Danish University Colleges

Entrepreneurial learning in eighth grade

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Publication date: 2017

Document Version
Post-print: The final version of the article, which has been accepted, amended and reviewed by the publisher, but without the publisher's layout.

Link to publication

Citation for published version (APA):

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Entrepreneurial Learning in Eighth Grade

Introduction

The aim of this paper is to demonstrate the different forms of learning that emerge from teaching designed to initiate entrepreneurial competences. At the core, the study is interested in entrepreneurial teaching and learning. On the one hand, this presupposes reflections on the relation between teaching and learning in general, and on the other hand, we need to clarify what we mean by entrepreneurial teaching and, in the present paper primarily, learning.

The research Question the paper is directed towards is: How do entrepreneurial, authentic goal-oriented and instructional designs affect students learning outcome and identity?

As a research field, entrepreneurship and entrepreneurial learning in school education is still quite young (Rae & Wang, 2015), and most studies are interested in higher education programs (e.g. Robinson et al, 2016; Gibb, 2011; Frederiksen, 2017). The ones that explore entrepreneurial learning at earlier stages, e.g. secondary school, look exclusively for outcomes in relation to what we could call entrepreneurial competences, and they use mainly quantitative methods (Moberg & Vestergaard, 2013; Huber, Sloof, Van Praag, 2012).

In this study, I am interested in combining and linking secondary school students learning towards subject specific (in this case Danish as L1) curriculum related competences and sub-curricular entrepreneurial ones by the means of qualitative methods. An experiment was designed where the researcher intervenes by introducing an instructional design to the class teachers aimed at certain specific competences related to entrepreneurial and curricular competences.

In line with other researchers, (Pepin, 2012, Robinson et al, 2016) we assume that exploring entrepreneurial learning and teaching, especially when applied in primary and secondary school, posits a broader look at different theories and ideas about teaching and learning. For this, I draw on practice theory (Schatzki, 2016; Dreier, 2008; Holzkamp, 1995) and theory on identity and learning (Jenkins, 2003; Spears, 2011; Frederiksen, 2017). In this paper, I examine empirical data from two students (both female) who demonstrated different ways of positioning themselves, and the significant role this has on their learning outcomes. From recent literature (Frederiksen, 2017) this phenomenon suggests a close connection between learning in entrepreneurial educational settings and identity formation.

The paper sets out by introducing central themes and theoretical concepts, which the analysis in this paper draws on. What follows is a section on the context and the methodology of the study. Thereafter, follows an analysis of selected parts of a data corpus collected through the intervention. In the end, I present and discuss the findings from the analysis.
Section 1: Theoretical perspectives

In the following, I explain the overall concept of learning as it is initiated in the instructional design used in the intervention (see methodology section for more detail).

Expansive Learning

As it is the case with any instructional design, there is a significant gap between the intentions, goals and aims of the design and the outcome of it. The very varying and different receptions by the different students is at the core of my interest. I want to find out why and how students engage differently, how they make sense and meaning of the design. For this, I draw on different theories on learning, primarily on theories that consider learning as something taking place over time, across different contexts and depending on certain factors. All of this, being in close connection to what Schatzki (2016) refers to as coming to know, or even better to become. In this way, learning is a processual endeavour, where the learner is an active player, and what catches the learner’s interest is highly depending on the individual learners personal interests.

In order to understand meaningfulness from the perspective of the learner, we can perceive learning as personal trajectories of participation (Dreier, 2008). We call them personal because people personalise the sense of their experiences. In expansive learning (Holzkamp, 1995), learners reflect on their experiences by connecting them to other experiences and making sense of them in relation to who and what they are as persons. Learning expands from one specific learning experience to others. We call them trajectories of participation because people learn by participating in and reflecting on different practices. Therefore, in line with Dewey and others (Dewey, 2005; Pepin, 2012; Kolb, 1984), we see learning as experiencing and reflecting upon the experiences.

