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Can learning in teams help teachers to become more entrepreneurial? The interplay between efficacy perceptions and team support[1]

ABSTRACT

This article argues that to enhance entrepreneurship education and entrepreneurial learning among students, it is vital for teachers to become more entrepreneurial as well. The core question for teachers is how to learn to become an entrepreneurial teacher. The abovementioned notions lead us to ask whether entrepreneurial team learning could be applied to enhance teachers' professional development as well.

This research focuses on the processes affecting in entrepreneurial team learning, which can enhance teachers' entrepreneurial readiness. This research seeks to answer to the following question: Can learning in teams help teachers to become entrepreneurial teachers?

It is suggested here that individual and collective experiences of entrepreneurial learning processes can be investigated in a real-life context. This article presents an entrepreneurial team-teaching experiment. The research setting is authentic and explorative. The textual data consists of the team members' written reflections gathered during the entrepreneurial team learning process. Grounded theory was applied as a research methodology and method.

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The research findings indicated that there is a positive relationship between team support and team members' efficacy beliefs. In the light of the research findings it can be stated that collaborative and entrepreneurial team learning can increase team members' competencies to act as entrepreneurial teachers.

Key words: *Entrepreneurial team learning, team support, efficacy beliefs, team-teaching*

1. INTRODUCTION

Entrepreneurial learning and teaching have become more relevant issues in the field of entrepreneurship education research (see e.g. Kyrö & Carrier 2005, 16). It has been acknowledged that teachers have an essential role to play in enhancing students' entrepreneurial learning. Thus, the questions of how teachers understand entrepreneurship education, how they value it and how willing they are to adopt new pedagogical methods are significant (Backstöm-Widjesog, 2008; Kyrö & Carrier, 2005; Paajanen, 2001). However, as many earlier studies have indicated (Béchard & Toulouse 1991; Solomon, Duffy & Tarabishy, 2002) conventional teaching methods still seem to be widely used in entrepreneurship education, despite the growing demands for renewed and more entrepreneurial teaching approaches. It has been suggested that strong norms of teachers' professional isolation and autonomy may have limited and discouraged teachers' co-operation (Collison & Cook, 2004; Leskinen, 1999; Sahlberg; 1997, Stott & Walker, 1999). Hence, there is an interesting paradox between the demands for entrepreneurial teaching and the reality that teachers have been less than enthusiastic to adopt entrepreneurial pedagogy and entrepreneurial teaching methods, which are based on collaborative action, innovativeness, risk-taking and new creation.

It is interesting that at the same time, the questions of entrepreneurial learning have attracted more interest in the field of recent entrepreneurship research. It has been suggested that experiential learning and learning from interactions are major learning sources for entrepreneurs (Cope, 2003; Harper, 2008; Honig, 2001; Politis, 2005). It has also been acknowledged that there is a close relationship between learning, entrepreneurial development and achievement (Rae & Carswell, 2001; Taylor & Thorpe, 2004). These discussions about entrepreneurial learning and the acquisition of entrepreneurial capabilities are related to the debate on entrepreneurship as a learnt and teachable issue (Koiranen & Ruohotie, 2001). In parallel with this, more focus has been placed on team entrepreneurship and entrepreneurial teams are being seen as a key to successful start-up and faster growth (Cooney, 2005; Lechler, 2001). Hence, as Harper (2008), following Schumpeter's (1965) thinking, argues, entrepreneurial functions should no longer be seen solely as individual "property", but rather as a socially distributed process. Thus, a construct of collective entrepreneurship focuses the attention on team work (Soriano and Martinez, 2007).

In order to enhance entrepreneurship education and entrepreneurial learning among students, it is vital for teachers, too, to become more entrepreneurial. The core question for teachers is how to learn to become an entrepreneurial teacher. The abovementioned notions lead us to ask, whether entrepreneurial team learning could be applied to enhance teachers' professional development as well. However, when applying entrepreneurial team learning as a means to enhance teachers' entrepreneurial competencies, it is essential to first understand what those competencies are. Béchard and Grégoire (2005), as well as Heinonen and Poikkijoki (2006) suggest that entrepreneurial competencies in a teaching context can be seen as abilities to adopt such teaching methods, which encourage and enhance the entrepreneurial expertise of students, i.e. learning to understand entrepreneurship, learning to become entrepreneurial and learning to become an entrepreneur. Kyrö, Mylläri and Seikkula-Leino (2008) use the concept of readiness, which can be seen as a more flexible and more extended concept than competence. Thus, teachers' entrepreneurial competencies can be seen as a readiness to initiate, guide and sustain students' entrepreneurial learning processes. Hence, teachers' primary role is not to ask "What am I going to teach today, but rather what am I going to have my students do today", as Fiet (2000) presents. An entrepreneurial teacher is able to follow that principle and act accordingly.

However, we do not so far know what the mechanisms affecting the entrepreneurial team learning process are. This shifts the focus onto the role of team dynamics in an entrepreneurial team learning process, which, however, is a problematic area to study. Thus, it can be suggested that perhaps we could gain more insights by examining entrepreneurial team learning and team dynamics in explorative and authentic settings. The aim of this research is to enhance our understanding of entrepreneurial team learning, team dynamics and teachers' professional development by describing a teacher team's entrepreneurial learning process during an explorative team-teaching project**.** This research focuses on the processes affecting in entrepreneurial team learning, which can enhance teachers' entrepreneurial readiness. This research seeks to answer to the following question: Can learning in teams help teachers to become entrepreneurial teachers?

2. ENTREPRENEURIAL TEAM LEARNING

The ability to learn is considered to be a central aspect in the process of entrepreneurial development (Rae & Carswell, 2001). Additionally, as Rae (2000) argues, "entrepreneurship should be seen as a contextual process of "becoming", where the entrepreneur is continually learning and developing in relation to his/her business and the wider environment". Cope (2005), on the other hand, emphasizes the affective and social characteristics of entrepreneurial learning. These notions are significant to this study, since they underscore the role of collaborative and entrepre-

neurial learning as core elements in obtaining entrepreneurial competencies. Thus, these notions should also be considered when viewing how learning in teams can support teachers to become more entrepreneurial.

Team learning can be seen as a process that occurs both on individual and collective level. The construct of team learning has its roots in organizational and collaborative learning theories (see e.g. Argyris & Schön, 1974, 1996; Kolb, 1984; Nonaka & Takeuchi, 1995; Senge, 1990), which have generated many attempts to characterize and describe knowledge creation in organisations, learning organisations and team learning. Otala (1996) defines team learning as a constant process of interaction between an individual and her/his team, consisting of shared planning, the construction of a common understanding, coordinated action and shared evaluation. Team learning is thus about achieving goals together, which go beyond the sum of individual efforts. Commitment to common goal and team spirit serve as cohesive forces in this process. Yacisi (2005) goes even further and underscores the role of peer interaction as an essential part of collaborative learning. Similar notions have also been presented by Vanhalakka-Ruoho (1999), who following the ideas of Lorange (1996), uses the concept of learning partnership to describe collaborative learning and suggests that reciprocal learning, dialogue and reflectivity are the core elements in a learning partnership. This term has also been discussed by Mäntylä (2002) who has applied the idea of learning partnership in her research on teachers' team learning. She argues that the crucial element of team learning, and thus of learning partnership, is the ability to walk along the learning path with another.

