

Article

# Entrepreneurship Education with Companies: Teachers Organizing School-Company Interaction

Kaarina Sommarström , Elena Oikkonen  and Timo Pihkala 

School of Engineering Science, Lappeenranta-Lahti University of Technology, Yliopistonkatu 34, 53850 Lappeenranta, Finland; elena.oikkonen@lut.fi (E.O.); timo.pihkala@lut.fi (T.P.)

\* Correspondence: kaarina.sommarstrom@student.lut.fi

Received: 24 August 2020; Accepted: 26 September 2020; Published: 29 September 2020



**Abstract:** Previous research into entrepreneurial learning has focused mainly on defining its aims; however, there seems to be little discussion on understanding the barriers or incentives involved when carrying out the pedagogical solutions that would enable entrepreneurial learning. In this study, we examine basic education level schools' cooperation with outside partners, especially from the school principals' and teachers' viewpoints. The study aims to understand the perspectives of teachers and principals on planning and organizing school-company interaction. To do this, content analysis was used in this qualitative study. The data were collected via semi-structured interviews with school teachers and principals, involving a total of 35 people working in basic education. The findings of the study show that principals and teachers intentionally select long-term cooperation methods to meet the aims of entrepreneurial learning. On the other hand, teachers that have chosen to apply short-term school-company cooperation methods have highlighted the ease of these methods rather than learning. Finally, our findings suggest that planning and organizing entrepreneurial learning would benefit from school-level commitment where collaboration between teachers and between teachers and company representatives is valued. We believe that would lead to more satisfied teachers and longer-term school-company cooperation, and also believe that short-term school-company cooperation methods would better meet the aims of entrepreneurial learning.

**Keywords:** entrepreneurship education; entrepreneurial learning; teachers; school-company interaction

## 1. Introduction

The recent report of Innovation Cluster for Entrepreneurship Education (ICEE) [1] indicates quite clearly that students' entrepreneurial learning benefits from a long-lasting entrepreneurship education experience. While many short entrepreneurship education events may cover learning for entrepreneurship and about entrepreneurship, only long educational interventions also consider the concept of entrepreneurship through entrepreneurship itself [1,2]. This suggests that through genuine long-lasting participation in the entrepreneurial process, a student would be able to gain the knowledge, attitudes, and skills needed for entrepreneurship. Surprisingly, the research on entrepreneurship education has barely touched on the issue of long-lasting entrepreneurship education methods [3]. While Johansen's report [1] focused mostly on students' perceptions of their learning, teachers' perspectives on entrepreneurial learning and especially on the organization of the entrepreneurial learning have been understudied. In this study, we focus on one important part of entrepreneurship education, namely entrepreneurial learning. In particular, we aim to understand schoolteachers' and principals' perspectives on planning and organizing entrepreneurial learning in various school-company settings.

Multiple studies on entrepreneurship education have argued for the importance of entrepreneurship education in a real company environment [4–13]. Cooper et al. [4] present the continuum of experiential

learning in entrepreneurship education and suggest that deeper learning occurs as a student's level of involvement in an entrepreneurial activity increases. From this perspective, any real-life experience cannot be valued in the same way as an equivalent level of learning, but its benefits do depend on the way that real-life experiences are organized. However, organizing real-life experiences seems to be a challenge for teachers [3,4,14,15]. Author et al. [16] in their study on paradoxes in school-company interaction show how teachers struggle with the plans, implementation, and different outcomes of real-life experiences. They suggest that teachers' perspectives on entrepreneurship, their competencies for interaction with companies, and the high standards that teachers set for these educational practices strongly affect the solutions they choose.

Cope and Watts [14] introduced the concept of entrepreneurial learning, referring to how entrepreneurs learn and how they learn best. Over the years, entrepreneurial learning has gained ground in research and according to Pittaway and Thorpe [17], the key is the teachers using pedagogy that connects students to the world of entrepreneurs. Kickul et al. [7] state that students can 'go real, go deep, get feedback', referring to real company knowledge and a real company environment. Neck and Greene [18] claim that students benefit from doing and then learning rather than first learning and then doing, as young students may lose interest when they must learn about something that is unfamiliar or abstract.

Connection to real-life cases and an authentic enterprise environment in entrepreneurship education are emphasized and requested by many researchers [9,10,19–23]. For example, Roehl et al. [24] call for a learning environment that allows students to participate actively in the learning process. Active participation in entrepreneurship education provides working-life skills and greater entrepreneurship intentions for students [25,26]. Jones and Iredale [6] note that it is worthwhile for students to make mistakes in a safe context and that this contributes to learning. According to Powell [27], students are more involved in learning outside school than in a traditional classroom setting.

We suggest that understanding the requirements and processes related to the organization of school-company interaction is crucial if we are to promote students' entrepreneurial learning in real-life contexts. Consequently, this study aims to understand teachers' and principals' perspectives on organizing school-company interaction. The research question is 'How do principals and teachers experience school-company interaction and the organization required to make entrepreneurial learning take place?'

In this study, we use the Cooper et al. [4] study as our starting point. They [4] utilize the following as factors for obtaining in-depth learning of entrepreneurship education: (i) teachers' educational technique, (ii) students' degree of interaction with company representatives, (iii) proximity to entrepreneurs as a source of students' learning, (iv) students' opportunity for questioning during their entrepreneurial situation and (v) students' involvement. We agree with their approach, but aim to take a step towards teachers and principals and therefore leave students' views in the background. This paper uses the modified table (Table 1) to describe above-mentioned current entrepreneurship education techniques to meet our focus, which is understanding the requirements and processes related to the organization of school-company interaction. Therefore, we added columns titled "People involved from school" and "Duration of interaction". Cooper et al. [4] model has elements describing how students interact with entrepreneurs (in the original model "Proximity to entrepreneur as the source of learning" and "Opportunity for questioning regarding the entrepreneurial situation"). In our modified model these aspects are included in a column titled "Students' involvement". The modification of Cooper et al.'s [4] model allows us to analyze the teachers' position in a new light as the central operator making the learning possible.

