

Enterprise Learning and School Subjects – A Subject Didactic Issue?

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Abstract

According to the Swedish government, entrepreneurship is supposed to “run like a read thread” through the education system. Teachers are in their teaching required to stimulate skills that are vital for entrepreneurship. This study problematizes the relation between school subjects and enterprise learning from a discourse analytical approach. The point of departure is policy documents and research on entrepreneurship in schools. By using interviews with teachers and a principal, interpretations and understanding of enterprise learning is analyzed. The results show that teachers emphasize the concepts *connection with real life* and *creating meaningfulness* in their rhetoric, but by omitting the didactic questions *why* and *for whom*, tend both the concepts creating meaningfulness and connection with real life to deal with teachers’ experiences and understanding and not on pupils’ learning.

Keywords: entrepreneurship, enterprise learning, subject didactic, teachers, secondary school

1. Introduction

The concept of ‘entrepreneurship’ with its origin in trade and industry is increasingly often being mentioned in educational contexts all over the world. Arguments that are usually advanced are on the one hand increased employment and on the other greater motivation and deeper learning among pupils. The meaning of the concept has been broadened and as a perspective, entrepreneurship is expected to permeate the entire educational system. Children and young people are supposed to acquire an entrepreneurial attitude through teaching and learning. In Sweden this issue used to belong to the socio-political area, but it is now also being seen as an educational policy. The Swedish Government has presented a *Strategy for entrepreneurship* in which they emphasize that the characteristics of a good entrepreneur:

ability to solve problems, planning one's work, taking responsibility and cooperating with others are qualities that pupils need in order to manage their studies and be successful in adult life (the Government Offices of Sweden, 2009). This strategy is in line with ideas of entrepreneurship taken from OECD policies (e.g. 1989; 1998) and the European Commission policies (e.g. 2001; 2002; 2004), in which they emphasize that it is about an approach or an attitude to learning comprising all working methods that stimulate pupils' self-reliance, self-knowledge, creativity, energy and ability to cooperate and communicate. For that reason entrepreneurship is not to be regarded as a separate subject.

The concept of 'entrepreneurship' is an example of how a discourse both develops and assumes new forms when meeting a new context, in this case an educational context. In educational contexts the concept is divided into two discourses, an *enterprise* discourse that is about developing pupils' power of initiative, responsibility, participation, creativity, self-confidence and ability to cooperate, and an *entrepreneurship* discourse that is aimed at developing abilities concerning business and enterprise. These are also called *broad* and *narrow* teaching specialisation respectively, in which the broad one is chiefly targeted at younger pupils and the narrow one at older pupils (Johnson, 1988; Erkkilä, 2000; Jones & Iredale, 2010). According to the European Commission (2004) these discourses are interdependent, because being allowed to develop one's enterprise is regarded as a precondition for being able to work as a good entrepreneur. In the Swedish curricula both these specialisations are visible; in primary (broad) and secondary schools (broad and narrow). Entrepreneurship in schools is thus an example of how an educational discourse has been designed in the last two decades with the ambition both to raise the quality of the education and to adapt the education more clearly to society's needs (Leffler, 2006; the Government Offices of Sweden, 2009) in order to secure jobs and safeguard the economy (Mahieu, 2006).

2. Aim and method

A possible interpretation is that if enterprise learning is about an attitude to learning, it may come to influence the subject content. What can then enterprise learning as a concept and a phenomenon imply for learning and teaching in different school subjects? Does it mean that individual school subjects will have to be related to enterprise learning and that subject didactic issues will be affected? The aim of the present article is to problematize enterprise learning and its relation to different school subjects. The following questions have served as guidance;

- How should the teaching of the different school subjects be conducted in order to be regarded as enterprising?
- How is the view of different school subjects affected when a whole school is to implement and develop an enterprising approach in its teaching?
- What changes take place?