Learners are individual people, and at the same time, they are part of groups and wider communities, so they do not learn or make sense of the world on their own. Hence, learning is social and cultural. Learners participate in a number of different activities that belong to different life-areas, such as school or football practice sessions. Those are widely called communities of practice (Lave & Wenger, 2003; Schatzki, 2016). Participation in communities of practice presupposes some kind of interest or willingness from the side of the learner, which emerges when the practice in focus meaningfully enlarges and increases the learners influence on her life and its subjective quality (Holzkamp, 2013). In addition, it presupposes a portion of repeated practice. Learners become full practitioners by practicing skills and by gradually experiencing the activities of the profession in focus as meaningful (Schatzki, 2016; Lave & Wenger, 2003).

Entrepreneurial learning

Summing up, we define learning as personal and contextual. When we define the learning in focus as entrepreneurial, the above described concept of learning is part of this. Hence, in line with other educational researchers, entrepreneurial learning- and teaching is understood as a continuation or a new configuration of other theories on teaching and learning (E.g. Pepin, 2012). We see entrepreneurial learning as a continuation of the practice oriented definition of learning given above.
Nevertheless, we think that an entrepreneurial way of working and grasping the world, truly can add something valuable and new to education in school. By that, we do not mean that schools should educate all students to become entrepreneurs who start businesses, or that they should learn to know everything about entrepreneurship. The potential of entrepreneurial teaching and learning at school is more about pupils exploring opportunities, acting upon opportunities and thereby gaining a feeling of being able to contribute and participate in the evolving world they are part of. Thereby, entrepreneurship in education is a method rather than a specific subject to learn (Neck & Greene, 2011), and it is a mainstream component in most educational institutions and policies today (Gibb, 2011; Robinson et al. 2016). Ideally, pupils could go through school with an entrepreneurial mindset constantly looking for opportunities to turn creative ideas and knowledge about different subjects into entrepreneurial actions (Wang & Rae, 2015; EC, 2016).

In the present paper, we emphasize further more on competences regarding the activist side of entrepreneurial behavior (Reinert, 2003). Hence, we look at pupils’ ways of taking initiative and acting upon it. An entrepreneurial person is someone who does not only make abstractions, understands, reflects and has an entrepreneurial mindset. She is furthermore able to mobilize the will and the wit to move forward acting upon ideas and plans towards innovation (Reinert, 2003).

**Learning as identity building**

Identity and entrepreneurial learning, as we introduced it above, are in close connection to each other. For something to be in alignment with the learner’s personal interests, it must have something to offer for the learner to maintain and build on her identity. We see identity formation as the process of becoming someone (Frederiksen, 2017; Jenkins, 2003), where this process forces the learner to ask questions such as: who am I? Who do I want to be? How do I want others perceive me?

We emphasise that this process is not a purely individual endeavour. People position themselves (Spears, 2011) in relation to others, different groups and communities (e.g. female with an immigrant background or someone doing well at school). In this study, we look at identity formation as the individuals work with positioning herself in, outside or on the edge of certain groups or communities. Thereby, she navigates towards a personal identity by identifying differences and similarities between herself, who she wants to become and the different groups and ways of being in the social (Jenkins, 2003). The nature of a person’s work on positioning herself depends on her general need for either maintaining social stability or trying to achieve social mobility (Spears, 2011).

**The purpose of school learning in relation to entrepreneurial learning**

Such a contextual concept of learning as personal trajectories of participation in different practices is difficult to combine with learning in schools. Firstly because school learning does not normally start at the personal interests of the learner or the different identities of the learners. Schools, and the different subjects taught in schools, work by following a curriculum, which consists of themes and related learning goals. Learning in schools is meant to be administratively plannable, directed by goals defined somewhere else than in school or in the minds of the actual pupils. This makes the concept of learning presented above somewhat difficult to actualize in schools (Holzkamp, 2013).
Nevertheless, this is exactly the challenge I want to address in this paper. What happens, in terms of learning outcome, when we (aim to) combine school learning with entrepreneurial learning? Instead of criticizing schools for promoting defensive learning (see Holzkamp, 2013), we acknowledge that schools always will be depending on and directed by demands and goals coming from somewhere else, e.g. policy makers and educational researchers. The challenge then is to try to explore possibilities for pupils to learn in an expansive way under the given circumstances, also being directed towards curricular goals.