**Table 1.** Entrepreneurship Education in cooperation with companies (Modified from Cooper et al. [4]).

Education Technique	People Involved from School	Degree of Interaction and Teachers' Roles	Duration of Interaction	Students' Involvement; Depth of Learning
Partnership	Principals, all teaching staff, and students	Intense Entrepreneurship embedded in school program	Class-company relationship lasting several years	Extremely high, students at the left of the learning process
Mini-company	Teacher with students	Intense Companies as advisors in students' businesses	Usually one School year	High, students participating as entrepreneurs
In-company project	Principal, teacher with students	Intense Several student-company meetings	From a few weeks to semester	High, students contributing to the company
Company visit	Teacher with students	Medium Activity relies on the teacher	A few hours, half a school day	Moderate, possibility for discussion and questions
Entrepreneur in class	Teacher	Medium Activity relies on the teacher	Usually One lesson	Modest, students as listeners, may have the chance to ask questions
Online session	Teacher	Low Teacher-led	One lesson	Low, face-to-face connection via internet, possible to ask some questions

The highest level of real-life experiences, longer-lasting school-company partnership models (Table 1) are considered to be somewhat challenging to organize, yet also fruitful and useful for students and teachers [3]. For partnership models, more or less formal agreements are important where both the partnering company and the school representative agree on joint activities and aims. Ruskovaara et al. [28] suggested long-term development projects, mentoring, sponsorship, and visits as useful partnership practices. Understandably, those practices require different timeframes for planning and implementing. Long-term cooperation includes recurring visits, cooperative projects, and different partnerships that give students the opportunity to participate in some company functions.

Mini-company exercises are shorter than school-company partnerships (Table 1). These are projects where students create a real company that operates, for example, for a single school year [29–32]. The students take different roles in their company, and learn idea generation, business planning, marketing, budgeting, and selling, among other things [12,33,34]. The mini-company is created by a group of students who thus also learn team-working, communication, management, and leadership skills. According to Mwasalwiba [35], these are also the most common course contents in entrepreneurship programs. Further, according to Powell [27], students' self-selected and self-directed experiential activities give them great experience in dealing with uncertainty.

Students learn through on-site experiences while participating in different projects organized together with companies [3,5,6,15,17,19,25,36,37] (Table 1). In the field of social entrepreneurship, this form of learning is also called service learning [38,39]. These in-company projects typically last from a few weeks to a whole semester, and companies may organize diverse assignments for students. Activities outside the classroom, and real-life connections are highly valued by students and educators [4,40,41]. Further, students may also be encouraged to come up with solutions to company challenges where they use their imagination and creativity and connect elements from different school subjects as a solution [35,39,40,42].

Company visits are usually fairly short occasions, each taking a few hours [3]. They provide an authentic environment where the students can see, feel, and get in touch with the real-life corporate

world [4]. The downside is that students' opportunities for learning are only moderate, as the visits follow certain predetermined schedules. Even so, there may be some room for discussion and questions during company visits [3] (Table 1).

The entrepreneur in class option means that a representative of a company visits students and gives a presentation about the enterprise [17,18,35,43]. Students listen and remain rather passive except for a possible occasion to ask questions (Table 1). The visits are quite short, usually one lesson. Online sessions use the same teaching technique as if the entrepreneur were in class, the difference being that a company representative has an online connection with the school class through which they discuss company activities. Students may also be asked questions about the companies [17,44].

While real-life learning has plausibly been covered in earlier studies, less is known about what teachers should do to enable entrepreneurial learning. Some researchers respond to this by pointing to pedagogical approaches. For example, Cheng et al. [45] as well as Smeets and Mooij [46] note that entrepreneurship education stresses the importance of methods that put the learner at the center. The other route has been to focus on entrepreneurship education practices and their implementation. These practical solutions have included, e.g., broadening the teaching and learning environment by completing stand-alone company visits that take a couple of hours [8,42,43,47].

There is still considerably little knowledge about long-term company cooperation, during which students could get to know the diverse activities in the partner companies and participate in their joint projects [5,15,22]. These long-lasting processes would have the best learning benefits [1] and would facilitate the students learning by doing and being entrepreneurial [48].

#### *Planning and Organizing School-Company Interaction*

Interaction with companies requires planning and preparation, as it usually means changes to the normal lesson schedule. Schools create their curricula for one year at a time, which include guidelines, objectives, and events for the coming year [49]. A curriculum also should include functional lesson planning in order to create meaningful learning [50].

When planning a new school year, the teaching staff is expected to maintain a balance between different subjects, whilst also taking the main subject characteristics into account. A plan should deal with different ideas with the same level of importance [49], although difficulties can arise due to the different fields, characteristics, familiarity, and know-how of the staff. For school-company interactions, planning includes determining the time resources for interaction, negotiations with other subject teachers regarding students' timetables, and outlining the preparations for and objectives of the upcoming interaction. In practice, similar demands have to be met for both short company contacts and long-term cooperation, including by considering preplanning, safety, a budget, teachers' skills, time, snacks, and chaperones [51].

The school principal has a key role in the planning as well as in the implementation of these plans, especially in cases of long-term cooperation [52–54]. School-company partnerships and in-company projects require commitment from the school. These methods may require the school to organize the schedules, which could be impossible for individual teachers. The principal's key tasks are to lead organization and coordination [55,56], lead response development, and provide a long-term view of this engagement [57]. At the same time, the principal should create a positive learning attitude, be inspiring and supportive for teachers, and manage new collaborations with other agencies that serve children [52]. The principal can also be a motivator [57] and enabler when students are interacting with companies. The learning environment for this type of interaction changes from a safe classroom to an unfamiliar place, and teachers should know that they have the principal's support in case the results are not very successful [52,58,59].

The different school-company interaction techniques require different amounts of planning and organizing. According to Sommarström et al.'s [3] study, the time horizon for planning and organizing the interactions with companies should be aligned with expected learning objectives. School-company partnerships, mini-companies, and in-company projects are intense and require teachers' active

participation in the interaction (Table 1). However, responsibility for the interaction is shared due to its nature, with principals, peers, companies, and students playing a part as well. It seems that while requiring planning, agreements, and organizing, the long-term interaction models provide students with excellent possibilities for entrepreneurial learning in real-life contexts. The short-term interaction models, including company visits, entrepreneurs in class and online sessions, in turn, seem to rely heavily on the teacher's personal activity. The models also require planning, agreements, and organizing, but seem to offer less for the students.