Inspired by Michel Foucault's theories of discourse (Foucault, 1993; 2002), I want to highlight how the discussions of enterprise learning are formulated in relation to different

school subjects, what explicit conceptions there are, what patterns are formed that provide preconditions of what we can think and say and how we can act. The concept of ‘enterprise learning’ is surrounded by statements, interpretations and expressions and will therefore have consequences for teaching and learning, i.e. consequences for the practice of education. In the analysis the didactic questions *Why, How and What* have also been useful (cf. Pennlert, 2013). The empirical material consists of interviews with teachers in a Swedish secondary school. The focus in the present study is on teachers’ interpretation and understanding of *enterprise learning* and on how teachers conceive of the relationship among individual school subjects, subject didactics and enterprise learning. I want to elucidate what discourses are materialised through teachers’ talks and are hence visualised in the teaching, i.e. what discourses are dominant. Are there differences among teachers from different subject disciplines, and in that case, what are these differences?

The selection of school was based on the fact that all the teachers in the school had undergone in-service training in enterprise learning with the aim that they would both acquire knowledge of enterprise learning and that knowledge of enterprise learning would contribute to school improvement and thereby also to better goal attainment, which is a relatively common interpretation of the purpose of introducing entrepreneurship in Swedish schools (Skolverket, 2010). The in-service training involved lectures, workshops, literature studies and development work. It was therefore interesting to study how the teachers had understood and interpreted enterprise learning and what they had developed in their teaching on completion of their competence development. In the present article I account for the results of focus interviews with a total of 15 teachers from different working teams and a single interview with one principal. In the initial stage of the investigation a questionnaire study addressed to the teacher of the school was performed, a total of 69 teachers and was answered by 50. The questionnaire contained four open questions concerning choice of content of the teaching, working methods and modes of working and cooperation both within and outside the school unit. On the basis of the first analysis of the questionnaire a selection of teachers were made for the interviews, a representative group from the working teams and they were then divided into three focus groups (cf Morgan, 1988). Focus groups may be said to be a type of group interview differing from ordinary group interviews by being a “research technique where data is collected through group interaction about a subject decided by the researcher” (Wibeck, 2000, p.27). Focus groups were used as a method as the ambition also was that learning situations would arise during the interviews. The number of teachers and subjects were represented as listed below.

Table 1. Number of teachers and subjects that were represented in the interviews

	Female teachers (FT)	Male teachers (MT)
One teacher from each working team with adjacent subject combinations	FT1: Science subjects / Mathematics FT2: Music FT3: Social subjects/ Swedish FT4: Social subjects FT5: Textile craft FT6: Physical education/ Health FT7: Swedish/Swedish 2 ¹ FT8: Art FT9: Social Subjects	MT1: Swedish/ Swedish 2 / English MT2: Science subjects MT3: Science subjects/ Mathematics MT4: Swedish/ Swedish 2/ English MT5: Science subjects/ Mathematics MT6: Swedish/Swedish 2/ English
Total	9	6

The point of departure in this study is the broad educational specialisation, enterprise learning. By way of introduction I will discuss the concept of ‘entrepreneurship’ and enterprise learning then go on to subject didactics. Then teachers’ interpretation and understanding of enterprise learning in relation to individual school subjects will be accounted for and analysed.

3. Theoretical framework

3.1 *Entrepreneurship and enterprise learning*

Can entrepreneurship be learned is a question that is debated among researchers. Johannisson (2011) thinks that children are natural entrepreneurs and that the task of schools is to make use of and develop the children’s entrepreneurial abilities. Entrepreneurs’ learning is described in terms of “learning by doing”, “trial and error”, problem solving and learning by experience, often outside formal learning environments (Cope, 2005).