However, professional development to become an entrepreneurial teacher involves more than learning partnership as such. To achieve this collaborative learning should also be entrepreneurial in nature. In the field of recent entrepreneurship education research much emphasis has been put on opening up the nature of the entrepreneurial learning process. It has been suggested that the essence of entrepreneurial learning derives from the nature of entrepreneurship, entrepreneurial human action and the qualities of enterprising humans (Fiet, 2000; Kyrö 2001; Kyrö 2005). Hence, the core elements of entrepreneurial behaviour, such as opportunity recognition and exploitation, risk-taking, action, creativeness and innovativeness should also have a fundamental role in entrepreneurial learning processes ((Fiet, 2000; Kyrö 2001; Kyrö 2005).

According to Kyrö (2005) entrepreneurial learning involves the idea of human beings looking around them and by selecting and combining different elements from environments creating something new which has consequences in action. Rae and Carswell (2001) underline the connection of knowing, acting and making sense by arguing that entrepreneurial learning is a discursive process in which people create new reality by talking and doing. Taylor and Thorpe (2005) support this view by arguing that entrepreneurial learning can be seen as a process of co-participation. Politis (2005) also highlights the need to make a distinction between the experience

and the knowledge acquired through it and stresses the experiential and long standing nature of entrepreneurial learning by arguing that "entrepreneurial learning is an experiential processes where enterprising individuals continuously develop their entrepreneurial knowledge throughout their professional lives". Koiranen and Ruohotie (2001) further argue that along with cognitive aspects (knowledge and skills), more emphasis should be put on conative (motivation and volition) and affective constructs (temperament and emotions).

Taken together, it can be said that *entrepreneurial team learning is a dynamic, discursive and reciprocal development process, which is based on a learning partnership and is experiential in nature. It takes place through action and making sense considering and encouraging freedom and uniqueness of the learners and aims at developing learners' entrepreneurial competencies*.

In order to enhance teachers' willingness to promote entrepreneurship education and to adopt entrepreneurial teaching methods, a more extensive use of team learning and learning partnership might be an efficient way to increase collegial interaction and dialogue among teachers and thus assist them to overcome the barriers of professional autonomy and isolation. The abovementioned notions also lead imply that perhaps entrepreneurial team learning could be applied to enhance teachers' entrepreneurial competencies as well.

The above notions indicate that entrepreneurial learning is an action-oriented process, which occurs through experiments and that the social processes have a central role in entrepreneurial action and learning. However, as Cope (2005) states, there is currently a lack of understanding regarding the entrepreneurial learning processes and the role of "powerful others" associated with the learning process. When extending these notions of entrepreneurial team learning in the context of teachers' professional development, it is also essential to know how teachers interact and learn to learn from one another. As Collison and Cook (2004) argue, to date not enough attention has been paid to the processes by which teachers share their learning. Thus, we need more understanding about team dynamics affecting teachers' entrepreneurial and collaborative learning processes.

3. TEAM DYNAMICS: EFFICACY BELIEFS AND TEAM SUPPORT

Team dynamics is defined as "the motivating and driving forces that propel a team towards its goal or mission" (Eckes, 2002). However, we know relatively little about the ways in which team dynamics affects on entrepreneurial team learning and even less when examining teachers' entrepreneurial team learning. Pounder's (1999) research of teacher teams indicated that teamed teachers with strong collegial relationships reported higher internal work motivation and professional efficacy than nonteamed teachers. This notion of professional efficacy is significant, as it implies that teaming has a positive impact on teachers' perceptions of their accomplishments and

achievements as teachers. In other words, it is a question of teachers' beliefs and perceptions of their abilities to succeed in specific situations.

The construct of self-efficacy derives from the social cognitive theory and was introduced by Bandura (1977). According to him self-efficacy refers to individuals' judgement of their capabilities to perform a given task and to achieve the set goals. The construct of self-efficacy is well-known in entrepreneurship education discourses as it has been seen as one of the essential factors in entrepreneurship intention development process. This construct was first integrated into intention development models by Boyd and Vozikis (1994). Since then self-efficacy has been seen as a meaningful construct in identifying and explaining entrepreneurship development and new venture creation processes. However, examining the formation of efficacy beliefs related to teachers' professional development process is a fairly new departure in the field of entrepreneurship education.

It has been proposed that there is a positive link between self-efficacy beliefs and work-related behaviour, i.e. self-efficacy beliefs seem to predict future achievements and correlate positively with past accomplishments (Bandura 1997). However, the literature offers somewhat mixed perceptions regarding the sources of self-efficacy beliefs. Bandura (1997) sees past mastery experiences as a primary source of self-efficacy beliefs, but he also emphasises the influence of vicarious experiences (learning by observing others), social persuasion (encouraging feedback) and physiological and affective states. McCormick, Ayres and Beechey (2006) support Bandura's arguments, but claim that social persuasion is generally a weaker source of self-efficacy than mastery and vicarious experiences. Interestingly, based on their research of teachers' self-efficacy beliefs formation during a curriculum reform, they also argue that support and understanding attitude are negatively associated with teachers' sense of self-efficacy, which is quite the opposite to Bandura's notions of the importance of social learning. Tams (2008), on the other hand, raises the importance of the context in which self-efficacy development emerges and proposes that self-efficacy formation is an active process which consists of attending to one's doing (focusing on the task), reflecting upon one's doing (learning from setbacks), attending to one's social environment (relating to others and modelling others' behaviour) and taking a stance towards one's environment (responding to negative feedback and asserting one's personal perspective). To sum up, it seems that a perceived self-efficacy derives from prior mastery experiences, but context and social environment has also impact on this process.

The abovementioned notions of self-efficacy formation approach this issue from an individual-level perspective. However, in recent years increased attention has also been paid to group performance and as a result the concept of self-efficacy has been extended to the team level (Katz-Navon & Erez, 2005). According to Jung and Sosik (2003) collective efficacy, also known as team efficacy, is a relatively new concept, which has emerged in the field of group research.

It has been suggested that collective efficacy is a parallel, but a group level concept to self-efficacy (Arnold, Barling & Kelloway, 2001; Katz-Navon & Erez, 2005). So far there is no standardized definition for team efficacy and thus it can be defined in several different ways, but in general it refers to group members' collective perceptions of their collective competence and performance. Nevertheless, according to Gully et al. (2002), the underlying theme among the various constructs is that it is a question of "group members' positive estimation or expectation about their collective competence and performance". Hence, collective efficacy generally refers to the team members estimations about the forthcoming performance, i.e., expectations prior to the performance itself.