Entrepreneurship has not reached the same status as other subjects, since it seems to be a missing element in curricula [40]. The lack of legitimacy may lower teachers' interests in school-company interaction, as the introduction of new pedagogical approaches may make teachers feel professionally vulnerable [16,60]. Teachers' enthusiasm for and skills in outside-classroom education are also influenced by their previous relevant training and peer teacher mentoring [61]. With no collaboration between teachers [61] regarding company cooperation, these interactions are more difficult to organize. It particularly energy-consuming to negotiate opportunities to interact with companies. Due to the extra work needed to arrange school-company interaction and outside activities, teachers' personal interests and backgrounds are decisive factors in whether these events are organized or not [43]. Furthermore, as the predictability and control of the teaching situation decreases in events outside school, teachers may choose to stay in the classroom rather than doing outside activities [15].

## 2. Materials and Methods

This study applies a qualitative methodology and thereby utilizes a conceptual framework [62], since the focus of the study is to understand teachers' perspectives [63] regarding the interaction between schools and companies. The strength of qualitative research is that it provides for understanding a phenomenon as it is seen by participants [64,65]. This study involves human behavior of the school personnel across subjects within schools and the building of bridges between school classes and companies, meaning qualitative methods are preferable [66,67]. The data were gathered with semi-structured face-to-face interviews, with teachers and principals providing information on the basic education level in their schools.

In the analysis, qualitative content analysis was used as a methodological tool. It is useful when a study aims to explore and deepen understanding of human experience that can be multifaceted and varied in description, depending on the respondent [68]. In the initial analysis, the data concerning teaching approaches in entrepreneurship education and the degree of interaction with companies were closely and carefully examined and compared with corresponding explanations [69,70]. In the next stage, the categories were divided in content-related subcategories, modified from Cooper et al. [4] according to education technique, that is, partnership, mini-company, company project, company visit, entrepreneur in class, and online session. The next step was the analysis of the organization, the processes, and the requirement needed to organize these education techniques, with special focus on understanding which people from the school were involved, what was the teachers' roles, and the degree and duration of interaction. The similarities and differences in the statements were compared. Finally, as a result, each technique and respondents' perspectives on planning and organizing entrepreneurial learning are presented.

### *Sampling and Participants*

The study was conducted in Finland. The Finnish national curriculum recommends but does not require schools to adopt entrepreneurship in schools' teaching programs [69]. Hence, Finnish schools can choose whether to include entrepreneurship education in their curriculum and, if so, in what way and to what extent. Thus, the alternatives are either to have entrepreneurship embedded in the teaching program across subjects, as a separate subject among other subjects, or not to adopt it in the school program at all. The Finnish National Board of Education exhorts schools to cooperate with companies for any of the subjects that they teach, even though entrepreneurship is not a compulsory subject in

Finnish schools. The Finnish National Curriculum recognizes a few transversal competence areas, one of which is working-life competence and entrepreneurship [71]. Further, the Ministry of Education and Culture [72] provides some brochures that encourage the teaching of entrepreneurship and suggest how to both start and proceed with entrepreneurship education. The schools have autonomy to make local decisions [71].

The data comprise interviews with a total of 35 people (24 teachers, 11 principals), all from different schools, working in basic education with students aged between 13 and 16. In the Finnish schools, the principal/school manager's duties involve leading and representing the school, but also teaching some lessons in a subject in which he/she has a teaching background. The principals interviewed in this study took the role of a teacher when discussing how to include entrepreneurship education in teaching practices and the role of a principal when discussing development and how to embed entrepreneurship education in school practices. Out of the respondents, seven people had no contacts outside school; 21 people made visits to cultural places, non-profit communities, or companies when an opportunity was offered; six people had developed long-term cooperation with companies. The respondents were selected from schools both in urban and rural areas across Finland in order to get data that were as comprehensive as possible for this study. The duration of the interviews varied from 17 to 81 min depending on how long and how detailed the respondents' descriptions were. The interviewees used their schools' home language – either Finnish or Swedish. The interviews were recorded and transcribed in their original language, but in this study, the quotations have been translated into English to facilitate readers' understanding of the respondents' statements.

The interviews used a pre-made framework of questions. These included questions about interaction with companies, planning activities, implementation of interaction, teachers' collaboration, resources for delivering lessons outside the classroom, practical arrangements, and learning objectives. In semi-structured interviews, it was possible to ask additional questions in order to obtain a comprehensive picture of practices applied by principals and teachers in entrepreneurship education. The interviews started by asking about company visits and cooperation with companies. Additionally, the respondents were asked about visits to non-profit organizations in order to be able to outline the school's general practices regarding activities outside of school.

### 3. Results

This section presents the outcomes of the study. We aim at describing the education techniques, activities, and interactions of different stakeholders used in school-company interaction and present respondents' perspectives in planning and organizing these techniques from the viewpoint of entrepreneurial learning. We start with the long-lasting interactions and continue to short-term ones.

#### 3.1. Partnership

Teachers' and principals' experiences about partnerships brought out some interesting insights. First, the motivations for engaging into partnerships with companies seem to center around student learning. That is, principals and teachers indicated that they had weighed up different forms of company cooperation, and selected partnerships due to the better possibilities they provide for entrepreneurial learning. One of the respondents put the thought into words by saying:

Of course, we could just make company visits, but I think the students would get a less structured image of the business world or a company's function. I think it is better to have a three-year partnership with a company to discover how it works. (Interviewee 9, principal).