In the educational practice the content of entrepreneurship is justified on the basis of local conditions, solutions to problems at school and needs at the individual level. A central perspective is that entrepreneurship in schools should contribute to school improvement in some form (Skolverket, 2010). It may e.g. involve increasing the cooperation between the school and the surrounding community, changing forms of teaching and learning processes, encouraging pupils’ creativity and initiative and changing attitudes to entrepreneurship (Svedberg, 2007). The emphasis is on encouraging pupils to be active and action oriented and being given opportunities to cooperate with individuals with complementary competences through cross-disciplinary and group-oriented work (Falk-Lundqvist, Hallberg, Leffler, & Svedberg, 2011). Circular thinking about teaching and learning as well as long continuous working periods is advocated, where pupils’ collaboration, i.e. participation in both planning

and implementation and evaluation of the work, is important. The importance is also emphasised of basing the activities on pupils' life-world in order to stimulate their own driving force and motivation, which is stated to be a precondition for enterprise learning. Of central importance is also that enterprise learning should be characterised by seeing opportunities instead of problems as well as the ability to reflect on one's own learning (Pepin, 2012).

Like many concepts in the making, the concept of entrepreneurship is surrounded by problems of definition, which causes the interpretations to vary, which in turn influences the educational practice. Enterprise learning is in many ways a question of how the dominant discourse is understood. This also includes the definition and the interpretation of which the Swedish curriculum Lgr 11 constitutes a part. In the curriculum entrepreneurship is included as a part of the mission of schools and is described as follows:

An important task for the school is to provide a general but coherent view. The school should stimulate pupils' creativity, curiosity and self-confidence, as well as their desire to explore their own ideas and solve problems. Pupils should have the opportunity to take initiatives and responsibility, and develop their ability to work both independently and together with others. The school in doing this should contribute to pupils developing attitudes that promote entrepreneurship (Skolverket, 2011, p. 11).

The starting-point is that pupils should be allowed to be active and to be stimulated to acquire abilities contributing to developing an attitude that promotes entrepreneurship.

Some research on enterprise learning has been aimed at pointing out a number of obstacles and emphasising schools' "traditional" teaching as the main source of the problem. Bager and Løwe Nielsen (2009) choose to talk about weaknesses in the educational system that causes difficulties, thereby challenging enterprise learning in their opinion. They pointed out aggravating aspects such as strong subject division, where the teachers experience that they are bearers of a subject, and a predominance of passive learning and traditional teacher-governed education. In his study Deuchar (2006) identified teachers' fear of losing power, fear of not attaining results and fragmented timetables as obstacles to the introduction of enterprise learning. The point of departure of this research is however that entrepreneurship can be learned.

3.2 School subjects and subject didactics

Didactic competence is described as both knowledge about teaching and practical skills in teaching (Pennlert, 2013). A teacher's didactic competence focus is on pupils' learning and their ability to reflect on their own learning processes. The ability to reflect on learning processes, teaching intentions and learning outcomes is therefore crucial. As enterprise learning is described as an approach to learning, it may as well be related to teachers' didactic competence and subject didactic competence.

Strengthening of subject knowledge and the importance of subject didactics are emphasised in the Swedish teacher education (Government Bill 2009/10:89) at the same time as

education, according to the curriculum Lgr 11, has an important task in “providing a general view and coherence” (Skolverket, 2011, p. 11). How is subject didactics described and how can it be related to taking an entrepreneurial approach to one’s subject? Among Swedish researchers there are different perspectives on subject didactics and hence several interpretations. They may be about reflection on knowledge, learning and the conditions of learning. Subject didactics is then the meeting place for reflection on the subject and the conditions of learning (Falkevall & Selander, 2002). Subject didactics is also regarded as a third area of knowledge, between general didactics and the subject. In addition to their subject knowledge teachers should have general knowledge of education and teaching and have subject didactic knowledge (Schüllerqvist & Osbeck, 2009). Subject didactics is regarded as a “meeting place for reflection on the conditions of knowledge /.../ on the subject’s traditions but also on the prerequisites and conditions of learning” (p. 7). There are also thoughts of whether subject didactics may be a mixture of general didactics and subjects, or a mixture of pedagogy and the subject. Subject didactics is then described as a “bridge” that is about didactic considerations that are connected to the content of a subject (Sjøberg, 2001). Some other researchers emphasise instead the holistic perspective and point out the importance of being able to reflect on one’s practice and make conscious choices based on a whole (Bronäs & Runebou, 2010; Tornberg, 2009). What links the subject discourses together are however issues concerning the subject’s content and the basic didactic questions What? How? and Why?