Section 2: Context and Methodology

The context for this paper is an ongoing interventionist Ph.D.-study (1.12.2016-31.12.2018). For the intervention, the study uses a design-explorative method inspired by Design Based Research (Barab & Squire, 2004). The researcher, together with self-selected teachers, developed an entrepreneurial and subject goal oriented instructional design. The design was then tested iteratively in two schools and five different classes, with 5 different teachers and approximately 125 pupils divided into 25 groups participating. The intervention took place on two levels. Firstly, the researcher intervened by suggesting and developing an instructional design with specific aims and for specific purposes. Thereby, he interrupted and disturbed the “normal” practice for the participating teachers. Secondly, the teachers then applied the intervention by testing the design with their pupils, disturbing their “normal” practices and ways of working in school. In the Ph.D.-study, the five different classes going through the process are seen as five different iterations of the intervention. Adjustments and revisions were made based on the prior experience.

The instructional design

In order to give readers an idea of what the pupils were expected to do and learn I will give a short description of the developed instructional design.

The design is called “The Communications Office”. Pupils are divided into teams of four, and each team is part of a bureau of communication that has been given an assignment, which is to find customers in the local area around the school. So firstly, groups of pupils are asked to map their network and mutual interests in order to find suited customers. Then, they contact those customers - it can be institutions, firms or individuals – in order to agree on collaborating for a couple of weeks. The task is to find and execute a communications strategy for the customer; produce texts, launch websites on different platforms, produce short films, produce flyers etc. During the period of text production, the pupils should be in touch with their customer, doing research, interviewing and so on. At the end of unit, the customers come for a presentation at the school, and they are asked to give the pupils a feedback on their work. The feedback should contain some “authentic” feedback to whether or not the pupils work can be used for “authentic” communication in the future. The idea is that some of the pupils work lives on, and is used as part of the customers’ external communication. The role of the teachers is defined as the leader of the communications office, and the design expects them to take on that role in full throughout the unit.

The learning goals for the unit are related to entrepreneurial competences, such as turning creative ideas into entrepreneurial action and collaborating and communicating with people outside of school. In addition, the
design aims at different learning goals related to the national curriculum for Danish, such as producing multimodal texts, being able to analyze and act within complex communicative situations and presenting their work in an authentic situation. In addition, they should learn to control a process with deadlines and milestones on the way to the deadline.

**Complexity and focus**

In practice, it soon became clear that the design experiment and the whole research approach was difficult to control. Although, it was never meant to be a controlled experiment, the complexity arising when teachers and students actually went through the unit, was striking. Therefore, focus shifted from looking for possible design principles and ways of refining and adjusting the design (Barab & Squire, 2004), to looking primarily at the interplay between the different teachers and students ways of interpreting the design; their sayings and doings pre, under and post the testing of the design. For this an ethnographic approach, inspired by Video Ethnography (Heath, Hindmarsh, Luff, 2010; Bezemer et.al. 2014), was adopted. Subsequently, the collected data was analyzed using methods for analyzing conversations and interaction between people and other non-human actors on the basis of primarily video material (Heath, Hindmarsh & Luff, 2010; Ayass, 2015; Sacks et. Al., 1974; Jordan & Henderson, 1996). In order to get a grip on the entire data corpus, I started with a Thematic Analysis (Braun & Clarke, 2006)

For this paper, and for writing up some of the observations, furthermore, an interactionist narrative approach (De Fina, 2015) is used. Taking on the perspective of two different students (Agnes and Aisha), trying to identify and understand their ways of constructing meaning concerning their identity, in relation to the four themes identified in the thematic analysis, their trajectories through the unit are written up.

**Empirical data**

Before I will present the findings from the thematic analysis and the two girls’ ways of going through the unit, I will give an overview of the data collected through the intervention. I collected:

- Audio recordings (5 x app. 30 minutes of audio recordings) and notes from individual semi-structured interviews with the participating teachers Marie, Peter, Stine, Katrine and Birte. The interviews were conducted prior the testing of the design with the primary aim to get teachers to talk about their values, beliefs and preferred practices as teachers. The interviews were transcribed verbatim.