Second, even if partnership is the main model for school-company cooperation, principals and teachers find the organization of partnerships to be rather easy. This finding may arise from the shared responsibilities related to negotiating, planning, organizing, and following the partnership. The respondents explained that the principal, class teacher, and students choose possible partners together. The findings are in line with previous results by Leffler and Svedberg [8], who suggested

students being in the key role to impact the choice of a partner for long-term cooperation. The shared responsibilities expand to the actual instruction during the cooperation and concern the joint activities between teachers. One of the interviewees put this sentiment in words:

I think that teamwork, that is collaboration across subjects, will increase in the future. For example, the agreement on mathematics, study counselling, and other reporting tasks when the students may need help from different teachers provides an important value add. (Interviewee 28, principal)

While shared responsibilities lower the threshold for partnerships, the principals seem satisfied due to noticing that partnerships could be a way to increase collaboration between subject teachers. As a result, they can develop the pedagogical practices in their schools and the embeddedness of entrepreneurship education in the school program. Furthermore, embedding partnerships in the school program supports the legitimacy of entrepreneurship education for teachers [16,58]. Our findings would seem to imply that teachers feel comfortable to continue in partnerships once they get involved in them.

### 3.2. Mini-Company

The creation of a mini-company is a long-term method for entrepreneurship education. Usually it lasts a period of one school year, the start-up takes place in the fall, and the business will be liquidated in the spring before the summer holidays. The availability of mini-companies depends on school-level decision-making, which affords the method credibility and legitimacy. Mini-companies may be available for students to choose as optional studies. It seems that the method is popular among the students. One of the respondents listed the reasons why entrepreneurship is popular and explained:

Half of the ninth-graders every year choose entrepreneurship. There are many reasons: it is an interesting subject, has an excellent teacher, and the students know that they may realize their ideas. They start all kinds of companies; everything from car washes to bakeries. They have a café here in the school, a photography shop, and a lot of small companies. (Interviewee 5, principal)

For teachers, the mini-company method appears to be a positive experience as the participating students are genuinely interested in entrepreneurship, they are looking for intense interaction with businesses, and are thus highly involved in the learning. Additionally, teachers stated that the students got extra assistance, as most of the student teams had chosen to have adviser companies to help them [12]. One teacher commented on this as follows:

Companies help us as much as we want. (Interviewee 33, teacher)

The students' high level of commitment to the method increases teachers' engagement in the program as well. As for students, there are indications that the mini-company method enhances their adeptness to learn how to work in teams. Each student has a role in a team and is responsible for a certain function area [12]. However, several teachers have observed that the students often work together without distinguishing between the responsibilities for the different tasks in mini-companies. Further, the mini-company initiative is a well-established program in Finland; there is a national organization to help teachers in embedding the program as well as ready-to-use materials for teachers. The texts are thus already implanted in the school curriculum and repeating the planning and organizing aspects annually may be reasonably easy for teachers [40,49]. This may increase the teachers' positive conception towards the mini-company initiative.

While most teachers noted that their students were active in creating mini-companies, they also noticed them sometimes needing help with deciding what business to create and with its start-up process. The teacher then has a key role helping and supporting students with their companies [30,34]. In any case, the teachers regard the students' learning through entrepreneurship as a very positive model [1].

### 3.3. Company Project

Company projects take a few weeks up to a few months, depending on the type of project. They are company-ordered projects that students do for the client company. In this paper, we focus on two major findings from the teachers' experiences with company projects.

Finding 1: The teachers show a good level of pedagogical understanding of entrepreneurial learning. They emphasize their roles as facilitators, staying in the background and letting the students make their own mistakes [6]. Projects may cause surprising situations that the students must manage. In this context, company projects have a close resemblance to the way that entrepreneurs learn [14]. The teacher assists and helps the students but must remember not to do the students' work for them. In our opinion, the facilitating company projects do not seem to cause hardships for teachers. Instead, we feel that once teachers have learned the idea of letting the students learn by doing, they find their own work to be much easier. One respondent explained the process as follows:

The students do not just work for me, their teacher, but there are the client companies with whom the meetings are held and decided what kind of press release would be written and so on. The things must be done before the deadline. Sometimes the atmosphere is chaotic, but I as a teacher must sit on my hands and not do anything, not even make any telephone calls, because the students have to cope with the situation, and the next time it will be easier. I could do it in a moment, but students have to have the opportunity to learn. (Interviewee 40, teacher)

Finding 2: The teachers commented on value creation for the clients. In this context, teachers talked fluently about companies as clients expecting specific services, problem-solving, and sticking to the schedule [4,39]. They emphasize issues such as value creation, open endedness, real negotiations with the client companies, carrying out orders, and keeping to deadlines. Examples of orders given by the respondents were decorating a shop window, providing music entertainment at a company party, or carrying out a survey for the client customer. Teachers reported that interaction with client companies is intensive, and that it is real work offering students the chance to develop realistic problem-based situations [36].

### 3.4. Company Visits

Teachers share a fairly negative view on company visits. Their negative experiences are founded on two main points. First, organizing company visits seems to *depend mostly on teachers* and their interest in taking students outside school [4]. Some of the teachers noted that they let the students decide which company to visit. Nevertheless, most respondents who had organized visits were of the opinion that there would be no visits unless they personally organized them. Some of the teachers indicated that planning the actual program in a company was especially difficult. Keeping this in mind, the teachers were expecting competent help from the companies. One of the respondents stated that:

It is good to have a proficient company person plan something concrete for the students; otherwise there is no reason for a visit if we are just going to listen to a presentation about sales figures and other similar information. (Interviewee 18, teacher)

As the excerpt above shows, several teachers pointed to an interest in getting something 'concrete' instead of just hearing about business facts. It may be assumed that these teachers are looking for more intense interaction from the visits. This finding is the second reason for negativity; teachers feel that company visits offer too little for the students. The disappointment is related to two main issues: (i) the company representatives' competencies for dealing with students, and (ii) the students' limited opportunities for interaction with the companies and their representatives. The problems of dealing with students may derive from communication difficulties between a teacher and a company representative when planning a suitable program for the students [47]. We do not know how company representatives find company visits, and moreover, there may not be a clear understanding of who



needs to plan and organize the visits, that is, what is the role of a company representative and what are the roles of a teacher and students. According to the respondents, company visits follow a certain pattern:

They used to tell us about what it is like to work there and so . . . then we do the walk-through and see the production section and the packing section if they have it. It takes a few hours.  
(Interviewee 13, teacher)

Teachers commented that a well-planned presentation is informative and leaves time for questions that have arisen during the presentation. That would be the moment when students have the possibility to be active, ask questions, and interact with the company. Usually the latter half of the visit is taken up by a walk-through when students can see the activities in a company. Some of the respondents described the walk-throughs as the part that is most appreciated by the students. This is understandable and in line with what Cooper et al. [4] highlighted: Students like to have a chance to see, touch, and feel what is happening in the world out there. Students' involvement in this learning process varies from low to moderate, and they may have an opportunity to ask questions about a company presentation [22].