4. Results

The results are presented in three steps. The first step relates to teachers’ understanding and interpretation of enterprise learning. The next step is teachers’ thoughts about enterprise learning in relation to school subjects. Finally some challenges that teachers have identified while working with enterprise learning are presented.

4.1 Teachers’ interpretation of enterprise learning

What understanding did teachers have of enterprise learning and what interpretation did they make, i.e. how do these teachers talk about enterprise learning? This emerged from the interviews:

- FT1: *I don’t know if there’s any direct definition of it. I’ve felt... you can interpret it a bit like what you yourself... there are some things that are supposed to be included, but you interpret it yourself to some extent: How? What is it? I think we all have somewhat different ideas about what it is, but I don’t think it’s wrong. (Science subjects/Mathematics)*
- FT2: *But, you know, enterprise learning is, I suppose, when the pupil, or whoever it is, takes responsibility for their own learning. (Textile craft)*
- FT3: *I was just going to say the opposite of passive ... enterprise learning is the same as meaningful teaching and learning. (Social subjects/Swedish)*
- MT4: *I lot of what was done was such that it could be subsumed under the concept of enterprise teaching and learning. (Swedish/Swedish2/English)*

MT1: *It depends on what it means, but I have caught onto this thing about creating meaning, and that's about doing some real thing, writing a letter to the editor of a newspaper/.../a real product. (Swedish/Swedish2/English)*

In spite of in-service training there are uncertainty and divided opinions about how the concept of enterprise learning may be understood by the teachers and hence what it may imply in the practical activities. Each of the teachers has made her/his own interpretation and built up her/his own conception and picture of what enterprise learning may imply. Some teachers think that they themselves can make their own interpretations and then choose something familiar or recognisable or make reinterpretations in order for it to fit into the prevailing practice. Others take as their starting-point that it should be about something meaningful and that it is about something active, is meaning creating and is about something genuine and for real.

It is possible to see a certain difference in the teachers' interpretations. For some of them the starting-point is that they are already working enterprisingly in the school and that it is about doing something concrete and genuine in the teaching, something that must be for real and meaning creating. Other talk about pupils' own responsibility and think that it is about something that is the opposite of passivity and that it must be meaningful.

4.2 ... In relation to different school subjects

When we got on to specific school subjects in the discussion, the teachers associated the concept of 'enterprise learning' to *connection with reality* and *meaning creating* activities. This also included *external contacts* and *cross-disciplinary* teaching. These concepts are central in the discourse on enterprise learning that the teachers have developed. The teachers' pictures of individual school subjects' connection to enterprise learning proved to vary, however. The teaching of science subjects is in itself regarded as enterprising, since the teachers of science subjects think that they are creative, that there often is a product or something that is to be made. The science teachers also think that in the science subjects they work with open tasks, since the pupils can first write a hypothesis and then test it. The pupils are also allowed to be active and are encouraged to think for themselves.

MT3: *I think that they [pupils] should be allowed to test and find out things, so that I don't just stand there talking all the time myself, but that they find out things themselves. (Science subjects/Mathematics)*

There are also reflections on which items in the science subjects are best suited to working enterprisingly in:

MT5: *I experience that if you want to do something simple, close to everyday life, then it's easy to refer to, but if you talk about atomic physics and such heavier stuff, then I think it's very difficult, such as the properties of light. How can you make that enterprising? (Science subjects/Mathematics)*