- Video recordings and notes from semi-structured group interviews with students, centered on some specifically selected talking points (ref.). The method of interviewing students was adjusted after the first 2 iterations. Under the first iterations, students were only interviewed in groups of 5-6 prior the testing of the design. For the other 3 iterations, students were interviewed in groups prior and post the testing, and some students were interviewed individually post the testing. This change of method is due to a deeper understanding of what we wanted to get at, which is to understand students’ transformation processes during the testing of the design, rather than the design itself or the teachers. Altogether, app. 15 interviews à app. 30 minutes were recorded using a camcorder and a rack.
• Video- and audio recordings from observed lessons where students and teachers work within the design form the largest part of the entire data material. Approximately 120 hours of video- and audio recordings were collected. The purpose with using video-recordings was to get a registering account of the sayings and doings of teachers and primarily students, as they were performed in the social reality (Ayass, 2015; Heath, Hindmarsh, Luff, 2010; Jordan & Henderson, 1996).

• Field notes – app. 30 pages of written notes, typed on a computer in word.

Section 3: Analysis and Findings

Thematic coding and analysis

By viewing/listening through and analyzing, the video/ audio data, some significant preconditions for when students succeed with the desired learning, became evident. As mentioned earlier, learning is hardly predictable, and consequently it is quite difficult to point out what exactly led to the learning outcome, once the unit is over, whether it is a positive or a negative outcome. Nevertheless, a thematic analysis (Braun & Clarke, 2006) of the video-material shows some factors, that in one way or the other, and intertwined in all sorts of different ways, are present and influential through all the 25 groups work. In the following, I will describe these themes briefly, knowing that some of them apply to all sorts of instructional designs, whereas others apply specifically for the entrepreneurial design in this case.

1. The first theme is the students meeting with the outside world. It plays an important role how students communicate and collaborate with the customer they chose. At the same time the customers’ attitudes and ways of communicating and collaborating with the pupils is crucial. In some cases (8 out of 25) customers take the students very seriously, and in these cases customers truly believed that the pupils work could make a difference for their business or their institution.

2. The second theme is the teachers’ attitudes, sayings and doings during the unit. The five participating teachers were all challenged by the design experiment they had agreed to undertake for the study. Their reactions to the challenge varied significantly. A deep description of the teachers is not part of the purpose for this paper (see the discussion at the end).

3. The third theme is the students’ attitudes, sayings and doings as well as identities. Students’ attitudes towards learning in general, the subject of Danish and the entrepreneurial design varied significantly. In addition to their attitudes and beliefs, their actual abilities to act in new ways is influential when it comes to their learning/ their performances. In addition, personality and identity issues are at stake when they go through the unit. Personal abilities and skills related to whom they are and to whom they care to belong influence on their engagement and the outcome in the form of relevant learning results.

4. The forth theme is the mechanisms and relations within the different groups of students. The different boys and girls participating in the study act in alignment to which groups they want to belong to, and we see, how they act according to their status in the community, which is the class in our case. Given the fact, that the tested design is a rather alternative way of working for the students, and given, that this demands a certain willingness to change and change views on how learning in school takes place, this evoked quite different receptions from the different groups. The pre-existing social identities play a significant role for
the groups that are formed in the specific unit “The Communications Office”. Social mobility versus social stability, and a continuum between the two, shows how some groups where the group-leaders were interested in stability, had resistance towards the design. Others, where the members in the group had an interest in gaining status, and where they were interested in social mobility, had positive attitudes towards the design.

Narratives of interaction – different learning trajectories

The two students highlighted in this paper are both girls. Their names are Aisha and Agnes (pseudonyms). They attend the same school, different eighth classes and they have different teachers and thereby are used to different classroom cultures. When I chose Agnes and Aisha for this paper, it is because they differ in their ways of approaching and working in the Communications Office. They are opposites in many ways, as I will try to show in the following.

Learning from the perspective of Agnes

For Agnes, the design never led to authentic or expansive learning. It is important to mention though, that this does not mean she did not learn anything. She just did not learn what the design aimed for her to learn.

In order to understand why Agnes never learned the desired competences, we will have a closer look at her process through the 4 weeks the students worked within the “Communications Office”. Her work will be described through the lenses of the themes identified through the thematic analysis described earlier in the paper.