### 3.5. Entrepreneur in Class

Organizing real-life experiences constitutes a barrier to teachers. In this context, inviting entrepreneurs to the classroom sheds light on an interesting perspective on entrepreneurship education. Neck and Greene [18] suggest that some teachers address entrepreneurship and working-life skills in the classroom setting by inviting a company representative to the school. Our data shows that teachers argue for the choice of method based on how easy it is to organize instead of how it leads to entrepreneurial learning. The respondents noted that it is easier to invite a guest speaker to come to the school than taking the students outside the school. One principal explained the trade-off as follows:

It is much easier when we invite a person to come and tell us about their profession instead of us trying to visit a company, which is not at all easy. Companies are quite restrictive about welcoming groups and it is also difficult to motivate and persuade them.  
(Interviewee 2, principal)

The excerpt above shows yet another obstacle for organizing more challenging learning experiences. Some principals and teachers reported it being difficult to find companies that would welcome them for a visit. This difficulty reveals two things: first, the teachers and principals may lack the skills to communicate with companies and as a result, the companies turn down their requests for visits. If this is the case, training could be a way to address this issue. The second reason for companies turning down requests for visits could be related to the companies' higher expectations for value creation—that is, they would not be interested in superficial visits but rather in more in-depth interaction and cooperation.

Some teachers gave examples about their practices of inviting several companies to the school on the same day. As in the case of company visits, organizing these 'entrepreneur panels' relies on teachers, while students remain quite passive. Students may be offered opportunities for short discussions and for asking questions to the invited company representatives. One of the respondents spoke about the experiences of an entrepreneur panel as follows:

In the entrepreneur panel, the idea is that we inform our ninth-grade students (the last year in the school) which companies are coming to participate in the entrepreneur panel. The students in small groups decide what they want to know about the companies. Then, in the auditory panel, they ask their questions. The questions can be of a general nature, but may also be directed to one particular representative. In that way, we want to bring out what the students want to hear from company representatives. (Interviewee 17, teacher)

Typically, these interactions are short and remain superficial for most of the students. The students' involvement remains low to modest, but they do have the possibility to communicate with the

representatives. Not all company representatives are able to communicate at a level that the students easily understand regarding the topic and business vocabulary. However, according to Pittaway and Thorpe [17], the key to entrepreneurial learning is to use a pedagogy that draws students closer to the world of entrepreneurs. Markedly, the connection between students and entrepreneurs is often very limited.

### 3.6. Online Session

Langhorst [44] described an online session as a connection with a company via the internet. The students are in the classroom and communicate with a company using video equipment that allows two-way communication between students and companies [44]. In our data, the teachers noted that online sessions do not incur transport costs. One of the respondents listed the positive elements of online sessions:

A little less stress with transport, because the students can stay in the classroom. And especially, no need to apply for passes and permits in the factory area. (Interviewee 22, teacher)

Organizing the online sessions is purely the responsibility of the teachers. They set the date and time for the online sessions and they also prepare the session contents. It seems that the preparations need to be well thought-out in advance: due to the nature of the interaction, it is advisable to prepare the questions in advance that are to be asked in the session. Here, the teacher may allow the students to participate in drafting the questions, even if this might cause problems. One of the teacher respondents said he felt some of the questions were too difficult to answer outright and helped the company representatives by sending the questions to them before the session, as he explained in the interview:

We sent the questions to the company in advance so they were able to answer correctly. (Interviewee 22, teacher)

Online sessions are typically very short—from half an hour to an hour—so opportunities for in-depth student learning inevitably remain very low.

## 4. Conclusions

In our view, these findings clearly embrace the benefits of long-term cooperation with companies. Teachers with long-term company-partnerships seem to be satisfied with the cooperation. They emphasized that the length of the partnership helped with intensifying the interaction [1], which in turn provides students with excellent experiences in a real company environment [7,13]. The partnership structures enable learning process adjustment, which gives the teachers more autonomy. Teachers note that any interaction program does need to be the same for every class but instead depends on students' interests and companies' wishes. Students can acquire an in-depth understanding of entrepreneurship by doing different tasks [12].

The quest for entrepreneurial learning has been going on for more than two decades. As stated in the Introduction, previous research has shown rather clearly what the aims for entrepreneurial learning should be, but discussion seems to be scarce on understanding the barriers or incentives involved in carrying out the pedagogical solutions that would enable entrepreneurial learning. In this study, we have examined the cooperation of basic education schools with outside partners, especially from the viewpoints of principals and teachers. The focus of our analysis has been on the principals' and teachers' experiences on the organization of short- and long-term interaction. The findings of this study indicate that we need to understand the perspectives of these people responsible for the pedagogical solutions in the schools if we are to promote students' entrepreneurial learning in real-life contexts.

The results of our study are somewhat surprising: First, principals and teachers intentionally select long-term school-company cooperation because they aim to promote students' entrepreneurial learning. This became more evident as the respondents argued for the selection of partnership approaches to school-company cooperation. Cooper et al. [4] suggested that deeper learning increases

along with student involvement. Our study seems to confirm that principals and teachers are aware of this relationship and they select long-term cooperation to meet their learning targets [1,30]. The long-term methods for school-company interaction require school-level commitment to support the implementation of long-term cooperation. School-level commitment to school-company interaction enables shared responsibility, which in turn facilitates the required planning and organizing. Additionally, owing to the need for school-level commitment as a prerequisite, the legitimacy of this method is high, which serves to enhance the teachers' willingness to engage in the activity [16,60]. We would like to regard this situation as a virtuous circle, with the different aspects affecting each other positively and leading to high-level performance on the whole. Further studies need to be done to understand the routes of engagement, how schools might enter the virtuous circle, and what kinds of critical steps should be included in its development.