Some items are considered more difficult and more complicated, which causes uncertainty about whether all teaching can be conducted enterprisingly. But it also turns out that the

teachers have different ideas about what subjects are easier or more difficult to conduct enterprise learning in. One language teacher assumes for example that teaching science subjects is difficult to conduct enterprisingly. Some of the teachers of science subjects partially agree with him. They certainly think that they work in connection with reality in the science subjects, but that it might not be the same reality as the pupils' experience, since some of the items may be considered abstract. Other teachers also have conceptions of which subjects are enterprising *per se* and mention handicraft and music as well as social subjects. Handicraft is a school subject where the teachers naturally claim that they work enterprisingly and that they have always done so, whereas this picture is not equally natural for teachers representing other school subjects. This may be understood by means of Bager and Løwe Nielsen (2009), who argue that the teachers' division of the knowledge mission in school subjects aggravates their understanding of enterprise learning.

The social studies subjects are also regarded as enterprising subjects. One of the social subjects teachers thinks that social subjects are worthwhile to develop, since they can easily be related to what is happening around the pupils and hence create motivation among them. She also thinks that social subjects teachers often have the privilege of meeting their groups of pupils several times a week, which facilitates creating a relation to them. In the social studies teaching they also work with current news that has a bearing on reality.

Whereas some subjects were considered easier to relate to enterprise learning, there were also subjects that the teachers considered more difficult to take an enterprise approach to. The mathematic teachers demonstrate greater uncertainty about their mathematics teaching, as expressed by one teacher:

FT1: *I find it easier to think of tasks in science subjects. I can think of as many as you like here, while I have to sit down and think a bit more about math. You can take things easier in math and use teaching media more and things like that. It is more difficult to find many practical tasks... but the question is if they learn anything from it. (Science subjects/Mathematics)*

The mathematics teacher thus thinks that it is easier to use the tasks of the book than to create meaningful situations where mathematics is put to use. There is also a tendency to regard mathematics as a subject where the pupils are satisfied with sitting and doing sums themselves and for this reason there is no need for thinking enterprisingly in the teaching of mathematics. This is stated above all by teachers who do not teach mathematics themselves, which is however denied by one of the mathematics teachers, as shown by the following statements:

MT1: *Those who really love math love so sit with their book and continue working and maybe reach the book of the next form level. (Swedish/Swedish2/English)*

MT4: *I think that if you have an amount, then you you'll feel secure about everything, and then everything will be automated in a way that may actually be quite good. (Swedish/Swedish2/ English)*

MT5: *I don't quite agree... what sticks in my memory is what I have really understood, why is it like this and why is it like that. (Science subjects/Mathematics)*

According to these teachers there are conceptions of mathematics resting on a tradition that emphasises proficiency training at the individual level, without connection to either reality or meaningful activity. There also occur assumptions that enterprise learning is about the pupils being allowed to perform practical tasks. Foreign languages are a further area that is regarded as a less suitable for enterprise learning, which the principal expresses in the following way:

Principal: *It's obviously difficult to ... for example with Spanish, German and French. They are in a great hurry there to reach a certain level, but otherwise I can't see any limitations in it. It's rather a matter of will. It's possible in these subjects too, but it's a lot trickier because it's difficult to make the pupils understand what they are doing in those subjects.*

The principal says that the teachers' approach to the teaching is to be in a hurry, but also that it is a matter of will. In addition the principal has a notion that teaching in these subjects is not about the pupils being expected to understand what they do and why. Hence not all school subjects neither are included in the enterprising discourse that emphasises meaning creation and connection with reality, nor are they based on the collective aspect.