Agnes’ actions and sayings, beliefs and attitudes

Often during the unit, Agnes sits for herself, yawning and holding her head down or looking into a computer screen, often with headphones on. When asked how it is going with the project, she answers willingly and honestly. Often her answer is that they do not really know what their communications strategy should be, because Stian (customer) already is communicating with his customers on all possible platforms. Agnes states openly that she did not find the unit “The Communications Office” relevant according to her views on what she is supposed to learn at school and what she is supposed to do when she is at school. When she has a discussion with her teacher and the researcher, she very courageously argues for her point in front of the whole class. Figure 1 illustrates the situation. We see Agnes sitting in the windowsill, Birte (pseudonym for the teacher) standing up in front of the whole class and the rest of the pupils sitting on their seats, passively. Birte by far has the longest speaking turns, and she has most of them. Apart from Birte, Agnes and the researcher actively participate in the communication situation. The others listen or drift away in their own thoughts.

Researcher: it is (0.6) yes (0.4) [...] it is a kind of competition (.) [...] (0.5) > because the customer really shows up (.) if your work is not good enough, you will be told so (0.6) remember what we talked about earlier?

Agnes: there is not much competition in (0.4) what you have done (.) that it is not good enough.

[...]
Birte: that is not what I am saying, Agnes (.) that was not what I said.

Agnes: No but (.) that was what he said (.) that it is a competition, because then the customer comes and evaluates your work (.) and then –

Birte: yeah, but what I said now, that was imagine (0.5) that it actually was (.) and that is what you do not do (0.4) you do not even try (.) imagine it were a real competition where you were a communications office (.) competing with four other bureaus on getting the same assignment (0.3) there is people living of this (0.6) [...] one of my sons does (.) at least some of his work is something like this (0.4) and the better he is, the more money he can earn (.) [...] you could imagine (.) that you were in the same situation.

Agnes: Yes, but Birte (0.3) the difference just is (.) that he – it is something he is interested in (0.4)

[...]

Agnes: Anyway (.) I would rather do something else than this (0.6) if I am totally honest.

[...]

Agnes: I cannot really see what I get out of this. [...]

(Excerpt from transcription of video take 22.11.2016 using Jeffersonian transcription system).

Figure 1: Agnes discussing meaning with Birte and the researcher on the 22.11.2016
Agnes has daily discussions with Birte, discussing the meaning with the unit. The one in figure 1 is exceptional though, because it is going on in front of the whole class.

In general, Agnes does not approve to the idea of entrepreneurial learning. Agnes says that learning is a very individual thing. When asked in an interview post the unit, if it would be a good idea to design more teaching and learning designs where students work entrepreneurial, she says that it depends on the student:

“If you want to work in the field where you help others, make a difference for them, then this would be a good way, but if you just want an ordinary job, this is not a good idea” (Excerpt from transcription of post-interview).

She does not want to generalize about what is the most important when it comes to learning. Her response to the statement: Danish is the most important subject in school, is a clear no, it is not. For her this depends very much on the individual person learning. Agnes focuses a lot on meaning. She reflects upon what makes sense to her, and she reacts critically when put into a situation that she cannot find meaning. In line with most of the other students in her class, she does not think that school necessarily should prepare pupils for real professional life after school. In recordings from the post-interview, she furthermore says that it never became clear to her, what they were supposed to do, how the texts they were to produce for their customers had to look like, and what they should consist of. Agnes is not the kind of pupil who thrives with open tasks in school. She expects her teacher to be specific and precise with regard to the texts, she wants pupils to produce.

Agnes in a team

Apart from looking at Agnes own personal sayings, doings, beliefs, and attitudes, we will now have a look at her way of engaging with her group. Agnes was in a group with three other pupils; Morten, Kiran and Soraya. The first thing that strikes the researcher is the fact that Agnes group hardly ever is seated in a way, which allows all four of them to communicate (see figure 2). The occasions when they communicate all together are always due to explicit teacher instructions.
Figure 2: Agnes group working

Observations of the group’s work show that it is always the same two people (Morten and Agnes) in the group, who take initiative, take decisions and speak for the rest of the group. Moreover, between these two people there seems to be a rather clear pattern of their roles, one being the optimist and the other being sceptic and more pessimistic:

Hence, when the group talks about ideas for their communications strategy, Agnes often is the one questioning relevance and quality of the ideas:

Agnes: *But they already have an Instagram profile!*

Morten: *Yes, which is half a year old...*

The collaboration between Agnes, Kiran, Morten and Soraya is unchanged. They do not sit together all four of them. They do not talk all four of them. They do not take decisions. They just go on discussing the same over and over again” (field note, 23.11.2016).

