answer to the question or ask another question or?

(3) Describe your leadership style: Is it authoritative/ democratic, explain

(4) How do you plan your teaching? In team, alone or Together with the students?

(5) Do you have a holistic approach when you plan or do you focus on parts that are important? Can you give an example?

(6) Long –term perspective? Detailed Planning or?

(7) Do you think about student’s future career rolls into you’re planning?

(8) Do you work with cross-curricular activities and to what extend?

(9) Do you think that the teaching focuses more on achieving goals or on learning and process?

(10) Do you work a lot in project form? If so how much?

(11) Do you work with problem-solving and brainstorming exercises? How and how much in the teaching?

(12) Is the classroom designed from a student’s perspective? How?
(13) Examination- Tests or learning without examination, presentations, project etc.
(14) Does the long lesion passes have advantages / disadvantages?
(15) Does the student have any influence in the teaching? How? Evaluations? Planning?
(16) When do you see that the student is motivated and find own drive in his learning?
(17) How do you see the student’s motivation towards their own learning?
(18) How do you see student’s in their own learning?
(19) How do you give support for this in the teaching?
(20) Do the students have the opportunity to see to their own learning for example log books under project work?
(21) Are the students allow to cooperate to reach an understanding?
(22) Do you let the student take responsibility for their learning and how?
(23) Do the students have the responsibility to make contact with enterprises?
(24) Do you have contact with the local surroundings / businesses, if so how?

Privacy information about the interviews

I am writing an essay in the subject innovation and stumbled on the word entrepreneurial learning. I am only going to focus on the teachings and your perspectives on them. The questions will be open during the interview and if you have anything you would like to add on then you are free to do so. If you think that the questions are wrongly posed or that something is missing, then feel free to take it up but at the end of the interview.

I am going to follow the ethical stances and principles set up for essays that is:

Anonymity for the person being interviewed and school will be held anonymous

I will be recording the interviews for my gain and it is only I that will listen to the answers when doing my work.

Thanks for your participation.