How do the teachers then describe what is enterprising in their teaching? The practical and artistic teachers in textile craft and music emphasise power of initiative at both the individual and the collective level:

FT5: *If you look at the heading, I think that handicraft is very enterprising learning. It's based you know, on you yourself taking initiatives and doing something. It's not as if I often stand teaching the whole group; I start the group and then there are very many individual projects, so a lot is up to the individual. In order to achieve something you have to take your own initiatives and do something, otherwise it will sort of come to a standstill. (Textile craft)*

FT2: *I've got the same thing but it's collective instead. It's also based on creativity and ability to take initiatives yourself, but you are always a part of the group, since we do a lot of choir work and play music together. (Music)*

The teacher of physical education and health bases her approach on the working party and an ambition to do something in common in the working party, thus a collective level that chiefly concerns the teachers:

FT6: *We decided to do something together /.../ and then we had the theme of Health. (Physical education/Health)*

Meaning creation and connection with reality are however not central aspects of the practical

and artistic teachers' talk of their teaching. However, the teachers seldom talked about what a theme or pupils' own "doing" would contribute to the "learning. Thoughts about different activities often came up, which other studies of entrepreneurship in education also show. The pupils are supposed to do something, but there are seldom reflections on what they should do and why (Leffler, 2006).

During the talks we also got on to the strengths and weaknesses that the teachers experience in their work. The organization is felt to be a great obstacle, since the size of the school makes sensible timetabling difficult, according to the teachers. This is also an obstacle that researcher point out (cf. Bager & Löwe Nielsen, 2009; Deuchar, 2006). Several teachers work with pupils from several working parties and therefore feel enormously controlled by the timetabling.

As regards their view of knowledge, they are agreed that there is no shared view of knowledge, neither in the working parties, nor in the school as a whole. Some teachers experience this as a weakness, while others think that it is a strength. Multiplicity enriches school life, according to some of the teachers. Different subjects are thought to be more or less similar from a pedagogical point of view. The subject of mathematics are according to the math teachers, somewhat special, like the practical subjects, while the social and science subjects are regarded as more combinable, as regards both consensus about pedagogical issues and assessment bases. The social and sciences subjects cooperate with the subject of Swedish, above all in written assignments.

The representatives of the practical-aesthetic subjects think that they have difficulties in cooperation in education development, partly because they are considered to teach unimportant subjects, and partly they think that they do not have the legitimacy to influence and offer opinions concerning the theoretical subjects. Yet another reason is that they think that educational development is often based on theoretical subjects.

4.3 Challenges

The point of departure of developing the teaching towards enterprise learning at the studied school was that the principal thought that a great deal of what was done at the school could be regarded as enterprise learning at the same time as enterprise learning would contribute to school improvement. The principal expressed this in the following way:

Principal: *We found out that enterprise learning was actually very much in line with our own goals, that is to say with subject integration and the contact with the community outside the school etcetera.*

An explicit goal for the school is thus subject integration and contact with the surrounding world, which is a goal that the teachers also state that they need to develop:

MT4: *We must try to have considerably more contacts with the surrounding community. (Swedish/Swedish as a Second Language/English)*

Based on the teachers' pictures of enterprise learning implying *meaningful learning, cross-disciplinary teaching and contact with the surrounding world*, the talks get on to what

changes the in-service course has led to and what challenges they think they are facing:

- FT4: *We have worked a lot with our views of knowledge /.../ and we have discussed how to formulate questions. That's what I feel is most concrete in what is called enterprise learning /.../ not to start by thinking that you must have some basic knowledge to be able to go on to the trickier questions, but let them begin with open tricky tasks and if they don't know, they will have to find out to be able to find out more. (Social subjects)*
- FT8: *I find this cross-disciplinary teaching difficult. I have difficulties getting into it /.../ We had the 'Theme of food', then they drew vegetables in my classes /.../ and that's no fun, I don't like my teaching to be like that (Art)*
- FT7: *I think that cooperation with the surrounding community /.../ it takes so much time and energy /.../ I don't think it is great fun. Though when they [the pupils] come back and have got all this, then it's fun. (Swedish/Swedish2)*
- FT3: *I tried in the social subjects to make them [the pupils] more enterprising when we were studying law and I thought: Now I'll start at the wrong end and give them the task of inventing a crime and who are involved and then it's up to them to find out: What things have we got? Who can blah-blah-blah? And what might be the punishment and things like that. But nothing happened. (Social subjects/Swedish)*