The other two members of the group, Kiran and Soraya, are mostly quiet. They do not bring up own ideas or take own initiatives for action. Often Soraya sits on her own, looking on her phone or computer. Kiran is mostly situated close to Morten, talking about all sorts of things or just being quiet.

The dynamic within the group, as described above, will now be supplemented by a description of the group’s choice of customer and the nature of the collaboration between the group and the customer.

**Agnes and the outside world**

The group picked a local fishmonger, Stian, to work for. He is a busy man who works from early in the morning until late, as reported by the pupils themselves. The reason to pick the fishmonger is an anecdote from Soraya, who had some pleasant shopping experiences with her aunt when they visited the shop. They did not hesitate for long when they had to pick a customer to work for, and their teacher Birte did not follow the instructions in the design, where it says that pupils should consider different options, discuss the options and end up with the best possible customer according to all the group members interests and relevance criteria. From the beginning, it seems as if they lacked an authentic genuine interest in working with their customer. They like Stian, but they do not really see any meaning in working and communicating for him.

This seems to go the other way around too. Stian is described as a busy man who does not have much time to talk to the pupils. Birte and Raffaele regularly point to possible ways to approach the task, e.g. by referring to the research-section in the project-folder, which pupils have been given in the beginning of the unit. In the folder, there is a section on how they can observe, take notes and another on how to conduct interviews. The group uses Stian’s busyness as an argument for not following instructions in the project folder.

In Agnes and the group’s sayings, there is a predominant discourse on how meaningless it is to communicate for Stian, because he already is communicating on all the available platforms, Facebook, own homepage etc.
The teachers influence on Agnes

Teacher Birte is 61 years old. She has been a schoolteacher for 25 years, and before that, she worked as a research assistant at the University with a master degree in Anthropology. She is very eager to talk about school and education in general. Her views on entrepreneurial designs and entrepreneurial learning and teaching in school are of a critical nature. She says that anyone has to learn basic skills and gain basic knowledge before she can start acting entrepreneurial. Her arguments for this derive from her own experiences when she was younger, and her experiences with her pupils participating at innovation competitions, and additionally refers to her son’s experiences (Different interviews with Birte).

In the eyes of the pupils, Birte is a very knowledgeable teacher, who also is liked by them. Birte often puts an arm on the pupils’ shoulders, and she is always openly engaging in conversations with her pupils. She likes to discuss societal issues. For example, she brings with her newspaper articles, which she shares with her pupils, asking them on their opinions.

In line with her views on entrepreneurial teaching and learning in school, she took an extraordinary decision (compared to the other teachers) with regard to the design “The Communications Office”. She split the class into those who would benefit from being part of the design experiment, and those who would not. After a week, about half of her pupils were working on other tasks, mainly filling forms with grammatical training exercises. I had some lively discussions with her about this, because I found it intuitively wrong to exclude half of the class from working in the communications office. Birte kept on arguing for her decision by saying that the pupils not participating would benefit more from other tasks, which then again would give them better chances to succeed at the final exams. Therefore, Birte did not buy my argument, and one of the intentions of the design, where students, through working in the Communications Office, acquire formal curriculum related competences and entrepreneurial ones at the same time.

In practice, this meant that Birte had to be teacher for two different groups working with different tasks, at the same time. In comparison with the teachers in the other classes, Birte spent very little time on instructing, scaffolding and modelling (video-observations). A typical lesson started by Birte telling everyone to get started, and then she would go talk to the pupils who needed help. Agnes’ utterances during the post-interview where she calls for more specific and detailed instructions have to be seen in that light. She asks for examples of possible texts, they could produce for the customers, and she wants to know, how producing communications strategies and texts for the customers connect to the learning goals for the subject Danish (Agnes, interview post intervention).

Learning from the perspective of Aisha

Aisha is pupil in 8.y in the same school, a parallel class to Agnes’ class. They are only 16 pupils all together, and their teacher, Stine, is replacing another teacher who is on maternity leave.

As mentioned earlier, Aisha is opposite to Agnes in many ways. In my interpretation, I try to understand the main differences between the two girls by exploring what and how they find and see meaning or not during the unit. Additionally, how their identities as persons and as pupils influence on their learning. In contrast to
Agnes, Aisha is interested in social mobility. She is clearly searching for ways of being a good student, ways she has not yet found.