The sources of collective efficacy perceptions have attracted much interest. According to Adams and Forsyth (2006), who studied teachers' collective efficacy formation, the process on the collective level is quite similar to self-efficacy formation, but additionally the contextual environmental conditions, such as a school level and structure, as well as student characteristics affect collective efficacy beliefs formation. Recent research has also implied that constructive performance feedback among group members can increase collective efficacy perceptions (see e.g. Jung & Sosik, 2003). Adams and Forsyth (2006) have introduced similar notions by arguing that past performance and collective successes, as well as social persuasion, may also have an effect on collective efficacy. This, however, is dependent on the norms of openness and collaboration within a team. Nevertheless, it seems that the social aspect has a stronger role in collective efficacy beliefs formation than it has on individual level.

To date it is unclear whether collective efficacy should be seen as an individually based assessment of a group's capability or a group-consensus-based construct (Jung & Sosik, 2003). Hence, it seems that collective efficacy beliefs take shape from individual to group level or they develop within a group. An interesting question arising from this is whether there could be an opposite influence, i.e., could positive collective efficacy beliefs, in turn, increase team members' self-efficacy beliefs? From the point of view of this research the possible interplay between team-level and individual-level efficacy belief formation is significant. If teachers' perceived collective efficacy of entrepreneurial teaching could enhance individual-level perceptions of entrepreneurial competencies, it would indicate that teachers' entrepreneurial team learning may have a positive effect on their professional development as entrepreneurial teachers.

Assuming this relationship exists, however, leads us to ask what the mechanism behind this is. Murray and Moses (2005) argue that the preconditions for efficient team processes and team learning are 1) clarity about the task, goal and responsibilities, 2) ability to share knowledge, skills and ideas and extend the boundaries what the team can do, and 3) supportive behaviour. Kirkman and Rosen's (2000) research of team learning and team effectiveness revealed a positive connection between team achievement, team empowerment and support systems. They identified four

distinctive components which must be in place to maximize team performance: Potency, meaning, autonomy and impact. Potency refers to a confident can-do attitude within a team, which is difficult to observe, but which becomes visible when observing how team members discuss about their competencies as individuals and as a team and how they support each other in conversations. A sense of meaningfulness refers to a team's collective commitment to the common goal and seeing the goal valuable and significant. Autonomy is about freedom to allocate resources and the ability to seize opportunities and to make rapid decisions. Impact refers to the ability to learn about feedback received from other stakeholders. According to Kirkman and Rosen (2000) these components are reciprocal and mutually reinforcing, thus all these aspects should be present in learning teams. These notions are interesting and significant when extending them to entrepreneurial team learning and to the context of teachers' professional development. Firstly, they imply that commitment to the team and shared task, as well as collective team efficacy perceptions are meaningful. Secondly, they suggest that teachers' autonomy and increased collaboration are not mutually exclusive, but complementary issues. Thirdly, these notions reveal that team support is a central aspect in efficient team learning.

Although the importance of team support has been acknowledged, it is quite amazing that for some reason this area has remained empirically unexplored. The rare exception is a study conducted by Drach-Zahavy and Somech (2002) on the impact of team support on team behaviour. This research revealed that there is a close positive relationship between team support and team effectiveness. However, it also suggested that the patterns of support should be studied more profoundly. This highlights the need for a more profound understanding of supportive behaviour and the patterns of support within a team, which sustain individual and collective learning. In contrast to earlier studies considering team support as a one-dimensional concept, West (1994) argued that team support contains four distinct dimensions, namely emotional support, informational support, instrumental support and appraisal support. Team emotional support refers to social support, such as mutual respect and concern, which becomes implicit in encouraging words and sympathetic understanding. Team informational support points at team members' ability to exchange and share information. Team instrumental support involves practical support, such as helping with tasks and duties or substituting for a colleague during an illness. The fourth form of support, appraisal support, refers to consultation on professional problems and exchanging perspectives and opinions.

Taken together, team efficacy is a new construct in the examination of entrepreneurial learning. It also seems that team efficacy perceptions and supportive behavior among the team members are essential elements of team achievements and team effectiveness. It has also been recognized that teachers' perceptions of self-efficacy and collective efficacy have an influence on team members' abilities to collectively carry out teaching tasks and seize new opportunities. Past mas-

tery experiences and supportive behaviour may serve as a foundation for the formation of collective efficacy perceptions. However, although the relationship between team support and team effectiveness has been acknowledged, it seems to be important to study further the interplay between team efficacy beliefs and supportive behaviour among team members. So far it has been suggested that collective efficacy perceptions are attained through team members' self-efficacy beliefs, but the opposite effects, i.e. from team-level to individual level are still little known. However, this dynamics might be significant when enhancing teachers' entrepreneurial competencies.

Experiences seem to be the key elements in self-efficacy and team efficacy formation. Thus, it can be suggested that perhaps this interplay between self- and collective efficacy perceptions could be examined through experiences. Minniti and Bygrave (2001) have suggested that "knowledge about "how to be entrepreneurial" can only be acquired through learning-by-doing or direct observation". This idea is also compatible with the recent entrepreneurship studies, which emphasize the significance of "critical learning events" or "learning episodes" as essential entrepreneurial learning mechanisms (Cope, 2005; Rae & Carswell, 2001).

Conversely one might ask what the critical learning events are in teachers' entrepreneurial development process and how to obtain teachers' experiences of entrepreneurial team learning. Heinonen and Poikkijoki (2006) have emphasized that "teaching and learning entrepreneurial behavior is not just understanding and acting, but also about having an opportunity to experience it in the classroom setting." Following this logic, it can be suggested that perhaps a classroom could be a learning environment which allows teachers' experiential learning and professional development as well. And furthermore, perhaps teachers' team work and team-teaching could create entrepreneurial learning episodes, which can have impact on teachers' professional development as entrepreneurial teachers.

4. TEACHERS' TEAM WORK AND TEAM-TEACHING

Team-teaching is an unexplored area in the context of entrepreneurship education. Therefore, when examining the possibilities it may have to offer to entrepreneurship education, entrepreneurial team learning and teachers' professional development, we have to start with what we know about team-teaching in general.

Team-teaching has been a common practice for teaching disabled students in comprehensive education and has further entered other areas of education. According to Sandholtz (2000) team-teaching as a term has many definitions, as it may refer to 1) allocation of responsibilities between teachers, 2) team planning, or 3) cooperative planning, instruction and evaluation. In general, team-teaching, also known as co-teaching or collaborative teaching, occurs when "two or more

teachers teach together and contribute to their collective responsibility for the plans, goals, enactment and outcomes of the lessons", as defined by Roth et al. (2005). However, this definition does not sufficiently describe entrepreneurial team-teaching, since it lacks the idea of team autonomy, innovativeness and new creation through action. The conventional view of team-teaching also reflects a teacher-centred approach to learning; i.e. goals and outcomes are set by teachers, whereas entrepreneurial team-teaching emphasizes a student-centred perspective. Thus, we could state that *in entrepreneurial team-teaching two or more teachers through collaborative actions guide and maintain the entrepreneurial learning process of the students and thus aim at enhancing self-guided and experiential learning among students and support the development of entrepreneurial mindset of the students*.