According to the above quotations, cooperation with the surrounding community, cross-disciplinary teaching and changes in the implementation or the teaching are challenges that the teachers are facing. It is also evident that different subjects have different 'status' or importance for the teaching. The art teacher, who had to use her art lessons in order for the pupils to draw vegetables, although she thought it was neither creative nor developing for her subject, also shows that some subjects risk being regarded more as padding and not as an important and integrated part of the pupils' learning. Based on a Foucault perspective we can thus talk here of a power relation between different subjects and subject teachers. There is thus a certain hierarchy between different subjects.

In the social subjects and Swedish the teachers have tried to think of other lines when it comes to avoiding linear thinking, to starting all the time from a basis that the pupils are supposed to know before they can proceed. The linear thinking is however obvious in a statement made by another social subjects teacher when illustrating how she tried to work enterprisingly in her teaching and thereby failed to make her teaching work.

The social subjects teachers have tried more than the others to initiate cross-disciplinary fields, and the social subjects are also regarded by the other teachers as most easily developable and being able to cooperate naturally with the surrounding community. Although cross-disciplinary work and cooperation with the surrounding community are explicit objectives in the curriculum, this may be a high threshold for the teachers to pass. Several of the teachers talk about meaningless constructions in connection with cross-disciplinary

teaching. One teacher says that there are far too many attempts to create a unity although it is not natural. The teachers themselves seem to find it difficult to see the connection among different subjects, which is likely to contribute to the pupils' understanding of the purpose of doing cross-disciplinary work. On the one hand they want to develop a cross-disciplinary working method. On the other hand they want to develop their own subjects, which a teacher expressed in this way:

MT1: *It's almost a collision in itself, the subject integration and then I'm supposed to strive as far as I can in my own subject. Swedish/Swedish2/English)*

For the teachers there is a state of opposition between working in a cross-disciplinary way and developing their subjects, since they experience that the cross-disciplinary element is conducted at the expense of developing their subject knowledge (cf. Bager & Løwe Nielsen, 2009). On the whole the concept of 'teaching and learning' seldom occurs during the teachers' talks. There is more of "we must have subject integration because we have decided to have it", than of wondering how cross-disciplinary working methods will enrich not only the pupils' learning but also their own learning. The teachers think, however, that assessment and marking constitute a hindering factor for the development of teaching methods. The pupils' fixation on marks in combination with questions of how they should be assessed and what should be assessed is a great obstacle, according to the teachers, as is also how the pupils should be motivated to think on other lines when it is the mark that is the goal, as exemplified by the following statement:

FT3: *When we had our brainstorming sessions, what we wanted was that the pupils would become enterprising, and in this case it was we who told them that you must do like this, because otherwise you will not pass, and then the question is: Do we make them [the pupils] enterprising in this way? (Social subjects/Swedish)*

The teacher's conception of how an open task is constructed is visualised in this statement. It is marks and assessment that create the task, and then it is a school task and not a genuine task. On several occasions the talks in the focus groups passed on to pointing out obstacles more than on focusing on the opportunities that enterprise learning might lead to.

5. Discussion

In this article I have accounted for how teachers in the focus group interviews talk about their school subjects and enterprise learning. What enterprise learning can thereby contribute to the teaching is not clear to the teachers in this study. One reason for this might be that there is no shared interpretation and understanding of the concept, which is in line with the existing definition problem but also with the staff's discussions being on a "doing level" and not on teaching and learning level. This is like the discussions of subject didactics that are conducted. How subject didactics is interpreted and understood affects the orientation and quality of the teaching, i.e. the practical activities.