Second, unlike with the selection of long-term methods, teachers argued for selecting short-term methods from the perspective of easy implementation. If their students lack learning-based motivation, then teachers opt for short-term school-company cooperation. Still, on the basis of our analysis, teachers are not satisfied with this type of school-company cooperation because they consider it to be not worth the value gained. Teachers perceive that students' limited opportunities to interacting with businesses and the low state of preparation of the business to participate in the planning of the cooperation lower the value of the experience. Moreover, entrepreneurship education resourcing is a major concern for teachers [16] and there seem to be numerous challenges: planning and organizing collaboration with companies is difficult, it is time consuming, transport is an issue, it is hard to get students out of the school, or the company could turn the visit down. Further, it may be unclear who needs to plan and organize the school-company cooperation, and what the roles of company representative, teacher, and students are. Interestingly, it seems that teachers' difficulties in short-term interaction are not so much founded on their own competencies (or lack of them) but rather on the incompetence of others. Earlier studies [43,61] have suggested that teachers' lack of training in entrepreneurship education is a decisive factor in determining their entrepreneurship education activities. We recommend that further studies need to be done focusing on the effects of teacher training on entrepreneurship education.

Third, it seems that teachers' experiences of extra work and hardships related to school-company cooperation are not related to the intensity of the cooperation model but more likely to their experience of being left alone to make decisions and organize the events. In our data, teachers seem to be happy for any help they can get in the planning and organizing of events. Rebar [61] suggested that cooperation between teachers would positively affect the organization of school-company interactions. Our findings follow what is indicated in Rebar's study and extend this to all possible cooperation, including collaboration between teachers, students, and company representatives. That would consequently also enhance all the key players' networks and connect students more closely to the world-out-there [4,17]. Lacking these possibilities for cooperation, teachers feel that they miss the resources for higher-level school-company interaction and end up selecting short-term, momentary cooperation forms that offer less for students. It is evident that cooperation among peers would positively affect the use of longer-term school-company interaction. More research is needed on the routes to increase teachers' joint activities.

We acknowledge this study has limitations related to perspective, research method, and research context. In terms of research perspective, our focus was on teachers and principals, not on company or student experiences, nor on student learning aspects in school-company cooperation. In that context, our study does not indicate whether the school-company cooperation has been successful in terms of learning, or how students or company representatives have perceived these cooperation events. Having noted this, further research is recommended on these areas. From the perspective of research methods, our study has followed a qualitative methodology. Therefore, the results of our study can merely indicate possibilities. However, we feel that our study provides good opportunities for future quantitative studies on school-company cooperation and its organization. Finally, the data have been

collected from a single country, which limits the generalizability of the results. Therefore, future studies should contain larger data sets in order to achieve insights from an international perspective.

**Author Contributions:** K.S. has operated as the primary researcher and she has been responsible for the theoretical framework, methodology and data collection; E.O. has contributed with the building of the research setting, the theoretical framework and the empirical analysis; T.P. has contributed with the building of the research setting, the empirical analysis and the results discussion. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Johansen, V. *Innovation Cluster for Entrepreneurship Education*. ENRI- Research Report 01/2018; Østlandsforskning/Eastern Norway Research Institute: Lillehammer, Norway, 2018. Available online: <http://icee-eu.eu/innovation-clusters.html> (accessed on 16 September 2020).
- Gibb, A. Can We Build 'Effective' Entrepreneurship Through Management Development? *J. Gen. Manag.* **1999**, *24*, 1–21. [[CrossRef](#)]
- Sommarström, K.; Ruskovaara, E.; Pihkala, T. Company visits as an opportunity for entrepreneurial learning. *J. Int. Bus. Entrep. Dev.* **2017**, *10*, 298–315. [[CrossRef](#)]
- Cooper, S.; Bottomley, C.; Gordon, J. Stepping out of the classroom and up the ladder of learning. An experiential learning approach to entrepreneurship education. *Ind. High. Educ.* **2004**, *18*, 11–22. [[CrossRef](#)]
- Henderson, R.; Robertson, M. Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career. *Career Dev. Int. Bradf.* **2000**, *5*, 279–287. [[CrossRef](#)]
- Jones, B.; Iredale, N. Enterprise education as a pedagogy. *Educ. Train.* **2010**, *52*, 7–9. [[CrossRef](#)]
- Kickul, J.; Griffiths, M.; Bacq, S. The boundary-less classroom: Extending social innovation and impact learning to the field. *J. Small Bus. Enterp. Dev.* **2010**, *17*, 652–663. [[CrossRef](#)]
- Leffler, E.; Svedberg, G. Enterprise Learning: A Challenge to Education? *Eur. Educ. Res. J.* **2005**, *4*, 219–227. [[CrossRef](#)]
- Löbler, H. Learning entrepreneurship from a constructivist perspective. *Technol. Anal. Strateg. Manag.* **2006**, *18*, 9–38. [[CrossRef](#)]
- Smith, A.J.; Collins, L.A.; Hannon, P.D. Embedding new entrepreneurship programmes in UK higher education institutions. *Educ. Train.* **2006**, *48*, 555–567. [[CrossRef](#)]
- Hynes, B.; Richardson, I. Entrepreneurship education; A mechanism for engaging and exchanging with the small business sector. *Educ. Train.* **2007**, *49*, 732–744. [[CrossRef](#)]
- Lindqvist, S.H. What and How Students Perceive They Learn When Doing Mini-Companies in Upper Secondary School. Licentiate Thesis, Karlstad University, Karlstad, Sweden, 2017.
- Pittaway, L.; Rodriguez-Falcon, E.; Aiyebayo, O.; King, A. The role of entrepreneurship clubs and societies in entrepreneurial learning. *Int. Small Bus. J.* **2010**, *29*, 37–57. [[CrossRef](#)]
- Cope, J.; Watts, G. Learning by doing—An exploration of experience, critical incidents and reflection in entrepreneurial learning. *Int. J. Entrep. Behav. Res.* **2000**, *6*, 104–124. [[CrossRef](#)]
- Heinonen, J.; Poikkijoki, S.-A. An entrepreneurial-directed approach to entrepreneurship education: Mission impossible? *J. Manag. Dev.* **2006**, *25*, 80–94. [[CrossRef](#)]
- Sommarström, K.; Oikkonen, E.; Pihkala, T. Entrepreneurship education—Paradoxes in school-company interaction. *Educ. Train.* **2020**. [[CrossRef](#)]
- Pittaway, L.; Thorpe, R. A framework for entrepreneurial learning: A tribute to Jason Cope. *Entrep. Reg. Dev.* **2012**, *24*, 837–859. [[CrossRef](#)]
- Neck, H.; Greene, P. Entrepreneurship Education: Known Worlds and New Frontiers. *J. Small Bus. Manag.* **2011**, *49*, 55–70. [[CrossRef](#)]
- Rae, D.; Carswell, M. Towards a conceptual understanding of entrepreneurial learning. *J. Small Bus. Enterp. Dev.* **2000**, *8*, 150–163. [[CrossRef](#)]
- Honig, B. Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. *Acad. Manag. Learn. Educ.* **2004**, *3*, 258–273. [[CrossRef](#)]