It has been suggested that team-teaching offers many benefits for schools and enrich teachers' work. Novicevic et al. (2003, 150 – 156), as well as Park, Henkin and Egley (2005) stress that collaboration and team-teaching provide a more positive working climate as a result of frequent interaction, increased collective responsibility and more knowledge of other curricular areas. The literature also supports the value of team-teaching in promoting students' learning in higher education (see e.g. Anderson & Speck, 1998; Novicevic et al., 2003; Park, Henkin & Egley, 2005).

However, until recently much less attention has been given to the impact of team- teaching on teachers' own professional development. Sandholtz (2000) makes a rare exception by presenting a study of team-teaching in which collaboration has been identified as a key aspect of teachers' professional development. The research findings revealed that team-teaching enhanced the professional growth of both student teachers and experienced teachers. Additionally, Pounder's (1999) comparative research of work characteristics and work-related outcomes between teamed and nonteamed teachers revealed a positive connection between teachers' teamwork and increased opportunities for teacher learning. Similar notions have been presented by Roth and Tobin (2004) who note that team-teaching also provides opportunities for learning to teach. From this perspective, team-teaching can be seen as a collaborative learning process, which aims at enhancing teachers' professional competence. Correspondingly, entrepreneurial team-teaching can be seen as a collaborative action-learning process, which enhances teachers' entrepreneurial readiness by increasing their self- and collective efficacy perceptions.

There are a variety of forms in co-teaching, thus the opportunities to enhance teachers' professional development are dependent on which team-teaching approach is applied. According to Nead (1995) and White, Henley and Brabston (1998) there are three distinct team- teaching forms presented in the literature. These models are the interactive, the participant-observer and the rotational models. The first of these models, interactive team-teaching, is an approach where two teachers are in front of the class simultaneously. This model has often been described as true team-teaching. The essential idea of this model is that both the teachers actively participate and

carry out the teaching and learning session. The second model, the participant-observer model, also requires that two teachers are present in the same classroom, but not simultaneously in front of the class, as the teachers alternate between the roles of observer and teacher. When one teacher is "in charge" the other does not actively comment or contribute new viewpoints. There is little or no dialogue between the teachers during the session. In the third model, the rotational team-teaching model, the teachers teach the same classes separately or attend the class only when teaching their specific areas. The teachers are not simultaneously present in the class.

Taken together, it can be said that team-teaching is a versatile tool to foster collaboration among teachers, and several variations can be identified in team-teaching. It is also evident that team-teaching approaches offer many opportunities to foster collaboration depending on which form of team-teaching is applied. This, on the other hand, leads us to question to what extent teachers are inclined to engage in such collaborative and action-based interventions. It has been suggested that teachers are more willing to interact and share their learning with friends and colleagues they like and find nonthreatening than with acquaintances (Collison & Cook, 2004). It has also been acknowledged that teachers' willingness to interact with each other is connected with their beliefs that they can perform efficiently together (Schechter & Tschannen-Moran, 2006).

To summarize the theoretical perspectives, it has been noted that entrepreneurial team learning might be a way to enhance teachers' professional development as entrepreneurial teachers. In the context of entrepreneurship education teachers' professional development can thus be seen as increased entrepreneurial readiness, which is needed when adopting entrepreneurial teaching methods. However, in order to reach this goal, we need to know how teachers' share their knowledge and learn collectively. This shifts the focus onto team dynamics. Supportive behaviour and efficacy beliefs seem to be essential in team learning processes. Team efficacy, which is a new concept in the field of entrepreneurship education, is presented as it seems to have a central role in the learning process. It has also been suggested that there is a relationship between team members' efficacy beliefs and team support. West's (1994) typology of team support patterns has expanded the construct of team support by identifying four distinct patterns of support. It is also suggested here that examining the teachers' collective learning experiences might open new insights into entrepreneurial team learning and team dynamics affecting in the learning process. Hence, the idea of entrepreneurial team-teaching has been presented as it may create opportunities for action-based and experiential learning and thus foster entrepreneurial learning among teachers and enhance their professional development as entrepreneurial teachers. From this perspective entrepreneurial and explorative team learning can be seen as a way to enhance teacher team's autonomy, which in turn supports individual and collective professional development by enhancing positive team-efficacy and self-efficacy perceptions among teachers. Hence, entrepre-

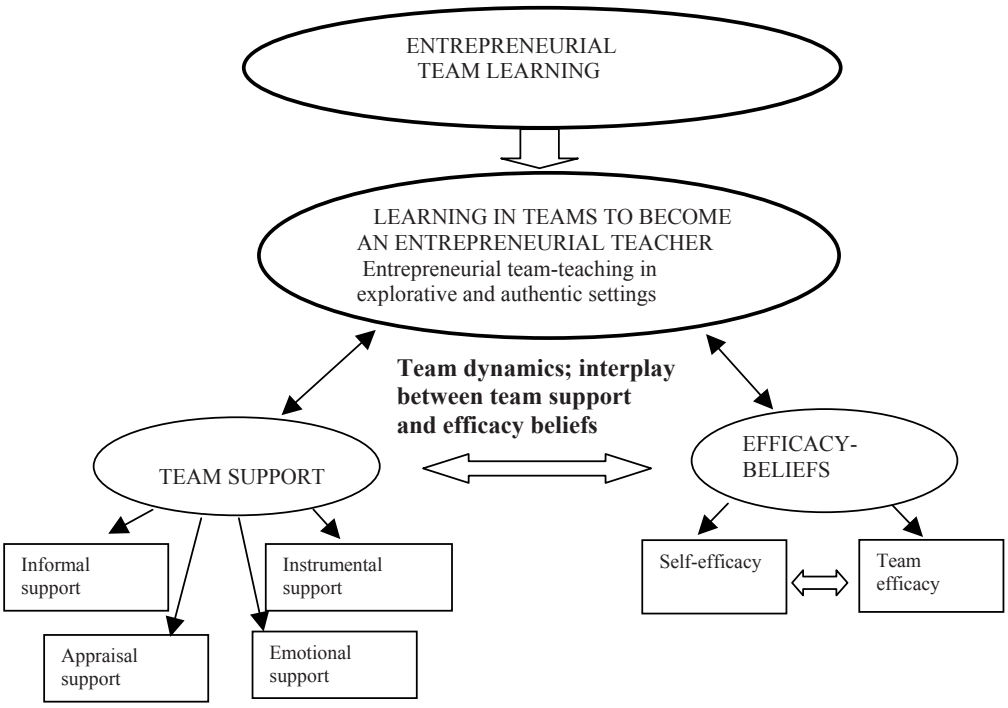

FIGURE 1. Theoretical framework of entrepreneurial team learning.

neurial team-teaching is not contradictory to the norms of teachers' individual autonomy, but could rather be seen as contributing issues. Figure 1 illustrates the theoretical framework.

5. RESEARCH SETTING, CONTEXT AND METHODOLOGICAL CHOICES

Research setting, context and intervention

The research setting applied in this study is authentic and explorative. This study aims to answer to the research question, whether learning in teams can help one to become an entrepreneurial teacher, by examining and interpreting team members' own perceptions about the meaning of teamwork and team support related to their professional development as entrepreneurial teachers. The professional development in this study is seen as a socially constructed learning process, which takes place through action in a real-life context and aims at enhancing teachers' entrepreneurial competencies.