In the shared discourse that the teachers have developed on enterprise learning the concepts

of ‘meaning creation’, ‘connection with reality’, ‘contacts with the surrounding world’ and ‘cross-disciplinary’ occur. In the discourse oppositions have however arisen. A common aspect is that the teaching must be meaningful to the pupils and be connected with reality. Not all subjects are however included in this discourse. Some subjects are accepted as not being possible to conduct enterprisingly, e.g. languages. The language teaching is hence excluded from the meaningful and reality-oriented aspects of the discussions. The same is true of mathematics. The textbook’s tasks are not considered meaningful but still constitute the basis of the teaching. Both languages and mathematics are also subjects that are not naturally a part of cross-disciplinary teaching and contacts with the surrounding world. With the aid of Bager and Løwe Nielsen (2009) we can understand that subject identities connected with conceptions of how teaching should be conducted in different subjects are a hindering factor for the teachers to think entrepreneurially about precisely these subjects.

It is also possible to find out that a lot of things are expected of the pupils. It is the pupils that should take responsibility and initiatives, but in what way and what this might imply and why the pupils should learn this are not included in the teachers’ discussions. Pupils’ participation in what should be meaning creating and connected with reality is an aspect that is not included in the teachers’ talk about enterprise learning.

Even if the discourse about enterprise learning includes meaningful learning, which also includes cooperation and cross-disciplinary teaching, according to the teachers, this is described as a challenge. Cooperation with the surrounding community and working life or between different subjects is still not regarded as a natural part of the teaching, which may be due to the lack of a connection to how this cooperation might contribute to pupils’ learning. There is no discussion of *why* cooperation should be included in the teaching. Teachers’ attitude to knowledge and learning is thereby neglected, what they themselves need to change at the individual level in order to reach a shared collective level. *What* needs to be changed in the teaching of the different subjects and *why*, are still questions that the teachers are wrestling with. On the other hand individual teachers, above all in social subjects, show how they have worked in various ways with developing co-assessment of pupils’ works and how they have tried to change their way of asking questions in order to develop pupils’ own thinking. Different traditions in different subjects seem to be of importance for how a development of the content and form of the teaching might be implemented. Mathematics is the subject in which it is most difficult to work enterprisingly, according to the teachers, but also that which is called more complicated knowledge in science subjects. Hierarchical thinking among school subjects also became apparent in the practical and artistic teachers’ opinion that they conduct enterprise learning but lack legitimacy for contributing to other subjects working more enterprisingly. Discussions between different subject teachers about development issues seem thus not to be a common way to go when it is a matter of exchanging experiences that might be of importance for changes concerning teaching in general.

The results show that entrepreneurial teaching and learning cannot self-evidently be transformed by the teachers into teaching and learning in their own school subjects. The teachers’ interpretation that the enterprising discourse includes teaching that is characterised

by connection with reality and meaning creation is the basis of an idea of an altered approach to teaching. In order to concretise the questions of *how* and *what*, the teachers emphasise contacts with the surrounding world and subject integration as a method, while the question of *why* is excluded. The dilemma that the teachers in this study are facing is combining rhetoric and practice and incorporating the didactic questions of *what*, *how* and *why* in their work. The focus of the how and why questions is placed not on the pupils and their learning but on the teachers themselves, who want to experience meaningfulness and have “fun” in their teaching. *For whom* is a central question here. It is pupils’ reality and meaningfulness in learning that schools should base their teaching on. By means of cooperation with the surrounding world and cross-disciplinary teaching the parts can be combined into meaningful wholes. Thereby the didactic issues have to be brought to the fore in order for the teaching to be meaningful, connected with reality, related to the surrounding world and cross-disciplinary.

Research on enterprise learning is in its early stage and the sample in this study is too small to allow any far-reaching conclusions. There is a need for further research, both longitudinal and comparative research. However, like all other teaching and learning projects, the study indicates that enterprise learning is a part of a didactic consciousness and can hence not be neglected neither in policy nor in strategies if the ambition is that “entrepreneurship should run like a common thread through the entire education system”.

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Note:

Swedish 2: Teaching of Swedish to pupils with other mother tongues than Swedish.

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