Aisha’s actions, sayings and beliefs

Aisha: “Today really meant a lot. [...] my group and I usually do not take school very serious. [...] In this project, we all took it serious. Today I am really happy.”

R: “What is the difference between this unit and what you usually do in school?”

Aisha: “Something with being outside of school, you work together a lot. You do not get so much help from your teacher, you do things yourself, such as editing your text... you have to communicate with people, and do everything yourself, as if you are a teacher yourself. We don’t usually do that... and getting another person to come to our school to listen to us... that’s why...”

(Excerpts from interview with Aisha after the presentation for their customer).

For Aisha it made a difference to work entrepreneurially. She appreciates having the opportunity to work independently, as the quote above shows. From the very beginning of the unit, she seemed motivated and willing to act on the ideas her groups came up with. When the group is on the way to their first meeting with the customer (a Kindergarten), the researcher follows the girls with a camera, taking photos and short videos. Aisha goes up and down talking to the others rehearsing what she wants to say to the people in the kindergarten, smiling and giggling (see figure 3).

![Figure 3: Aisha on the way to first meeting with customer.](image)

In general, this positive attitude towards the entrepreneurial design lasted throughout the unit.
Aisha and her team

Aisha’s team consisted of four girls, Aisha, Samira, Julie and Azra. They describe themselves as best friends, and their teacher, Stine, put them together in a group as an experiment. She wants to see if they can work together. Usually, none of them performs above average in school, according to Stine.

Throughout the unit, the group works well. The girls supplement each other, and all of them seem to contribute equally. The outcome of their work is very positive. They pursue different strategies for communicating and branding the Kindergarten. One way is by producing a commercial film to be uploaded on the homepage, another one is to produce flyers and distribute them in the neighborhood. The flyers had a specific purpose, which was to inform the community about an idea for a sense room for the children. The room is empty now, and there is not enough money to get it furnished and accommodated, so Aisha and her groups decided to collect money by going from door to door talking to people and handing out the flyers (interview with the girls).

Aisha’s meeting with the outside world

Aisha and her group visit the Kindergarten 3-4 times during the unit. They mostly meet with Lene, who is the leader of the institution. Lene says repeatedly that she is very interested in working together with the girls. She generally likes the idea of different institutions in the area working together.

The girls also talk to children and other grown-ups from the institution. They conduct interviews with five children and some of the employees. The girls’ work impresses Lene, and at the presentation in the end, Lene gives a positive feedback to the girls, which lasts for about 4 minutes (video observations). The girls are touched and proud, as the series of stills shows:

Figure 4: Series of stills showing proud body language

Teacher influence on Aisha’s work

Stine, Aisha’s teacher, was supportive throughout the unit. Compared to some of the other teachers, she did not spend much time on modelling and instructing the pupils which partly is because she was not participating in the project from the beginning. Nevertheless, video recordings and interviews show that she gradually became more involved and engaged, and she ended up being very positive and emotionally touched, e.g. When her pupils have success presenting their work for the costumers...
Comment: the last part on Aisha’s work is missing some examples, quotes... this is due to lack of time and space.

Section 4: Conclusion and discussion

Conclusion and lessons learnt

Registering learning processes through the lenses of Aisha and Agnes allows for two very different narratives with two different outcomes. For Agnes the design never led to expansive entrepreneurial learning. Her identity as a student, in the learning environment she is used to, is strongly and widely developed, but seems to remain fixed. In the study, data shows how Agnes has a strong resistance towards the new design. At the same time, Agnes is the kind of student who speaks well for herself. She has her own opinions, and she reflects on questions of learning and the purpose of schooling. The idea of entrepreneurial learning as a form of learning, where pupils learn for life, also life after school, is not one she agrees.

For Aisha, the entrepreneurial design opened up for her to gain a new and more meaningful identity as a pupil. She took the new opportunity and found new ways of learning. Her learning trajectory involved getting in touch with and collaborating with her classmates, who also are her friends, and with people outside of school. In addition, she looked for, and found, opportunities to act on ideas in an entrepreneurial way. In collaboration with her team, she even managed to collect money for the purpose of helping the institution, they worked for. The most significant outcome of her learning trajectory is her changed view on herself as a learner. She expresses to have gained a different kind of motivation for learning. Aisha’s teacher’s way of supporting and helping when it was necessary was just the right way to facilitate her process. She enjoys to work more freely and independent, which the design opened up for.