This study is based on the teacher team individual and collective experiences gained during an entrepreneurial team-teaching intervention from February 2005 to May 2006. The entrepre-

neurial team-teaching intervention was related to the entrepreneurship education project, which was carried out at the Salpaus Further Education Centre in 2005 – 2006 in Lahti, Finland. The project was targeted to the teachers of Salpaus Further Education Centre. Altogether 30 teachers started in the programme. The aims of the programme were to support participants' competencies to act as entrepreneurship educators and mentors in their own educational departments. The programme contained three modules; 1) Orientation to entrepreneurship in a postmodern society and entrepreneurship education, 2) Teachers as entrepreneurial educators, 3) Intrapreneurship in a learning organization. Each module started with orientation lectures, which were given by the professors from other universities and was followed by two face-to-face interventions per module. A virtual leaning environment was used to support learning between the interventions. The programme adopted the principles of entrepreneurial learning and entrepreneurial pedagogy and thus the participants were allowed to set their own goals for learning, as well as the means to achieve them and they were encouraged to experiential and collaborative learning.

A three-member teacher team acted as tutors on this programme and guided participants' learning processes. This project offered the teacher team an opportunity to renew their pedagogical perceptions and apply the ideas of entrepreneurial pedagogy in practice. At the same time, as the interventions were carried out by applying the interactive model of team-teaching, the project offered an opportunity for entrepreneurial team learning through team-teaching method in authentic teaching situations. The team's experiential pilot project was thus a chance to research whether this would be an efficient method to enhance teachers' entrepreneurial readiness through entrepreneurial team learning. Hence, the research aspect was related to the project from the beginning. Thus data collection (written reflections) was also planned and started at this point. Figure 2 illustrates the project timeline

The team consisted of the author and two teacher colleagues, who had known each other for several years after becoming acquainted with each other in 2003 when studying entrepreneurship education at the University of Tampere. All team members had different work histories, but during the entrepreneurship education studies they had worked on several projects as a team and achieved good results. Previous joint endeavours and experiences of action in an autonomous team, friendship and a shared vision of the goals and means of entrepreneurial learning and teaching between team members were good foundations for starting this experimental pilot project.

Methodological choices

Grounded theory (GT), initially presented by Glaser and Strauss (1967) was applied as a research methodology and method in this study. GT is a widely used qualitative research method in the social sciences. The roots of GT lie in symbolic interactionism, which in turn is derived from pragmatism. GT is an interpretative mode of inquiry which aims at "exploring basic social proc-

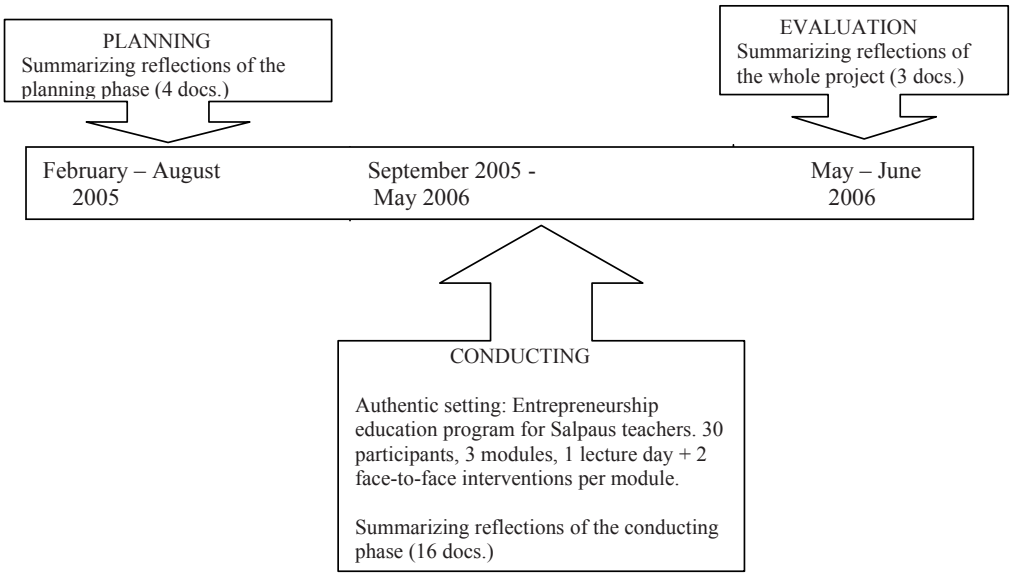

FIGURE 2. Project timeline.

esses and to understand the diversity of interactions that produces variation in that process" (Heat & Cowley, 2004). According to Goulding (1998) GT is a methodology which is applicable to "generate theory where little is already known, or to provide a fresh slant on existing knowledge".

Since its introduction, grounded theory has diversified. The most important variations of this method are the Glaserian and the Straussian approaches, of which the latter was applied as a research method in this study. The main differences between these two approaches relate to the nature of logical reasoning and to the role of theory. While Glaserian GT has remained true to inductive reasoning and moving from the data to empirical generalisation without any prior theoretical bindings, Straussian GT allows inductive-deductive and abductive reasoning and thus the literature, as well as a researcher's past experiences may be used to stimulate theoretical understanding. (Goulding, 1998; Heat & Cowley, 2004.) The style of reasoning applied in this research is both inductive and abductive, as the perspective from which the analysis has been built is affected by the theoretical framings, but the analysis process was started inductively from the data.

Data gathering and analysis

The data consists of reflections written by team members during the entrepreneurial learning process. The basic idea was that the experiences can be acquired through reflections. This idea

have been presented for example by Mezirow (1990, 6), who describes reflection as "an assessment of how or why we have perceived, thought, felt or acted". Hoyrup (2004, 442–454), on the other hand, states that reflection is "a mental activity through which it is possible to investigate one's own actions in a certain situation". In accordance with those above-mentioned ideas, written reflections seemed to be an appropriate data-collecting instrument for this study.

The data consist of 23 reflection documents, systematically gathered during the entrepreneurial learning process. The reflections were written at the beginning, in the middle and at the end of each phase in the team-teaching project. The average length of the documents was one to two pages. The data is narrow, but rich, as the written reflections summarized each phase of the learning process. In earlier entrepreneurship education studies, the team members had also trained how to write reflections of their learning processes, which partially explains the richness of this narrow data.

The data were analysed through three main coding phases; open coding, axial coding and selective coding. According to Saaranen-Kauppinen and Puusniekka (2006), the coding process should not be seen as an unvarying procedure, as a researcher may combine or move between the phases and also the precision of the coding depends on the aims and nature of the research. Hence, data analysis of this study has been conducted several times and each "analysis circle" has evolved and matured the interpretations.