21. Pittaway, L.; Cope, J. Simulating Entrepreneurial Learning Integrating Experiential and Collaborative Approaches to Learning. *Manag. Learn.* **2007**, *38*, 211–231. [CrossRef]
22. Ruskovaara, E. Entrepreneurship Education in Basic and Upper Secondary Education—Measurement and Empirical Evidence. Ph.D. Thesis, Lappeenranta University of Technology, Lappeenranta, Norway, 2014. Available online: <http://urn.fi/URN:ISBN:978-952-265-657-5> (accessed on 16 September 2020).
23. Žur, A. Two Heads Are Better Than One—Entrepreneurial Continuous Learning through Massive Open Online Courses. *Educ. Sci.* **2020**, *10*, 62. Available online: <https://www.mdpi.com/2227-7102/10/3/62> (accessed on 16 September 2020). [CrossRef]
24. Roehl, A.; Reddy, S.L.; Shannon, G.J. The Flipped Classroom: An Opportunity to Engage Millennial Students through Active Learning Strategies. *J. Fam. Consum. Sci.* **2013**, *105*, 44–49. [CrossRef]
25. Kassean, H.; Vanevenhoven, J.; Liguori, E.; Winkel, D.E. Entrepreneurship education: A need for reflection, real-world experience and action. *Int. J. Entrep. Behav. Res.* **2015**, *21*, 690–708. [CrossRef]
26. Roxas, B. Effects of entrepreneurial knowledge on entrepreneurial intentions: A longitudinal study of selected South-east Asian business students. *J. Educ. Work* **2014**, *27*, 432–453. [CrossRef]
27. Powell, B.C. Dilemmas in entrepreneurship pedagogy. *J. Entrep. Educ.* **2013**, *16*, 99–112.
28. Ruskovaara, E.; Hämäläinen, M.; Pihkala, T. HEAD teachers managing entrepreneurship education—Empirical evidence from general education. *Teach. Teach. Educ.* **2016**, *55*, 155–164. [CrossRef]
29. Elert, N.; Andersson, F.W.; Wennberg, K. The impact of entrepreneurship education in high school on long-term entrepreneurial performance. *J. Econ. Behav. Organ.* **2015**, *111*, 209–223. [CrossRef]
30. Johansen, V. Gender and self-employment: The role of mini-companies. *Educ. Train.* **2016**, *58*, 150–163. [CrossRef]
31. Oosterbeek, H.; van Praag, C.M.; Ijsselstein, A. *The Impact of Entrepreneurship Education on Entrepreneurship Competencies and Intentions: An Evaluation of the Junior Achievement Student Mini-Company Program*; IZA Discussion Papers, No. 3641, Institute for the Study of Labor; IZA: Bonn, Germany, 2008. Available online: <http://nbn-resolving.de/urn:nbn:de:101:1-2008082164> (accessed on 16 September 2020).
32. Ruškýté, D. Efficiency of Student Mini-Company Developing Personal Qualities. *Pedagogika* **2018**, *130*, 148–164. [CrossRef]
33. Mathisen, T.; Johansen, V.; Mathisen, S. *Evaluation of Entrepreneurship in Education: A project between Junior Achievement Uganda and Junior Achievement Enterprise Norway*; ENRI-Report No.: 17/2011; Østlandsforskning Eastern Norway Research Institute: Lillehammer, Norway, 2011.
34. Göler von Ravensburg, N. *Working Paper CIRIEC N° 2017/01, CIRIEC International. Pupils' Cooperatives and the Acquisition of Competences for Sustainable Development*; CIRIEC-Université de Liège: Liège, Belgium, 2017.
35. Mwasalwiba, E.S. Entrepreneurship education: A review of its objectives, teaching methods, and impact indicators. *Educ. Train.* **2010**, *52*, 20–47. [CrossRef]
36. Zsidisin, G.A.; Hartley, J.L.; Collins, W.A. Integrating student projects with real-world problems: The case of managing commodity price risk. *Supply Chain Manag. Int. J.* **2013**, *18*, 389–397. [CrossRef]
37. Mueller, S.; Brahm, T.; Neck, H. Service Learning in Social Entrepreneurship Education: Why Students Want to Become Entrepreneurs and How to Address Their Motives. *J. Enterp. Cult.* **2015**, *23*, 357–380. [CrossRef]
38. Niehm, L.S.; Fiore, A.M.; Hurst, J.; Lee, Y.; Sadachar, A. Bridging the gap between entrepreneurship education and small rural businesses: An experiential service-learning approach. *J. Bus. Entrep.* **2015**, *26*, 26–129.
39. Gibb, A. Concepts into practice: Meeting the challenge of development of entrepreneurship educators around an innovative paradigm. *Int. J. Entrep. Behav. Res.* **2011**, *17*, 146–165. [CrossRef]
40. Frank, A.I. Entrepreneurship and enterprise skills: A missing element of planning education? *Plan. Pract. Res.* **2007**, *22*, 635–648. [CrossRef]
41. Ruskovaara, E.; Pihkala, T. Teachers implementing entrepreneurship education: Classroom practices. *Educ. Train.* **2013**, *55*, 204–216. [CrossRef]
42. Solomon, G. An examination of entrepreneurship education in the United States. *J. Small Bus. Enterp. Dev.* **2007**, *14*, 168–182. [CrossRef]
43. Ruskovaara, E.; Pihkala, T. Entrepreneurship Education in Schools: Empirical Evidence on the Teacher's Role. *J. Educ. Res.* **2014**, *108*, 236–249. [CrossRef]
44. Langhorst, E. You Are There, No budget for travel? Try video chat. *Sch. Libr. J.* **2009**, *2009*, 46–48.
45. Cheng, M.Y.; Chan, W.S.; Mahmood, A. The effectiveness of entrepreneurship education in Malaysia. *Educ. Train.* **2009**, *51*, 555–566. [CrossRef]