By looking closer at the two girls in this paper, I demonstrate how there are very different positions for pupils to take. In the data for the Ph.D.-study as a whole, these positions are extreme positions, and most of the pupils position themselves somewhere in between Agnes and Aisha. Both girls described in this paper, can teach us something. Aisha teaches us about the necessity to let pupils work independent from too much teacher control. She shows us how pupils independently can achieve good results that even lead to making small differences to the world outside of school. Aisha had been given the opportunity to pursue an idea actively, she took that opportunity, and she became someone else as a pupil. Hence, she teaches us that under certain conditions, entrepreneurial learning designs can lead to expansive learning and change, in a positive sense, of pupils’ identity as learners. Furthermore, she teaches us that this process of learning and becoming is closely related to collaboration. By finding good ways to collaborate with her classmates, she gets engaged and achieves results. She experiences that it is worth the while engaging in a project, because it leads to a good result and some very positive feedback and recognition by teachers and customers.

Agnes teaches us that entrepreneurial designs have to be supported by teachers and the people outside school participating in the process. She does not just accept that the unit makes no sense to her. She reacts by asking critical questions and continuously expressing her doubts towards the design and the whole project around entrepreneurial learning. She is not willing to go for a new opportunity to become a learner in a new way, as
long as this new way does not make more meaning for her. In that way, she teaches us that entrepreneurial designs have to be anchored in motivated teacher communities, they have to be in alignment with other dominant practices and discourses about school, and at last, they have to be thought through by the practicing teachers. Agnes, although being an extreme case, was not alone with her frustrations in her class. None of the pupils from Agnes class had success with getting customers to come and hear the presentation in the end of the unit.

Discussions and limitations

Looking at entrepreneurial learning as becoming someone closely connected to people’s identity formation processes, the findings lead to further discussions on how this process can be facilitated in the best possible way. Teacher attitudes, sayings and doings play a role her, but also the pupils own attitudes, identities and ways of understanding themselves, learning and school seem to matter quite significantly. By looking closer at the two girls in this paper, we see how there are very different positions for pupils to take. From listening to the discourse of the teachers, we learn that there is a certain discrepancy between the entrepreneurial design experiment and its aims and purposes, and other dominant discourses teachers and pupils are directed towards (interviews with teachers), such as goal oriented learning, testing and learning basic skills allowing for higher education after school.

There are some obvious critical issues in presenting data in the way, this paper does. Whenever regularities are identified in some direction, other pieces of data dismantle the line of argument, which is being established. Writing up the two girls as opposites, one being open for new ways of learning and social mobility, and the other being opposed, is only one way of seeing their work. Nevertheless, the idea is to show how various different factors, organized in themes, play together and in some way are influencing the learning outcome of the pupils. Although, the empirical data support the two narratives where the girls are opposites, it is still a simplification of the social reality behind.

Another limitation is the question of measurement and generalizability. In the case of Aisha, we see some signs of her positively changed attitude and even some results of her learning. However, it still seems just as difficult to measure learning, as it is to predict a learning outcome. In this study, we try to register signs of learning by video filming the people involved in learning. This gives us recordings of pupils for example being engaged, showing positive and active body language or hanging their heads most of the time. Still, the same pupils who were engaged the one day, may have been disengaged and absent the other day. Pupils in school are not hired workers. They are children after all, and they act and react according to many contextual influences around them that often relate to social relations and emotions connected to puberty and other issues (interviews with individual pupils) that may have nothing to do with things going on at school.

A clear limitation is the relatively small time scale of the study. By only being in the field for 5 weeks for each iteration, I only got access to the social reality for a relatively small timespan. In the case of the two girls, for example, I cannot say anything about any long-term learning outcome, the design and the actualization of it, may have caused. Aisha, for example, may just have gotten back to normal, and it is unsure, whether her
identity as a pupil behaving and thinking entrepreneurial, will last. Although, her teacher says in the end of the period that she intends to build on the girls’ new won identities.

References