In this study the analysis was conducted as follows:

1. *Open coding:* Open coding refers to breaking down the data into separate units of meaning (Goulding, 1998). In this study the analysing process started with chronological and inductive coding. Altogether 492 expressions were coded and identified according to their topics. Open coding revealed that the coded expressions related mostly to collegial support, team performance and team learning, which indicated that the team-teaching intervention was seen as meaningful. It indicated that deeper analysis was relevant to focus on those identified topics. After that the coding process continued by classifying the expressions related to efficacy beliefs according to the phases of the teaching project (planning, action, evaluation) in order to find if and how the efficacy perceptions changed or altered during the different phases of the project.
2. *Axial coding:* In axial coding the preliminary categories built in open coding, are expanded in terms of their properties and dimensions (Moghaddam, 2006). In this study West's (1994) typology of the support patterns was used as a mini-framework and the references related to team support were identified and classified accordingly along with the phases which were identified in open coding.
3. *Selective coding*: Selective coding aims at revealing the central or core category which

integrates all the other categories and relationships between them (Goulding 1998). Thus, also in this study in selective coding a core concept was chosen on the basis of the identified and organised categories.

6. RESULTS

Open coding:

Open coding revealed that the efficacy perceptions changed as the project advanced. In the planning phase team members' self-efficacy perceptions were very low, while team efficacy beliefs were very high. During the action phase the number of team efficacy beliefs was still considerably higher than self-efficacy beliefs, but interestingly indicators of increasing self-efficacy beliefs were discernible. In the evaluation phase the number of self-efficacy beliefs exceeded the references to team efficacy. Table 1 shows the variation of the references and the examples of expressions are presented in the Table 2.

The results indicate that belonging to the team was highly appreciated especially at the beginning of the project. Acting as a team and belonging to the team seemed to be a strong factor in proceeding with the project. Hence, the project appeared fascinating not just for the team, but also because of the team. This indicates that team members share a strong sense of team efficacy, which can be seen to derive from previous mastery experiences. Such commitment to the team seemed to be a good starting point for a project requiring effective team skills. On the other hand, effective use of mixed skills and supportive behaviour among team members increased cohesion within the team. It is also worth noting that only one expression related to efficacy beliefs on individual level and even that one reflected the lack of self-efficacy.

During the action phase the references to team efficacy focused on co-operation, which reflects team members' satisfaction with well functioning interaction and team performance. Individual strengths became shared strengths and team cohesion seemed to increase even further. Interestingly, at the same time the self-efficacy beliefs also increased. Consequently, acting and learning to perform in a more efficient way as a team seemed to support team-efficacy beliefs, but at the same time professional development also occurred on individual level.

In the final phase of the teaching project the importance of being a team became less important, even though the team members also expressed a willingness to work as a team again. The team members' perceptions about increased individual capabilities were explicit. Thus it seems that acting as a team was a way to develop individual competencies by giving and receiving feedback from others. Hence, team learning had not only increased team members' self-esteem, but also heightened their self-efficacy perceptions and thus enhanced their abilities to pursue new opportunities on their own.

TABLE 1. Categories and references in open coding.

Categories	PLANNING		ACTION		EVALUATION	
	References /Category		References /Category		References /Category	
	Number	%	Number	%	Number	%
Efficacy beliefs						
Team-efficacy	14	93,3	8	72,7	3	23,1
Self-efficacy	1	6,7	3	27,3	10	76,9
References N=39	15	100,0	11	100,0	13	100,0
Documents =23						

TABLE 2. Categories and examples of expressions in open coding.

Phase	Efficacy beliefs	Examples of expressions
Planning	Team-efficacy	I am excited about this possibility, but it seems even more attractive, because we can to do it together. / Here lies the greatest strength of our team; we know how each of us works and we are able to benefit our individual strengths and we are all equally committed to this project.
	Self-efficacy	I don't' think that anyone of us would have started this alone.
Action	Efficacy beliefs	
	Team-efficacy	Our team is flexible and willing to put more effort into this if and when needed. / Sometimes I have felt our team was like "a secret club", We have reached the level where we understand each other from half a word.
	Self-efficacy	I have changed as a teacher! /Entrepreneurial teaching approach has become more natural to me. Development happens even at this age
Evaluation	Efficacy beliefs	
	Team-efficacy	Our co-operation worked still well, although we didn't keep in touch with each other as often as in earlier phases. / Perhaps we will have a similar project later where we can act as a team; even though we are now more ready to act on our own
	Self-efficacy	There's no doubt that teamwork offers many benefits, which, I think, should be utilized, but we have now to share everything that we have learned so far and therefore acting individually is also possible./Instead of one, three teachers grew professionally during this project. Thanks to this experience it is easy to "tilt at windmills" also on our own.

Axial coding:

Open coding revealed the changes in efficacy perceptions and described the variation in the course of the teaching project. Axial coding aims at revealing what causes this variation. The theoretical framework indicated that efficacy beliefs and supportive behaviour are connected with each other. Hence, West's (1994) typology of team support patterns was used to identify variations in supportive behaviour among team members. Table 3 shows the support categories and the number of references in each category during the phases of the teaching project. The examples of expressions are presented in the Table 4.

In light of the findings it seems that at the beginning of the project, and team learning process, team support focuses mainly on instrumental dimension. This is not surprising, as the planning phase contained many tasks related to drafting and finalizing the schedule, compiling teaching materials, setting up meetings with other stakeholders, etc. During the planning phase the team members were also occupied with their other jobs and projects. Consequently, the issue of time was prominent. Finding time to fulfil the agreed obligations and for shared meetings was not trouble-free. The team's ability to allocate tasks turned out to be a cohesive force in this phase. However, it is worth noting that task allocation would not have been unproblematic without a shared commitment to a team goal and a sense of shared responsibility, as well as the ability to take advantage of merged talents and skills. The team members had known each other for many years and had acquired previous experiences of successful teamwork, which probably helped the team to move forward with this new project.

Although the practical benefits of teamwork were appreciated, another pattern of support emerging in the planning phase was appraisal support, which was referred to 10 times during the

TABLE 3. Support categories and their references

Categories		PLANNING		ACTION		EVALUATION	
		References / Category		References / Category		References / Category	
		Number	%	Number	%	Number	%
Support							
	Instrumental support	**12**	**30,8**	**16**	**19,1**	**4**	**21,0**
	Informal support	**9**	**23,1**	**11**	**13,1**	**3**	**15,8**
	Emotional support	**8**	**20,5**	**28**	**33,3**	**6**	**31,6**
	Appraisal support	**10**	**25,6**	**29**	**34,5**	**6**	**31,6**
References	**N=142**	**39**	**100,0**	**84**	**100,0**	**19**	**100,0**
Documents =23							

TABLE 4. Support categories and examples of expressions.