46. Smeets, E.; Mooij, T. Pupil-centred learning, ICT, and teacher behavior: Observations in educational practice. *Br. J. Educ. Technol.* **2001**, *32*, 403–417. [CrossRef]
47. Markom, M.; Khalil, M.S.; Misnon, R.; Othman, N.A.; Abdullah, S.R.; Mohamad, A.B. Industrial Talk and Visit for Students. *Procedia Soc. Behav. Sci.* **2011**, *18*, 674–682. [CrossRef]
48. Gibb, A. Creating conducive environments for learning and entrepreneurship. Living with, dealing with, creating and enjoying uncertainty and complexity. *Ind. High. Educ.* **2002**, *16*, 135–148. [CrossRef]
49. Frank, A.I. Three Decades of Thought on Planning Education. *J. Plan. Lit.* **2006**, *21*, 15–67. Available online: <http://jpl.sagepub.com/cgi/content/abstract/21/1/15> (accessed on 16 September 2020). [CrossRef]
50. Uhrmacher, P.B.; Conrad, B.M.; Moroye, C.M. Finding the Balance between Process and Product through Perceptual Lesson Planning. *Teach. Coll. Rec.* **2013**, *115*, 1–27.
51. Hoke, M.W. Field-Trip Tips—A Baker’s Dozen. *Sci. Child.* **1991**, *28*, 20–21.
52. Bredeson, P.V.; Johansson, O. The School Principal’s Role in Teacher Professional Development. *J. Serv. Educ.* **2000**, *26*, 385–401. [CrossRef]
53. Habegger, S. The Principal’s Role in Successful Schools: Creating a Positive School Culture. *Principal* **2008**, *88*, 42–46.
54. Hallinger, P. Instructional Leadership and the School Principal: A Passing Fancy that Refuses to Fade Away. *Leadersh. Policy Sch.* **2005**, *4*, 221–239. [CrossRef]
55. Burhanuddin, B. The Leadership Roles of a Principal in Improving School Effectiveness. *J. Educ.* **1997**, *4*, 333–352.
56. Leithwood, K.A.; Riehl, C. *What We Know about Successful School Leadership*; Centre for Educational Policy Analysis: Rutgers, NJ, USA, 2003.
57. Goolamally, N.; Ahmad, J. Attributes of School Leaders towards Achieving Sustainable Leadership: A Factor Analysis. *J. Educ. Learn.* **2014**, *3*, 122–133. [CrossRef]
58. Hämäläinen, M.; Ruskovaara, E.; Pihkala, T. Head teachers promoting entrepreneurship education: The relationships between development activities and schools’ practices. *J. Entrep. Educ.* **2018**, *21*, 1–19.
59. Hämäläinen, M.; Ruskovaara, E.; Pihkala, T. Principals’ Networking Activities for Entrepreneurship Education—Evidence from the General Education. *Eest. Haridusteaduste Ajak. Est. J. Educ.* **2018**, *6*, 104–117. [CrossRef]
60. Kelchtermans, G. Teachers’ emotions in educational reforms: Self-understanding, vulnerable commitment and micropolitical literacy. *Teach. Teach. Educ.* **2005**, *21*, 995–1006. [CrossRef]
61. Rebar, B.M. Teachers’ sources of knowledge for field trip practices. *Learn. Environ. Res.* **2012**, *15*, 81–102. [CrossRef]
62. Imenda, S. Is There a Conceptual Difference between Theoretical and Conceptual Frameworks? *J. Soc. Sci.* **2014**, *38*, 185–195. [CrossRef]
63. Collier-Reed, B.I.; Ingerman, Å.; Berglund, A. Reflections on trustworthiness in phenomenographic research: Recognising purpose, context and change in the process of research. *Educ. Chang.* **2009**, *13*, 339–355. [CrossRef]
64. Ireland, J.; Tambyah, M.M.; Neofa, Z.; Harding, T. The tale of four researchers: Trials and triumphs from the phenomenographic research specialization. In Proceedings of the AARE 2008 International Education Conference: Changing Climates: Education for Sustainable Futures, Brisbane, Australia, 30 November–4 December 2008; Queensland University of Technology: Brisbane, Australia, 2009.
65. Sin, S. Considerations of Quality in Phenomenographic Research. *Int. J. Qual. Methods* **2010**, *9*, 305–319. [CrossRef]
66. Lacy, S.; Watson, B.R.; Riffe, D.; Lovejoy, J. Issues and Best Practices in Content Analysis. *J. Mass Commun. Q.* **2015**, *92*, 791–811. [CrossRef]
67. Oppliger, P.A.; Davis, A. Portrayals of Bullying: A Content Analysis of Picture Books for Preschoolers. *Early Child. Educ. J.* **2015**, *44*, 515–526. [CrossRef]
68. Erlingsson, C.; Brysiewicz, P. A hands-on guide to doing content analysis. *Afr. J. Emerg. Med.* **2017**, *7*, 93–99. [CrossRef]
69. Gioia, D.A.; Corley, K.G.; Hamilton, A.L. Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organ. Res. Methods* **2013**, *16*, 15–31. [CrossRef]
70. Nag, R.; Gioia, D.A. From common to uncommon knowledge: Foundations of firm-specific use of knowledge as a resource. *Acad. Manag. J.* **2012**, *55*, 421–457. [CrossRef]

71. Finnish National Board of Education. *National Core Curriculum for Basic Education 2014*; Next Print Oy: Helsinki, Finland, 2014.
72. Ministry of Education. *Guidelines for Entrepreneurship Education*; Publication of the Ministry of Education, University Print: Helsinki, Finland, 2009.



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).