Phase	Support patterns	Examples of expressions
Planning	Support	
	Instrumental support	There was a lot to do and therefore it is good that we can divide tasks. It went so easily...on the other hand, it is not surprising, because anyone of us could have picked any of the subjects./ My full-time job has kept me busy and the constant lack of time has been stressful. I'm grateful to the others, because they have been able to take more responsibility in this phase
	Informal support	We met at my place and discussed the agenda for the coming session./ We noticed that we actually had too much material; relevant choices and a logical way to present the key issues is essentially important.
	Emotional support	The initial phase was problematic, because the goals set by the client organization were somehow unclear to us. We stood uncertainty very well./Our conversations have been very fruitful, because we are aware of the demands and challenges of this project and we have tried to anticipate the possible forthcoming criticism.
	Appraisal support	It's going to be a big challenge for me. My career as a teacher, especially on vocational level, is rather short, and I worry about how I'm able to fully utilize the skills and knowledge acquired from other occupations. Luckily the others can support me in this respect./ We discussed about the influence of having an entrepreneurship background.
Action	Support	
	Instrumental support	She is so good with the computers; we won't be in trouble as long as she is here with us./The students have asked for that feedback and we agreed that I'll do it.
	Informal support	I agreed to write out the memo regarding the closing arguments and to deliver it to the others./ Being here all together gives us a wider perspective; one of us might have had a change to discuss in more details with certain students and thus we get much more feedback
	Emotional support	I was very confused. How could they ask such questions? I feel that we are walking on thin ice...It helps a lot to know that I am not alone in this situation. / We have often thought and discussed that day. It was an extremely important situation for our own learning and development. This was a turning point and we were not worried after that. We just realized that it was meaningful for the students to pour out their feeling. I still remember us walking in silence back to the cars after that day. None of us said a word, but I knew that the others walked with me and shared the same experience. Later we talked about it more.
	Appraisal support	We should keep our minds open all the time and I have felt that we have succeeded in this. We act like entrepreneurs, all together toward the shared goal. Through open discussions we are able to adjust our actions to meet the needs of the students. We were able to change plans even in the middle of the day, or middle of the hour when needed./Each and every one of us has a right and responsibility to intervene and correct if and when she notice that we are going on "a wrong way" and "throw the ball" back to the students

TABLE 4. cont.

Evaluation	Support	
	Instrumental support	**Evaluation meant a lot of work. The team helped to handle this workload. How could I have handled that alone? / We have agreed that we'll give each group an individual written feedback about their work and their progress during the process. This evaluation and giving constructive feedback is demanding and takes a lot of time and thus it's good that we can divide the tasks among us three.**
	Informal support	**Lately we have discussed evaluation a lot. / The strength of the team becomes visible when we evaluate our students and discuss how they have succeeded in this programme.**
	Emotional support	**Team support has been indispensable in these situations. / It has been valuable to know that team support is available when needed, and support that has been given and taken had been appreciated.**
	Appraisal support	**Our meetings have been extremely important in order to carry on this project. We would not have succeeded without sharing the same perspective. / During this winter we all have received other opportunities to act as entrepreneurial teachers on our own. This was a new situation for our team and we did not how to handle it at first. Maybe we all were confused and wondered why the other one was playing "solo"…Now we have learned to understand that when we grow as individuals, we also grow as a team. Acting as a team, has made us stronger individuals.**

planning phase. According to the written expressions, it seems that appraisal support was mainly related to sharing experience-based resources regarding a teaching context (vocational level) and know-how and understanding about entrepreneurship.

In the action phase instrumental support was still appreciated, but appraisal and emotional support seemed to have more significant role in the team learning process. The expressions referring to appraisal support seem to reflect a profound satisfaction with the team and team performance. Through frequent conversations the team members were able to outline the learning needs of the students and at the same time team discussions supported team learning. In addition, appraisal support, in the form of shared reflections after each teaching session enabled them to constantly improve their interaction and thus helped them to maintain an entrepreneurial teaching approach.

As entrepreneurial learning differs greatly from a conventional approach to learning, it might cause resistance among students at the beginning of the process. However, it is important to give the students an opportunity to express their feelings of confusion and even anger. Otherwise the negative attitudes could obstruct the learning process of the students. However, dealing with the defensive reactions of the students could be emotionally demanding for a teacher as it requires an understanding attitude and abilities to control his/her own feelings in stressful situations. The

team faced this situation at the beginning of the programme and the references to the role of emotional support during an action phase clearly related to this event. It seems that collegial support helped the team members to withstand their own feeling of insecurity, as well as to cope with the outbursts of the students and thus overcome the incident and even to learn from it. Consequently, it is fair to say that teamwork seemed to develop team members' emotional and reflective skills, which are essential when adopting entrepreneurial teaching methods.

When the project, and thus a team learning process along with it, came to an end, the team members were satisfied that they had accomplished their goals as a team. It is interesting that in general the need for support decreased during the evaluation phase. Owing to the responsibilities related to evaluating students' work, the instrumental aspect of team support was appreciated, but still emotional and appraisal aspect seemed to have a more prominent role in this phase of the learning process, too. Emotional support was valued, as it was seen to be a key component in the entrepreneurial learning process. There were several expressions regarding emotional collegial support that was given and received during the process and the occasions when this kind of support was needed proved to be the most meaningful events in the learning process. Appraisal support was equally appreciated because it strengthened the understanding about entrepreneurship and entrepreneurial learning and teaching. The appraisal support also referred to the ability to resolve disagreements which occurred during the evaluation phase. It seems that at the beginning of the learning process the appraisal support was exploited to strengthen the team, but in this final phase the team members learned, by solving conflict arising, to support each other's personal growth as well.

Selective coding:

Open coding indicated that self-efficacy and team efficacy perceptions changed during the entrepreneurial team-teaching project, but in this phase the elements causing this variation were still indefinable. Axial coding was based on the acknowledgement that team performance and achievements are connected with the team's ability to learn, and also that team achievements are dependent on team support systems. Consequently, in order to go deeper into this interdependence, the references to team members' supportive behaviour were reclassified using West's (1994) typology of the support patterns as a framework. The axial coding showed that the team support was highly appreciated during the entrepreneurial learning process. However, it also turned out that the role and nature of team support changed during the process.

On the basis of these findings it seems that even if all the patterns of support were needed and appreciated, emotional and appraisal support seemed to have the most significant role in enhancing team members' self-efficacy perceptions. Therefore it seems that there is a positive connection between efficacy belief formation and supportive behaviour. However, the findings

also indicated that efficacy beliefs changed when supportive behaviour varied. Additionally, so far it has been stated that team-efficacy perceptions derive from team members' efficacy beliefs. However, these findings indicated that a strong sense of collective efficacy formed a foundation for entrepreneurial learning, which, in turn, was connected with supportive behaviour among team members and enabled the development of self-efficacy beliefs. It seems that team efficacy is an essential predictor for the changes in self-efficacy beliefs. Hence, these findings indicate that entrepreneurial team learning, team support and team efficacy perceptions can enhance self-efficacy perceptions.

When trying to model entrepreneurial team learning process, three distinct development or learning phases can be identified on the basis of the occurred changes in efficacy beliefs; confusion, strengthening and increased readiness. In the first phase of the entrepreneurial learning process team members' self-efficacy beliefs were very low and the team members were confused about the forthcoming project, but a strong sense of team efficacy combined with supportive behavior helped team members to overcome the confusion. In the action phase, owing to emotional and appraisal support, the strengthening of team members' self-efficacy beliefs became visible. When the project ended the need for support diminished. Emotional and appraisal support were still appreciated, but interestingly the nature of these patterns of support changed. When in the initial phase, emotional and appraisal support were utilized to increase team cohesion, in this final phase emotional and appraisal support were merely exploited to empower and strengthen individual entrepreneurial competencies. It was also noteworthy that while the self-efficacy beliefs increased, which indicates that individual-level entrepreneurial readiness has enhanced during the process, the significance of being a team seemed to diminish. Table 5 shows the phases of self-efficacy formation in entrepreneurial team learning process.

Figure 3 illustrates the self-efficacy formation during the entrepreneurial team leaning phases in relation to the phases of team-teaching project. It seems entrepreneurial team learning enhances the development of self-efficacy perceptions, which stems from confusion and strengthens through action, and an increased entrepreneurial readiness can thus be seen as a leaning outcome. These phases are quite similar to the phases of risk learning identified by Kyrö (2005), which also highlighted the significance of collaborative action-based learning. Risk-taking is also one of the core elements of entrepreneurial team learning. These findings also reflect the idea of learning partnership presented by Lorange (1996) and Mäntylä (2002). It seems that while collaborative entrepreneurial learning support team performance, it also enhances the development of individual competencies.

TABLE 5. Phases of self-efficacy formation in entrepreneurial team learning process

CONFUSION:	STRENGHTENING:	INCREASED READINESS:
Entrepreneurial team learning as a means to overcome confusion	Entrepreneurial team learning as a means to support team and individual performance	Entrepreneurial team learning as a means to enhance individual entrepreneurial readiness
Strong sense of team efficacy, lack of self-efficacy	Team efficacy fosters the formation of self-efficacy beliefs	Increased self-efficacy perceptions, diminished role of being a team.
Instrumental and appraisal support as driving and cohesive forces.	Emotional and appraisal support as maintaining and strengthening forces.	Emotional and appraisal support as empowering forces.
Supportive actions; from individuals to the team	Supportive actions; to increase team performance	Supportive actions; from team level to enhance individual learning

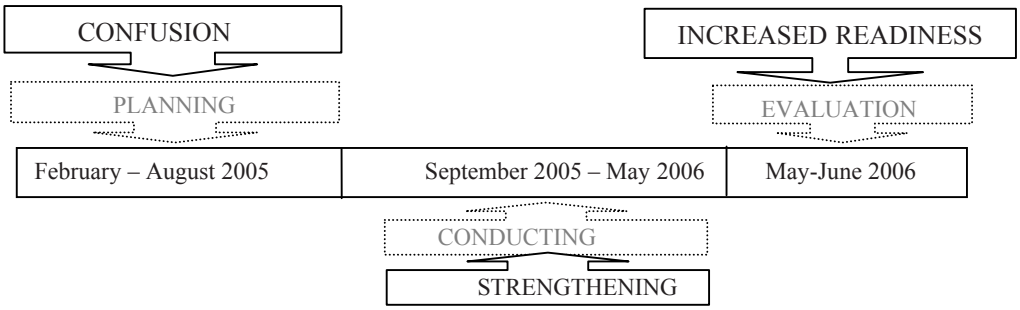

FIGURE 3. Self-efficacy formation in entrepreneurial team learning process.

7. CONCLUSIONS

The aim of this study was to improve our understanding of entrepreneurial team learning, team dynamics and teachers' professional development by describing a teacher team's entrepreneurial learning process during an explorative team-teaching project**.** The research focused on the processes affecting entrepreneurial team learning which might have an influence on enhancing teachers' entrepreneurial readiness. This research explored whether learning in teams can help teachers to become entrepreneurial teachers.

On the basis of the research findings, it can be stated that an entrepreneurial team-teaching experiment seemed to create crucial learning episodes for the team members. An explorative

research setting with written reflections seemed thus to be a valid method to investigate team dynamics and team members' experiences in an entrepreneurial team learning process. The findings also indicated that West's (1994) typology of support patterns is an appropriate tool to explore the support patterns in a team context. However, it was revealed that the support patterns are rather changing than stable during the entrepreneurial learning process and thus the classification of the expressions accordingly was not clear-cut. This highlights a need for further studies on the types of support. However, the results indicated that all patterns of support were appreciated, but appraisal and emotional support seemed to be the central elements in enhancing entrepreneurial team learning and the formation of efficacy beliefs.

The research findings indicated that there is a positive relationship between team support and team members' efficacy beliefs. These constructs are mutually enforcing, but it also turned out that team efficacy perceptions predict changes in self-efficacy beliefs, which means that a strong sense of team efficacy among team members can generate and enhance team members' self-efficacy perceptions. The research findings also indicated that self-efficacy formation in an entrepreneurial team-learning process occurs through three separate phases; confusion, strengthening and increased readiness, which also emphasized the social aspect in entrepreneurial learning, as team support seemed to be the essential element in this process. Hence, it can be stated that collaborative and entrepreneurial team learning seemed to enhance team members' individual-level entrepreneurial readiness and thus increased team members' competencies to act as entrepreneurial teachers.

This study aims to make a theoretical contribution to the field of entrepreneurship education research by presenting the concepts of entrepreneurial team learning and entrepreneurial team-teaching and by opening up the entrepreneurial team learning process and especially the interplay between team support and efficacy beliefs. Additionally, the construct of efficacy, which has previously been connected with the debates of the development of entrepreneurship intention, was here presented in a new context within entrepreneurship research. Along with this, the construct of team efficacy was also brought into entrepreneurship education discourses.

Straussian Grounded Theory seemed to be an appropriate research method for this kind of explorative and experiential research setting. A systematic analysis through three coding phases revealed the interplay between efficacy beliefs and team support, which has been difficult to explore with other qualitative methods. These findings imply that perhaps this is a relevant method to explore innovative, experience-based and reflective interventions more extensively.

This is a small-scale research and thus has its limitations. Therefore these findings cannot be generalized. However the findings hopefully increase interest in studying this area further. It should also be noted that this research focused on a team which already had reached a high-performance level and had thus already gained experiences of mastery performance. As team

development requires a lot of time, it may be that when a team is at a different stage in its development, the patterns of support are likewise different. Thus, further research is required to investigate the role and nature of support patterns in different stages of the team development process.

Nevertheless, these findings suggest that if we want to promote teachers' entrepreneurial competencies, perhaps team-teaching and team learning ought to be considered more extensively. This research may also have other practical contributions, as the findings can be linked with questions of teachers' workplace learning, which is still quite an unfamiliar way of learning in formal teacher education (Maaranen, Kynäslahti & Krokfors, 2008). It has been suggested that even though teacher education in Finland has prospered in many ways, as several researches have verified (see e.g. Jakku-Sihvonen & Niemi, 2006), informal teacher learning taking place through experiences at the workplaces should not be overlooked. Hence, more emphasis should be put on practice-based courses and collaboration with other stakeholders. (Maaranen, Kynäslahti &Krokfors, 2008; Mehdinezhad, 2008.)

In summary, this was an interesting experiment and on the basis of these findings it can be suggested that perhaps an action-oriented, collaborative and entrepreneurial approach to teacher learning, especially in the field of entrepreneurship education, should be considered more extensively. ■

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