

**NEW KIND OF OPERATIONS MODEL – MEANINGFUL
LEARNING THROUGH ENTREPRENEURSHIP EDUCATION**

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Abstract

Voimala Coaching Center for Entrepreneurship offers coaching for students and teachers at the upper secondary level. Voimala project started 1.5.2008 and operates under Tampere University of Applied Sciences Proacademy unit that specializes in entrepreneurship studies for BBA students. Voimala is financed by the European Social Fund, Pirkanmaa Centre for Economic Development, Transport, and the Environment, and Tampere University of Applied Sciences.

Voimala project was set to have two major purposes. Firstly, to transform the entrepreneurship culture of young people in Pirkanmaa region by creating positive entrepreneurship experiences and secondly, to offer tools for teachers to bring entrepreneurship education into practice at their work.

To succeed in this mission coaches challenge and support the students and teachers in the learning process by utilizing Proacademy's practical training methods. These methods are based on team-centred learning tools such as coaching in small teams, dialogue, knowledge-creation sessions, innovation, learning by doing, and real world working life customer projects.

1 Introduction

The continuously changing society and working life require entrepreneurial readiness. Voimala project was originally launched to meet these requirements, to develop the educational system, and to promote entrepreneurship in Pirkanmaa region. The idea was to change the entrepreneurial attitudes of young people more positive, and develop their working life skills. The basis was to create an innovative and motivating way to study entrepreneurship within the project, through learner-oriented and practical coaching. This would later on benefit the economic life through having workforce with better working life skills and increased entrepreneurship.

To enable the continuity of entrepreneurship promotion, the teachers were added as target group. In teacher trainings coaching skills by using innovative tools for coaching and teaching entrepreneurship education and producing new ideas and thoughts for entrepreneurship education are taught. Teacher trainings also offer tools to self-improvement and new ways of working.

The goal has been to conceptualize the process and create a format that could be spread out nationwide as a good and effective way to promote entrepreneurship and enterprise among young people. The project also aims to cooperate with other instances aiming to promote entrepreneurship. In Voimala entrepreneurship is the way of working, and this shows all along the line in the coaching methods.

2 Learning Methods

Voimala Coaching Center for Entrepreneurship utilizes practical Partus training methods tested since 1999 in the Tampere University of Applied Sciences Entrepreneurial Unit Proacademy. Proacademy operates independently under the administration of the degree programmes in Business Administration and Business Information Systems and provides degree-oriented education for BBA and IT students.

Partus methods are team entrepreneurship methods based on working and learning together, applying latest theoretical knowledge, and generating new knowledge to build learning organizations and communities. Utilization of Partus methods can develop the expertise of individuals and organizations in the following areas: team entrepreneurship, team learning, and team leadership, which all support business activities. The role of coaching is to support growth in these areas of know-how.

Coaching can be seen as one of the best ways to help people to learn, to develop their work communities, and to achieve satisfying results. People achieve their best potential and learn the quickest in productive teams with like-minded friends. Proacademy uses a combination of pedagogical, organizational and leadership theories to create an environment where learning by doing, dialogue, and brainstorming, generate new ideas. The Partus coaching methods are applied into practice to meet the requirements of Voimala's short term based coaching.

2.1 Theories and ideology behind Voimala's Learning Methods

The concept of different types of trainings, vary depending on the extent, contents, and goal of the coaching. In general, the driving force in Voimala is doing together, having fun, learning by doing, and taking the learned matters into everyday life actions. At the background of these ideologies is Kolb's (1984) theory of experimental learning that is based on observing and reflecting concrete actions and testing them in new situations. Learning by doing, however, puts very little emphasis on the social construction of knowledge and what actually happens in the learning process. It does not provide, either, concrete tools for idea generation and conceptualization that are required in the process.

2.1.1 Learning Through Knowledge Creation

Nokana and Takeuchi (1995) have extended the learning cycle to include the nature of knowledge and other learners in the process. Knowledge that accumulates in formal, and informal learning processes, can be tacit or explicit. Tacit knowledge is internal knowledge built by the learner from experiences, current reality and practice. The difficulty is to verbalize or share this knowledge with others. Explicit knowledge is conceptual, generated by reasoning, past memories and theoretical knowledge. For the learner it might be difficult for to apply explicit knowledge in action. In an effective learning process, information must flow in all directions as shown in Figure 1.

It is possible to share tacit knowledge by socializing with others. In order to do so, tacit knowledge needs to be externalized and processed. This way it can be presented and shared more effectively as explicit knowledge that can be augmented by sharing and combining different theories and sources of information. To make explicit knowledge a part of learner's practical skills, it needs to be converted to tacit knowledge through internalization.

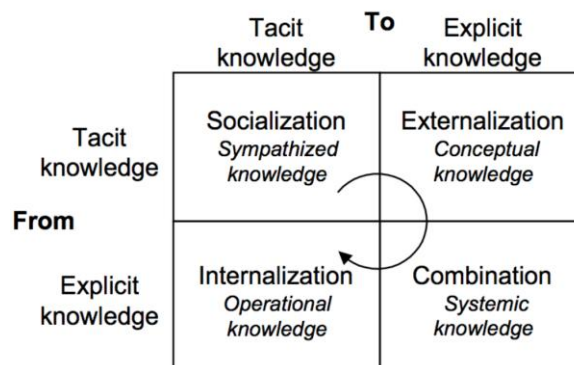


Fig. 1: Flow of information from tacit to explicit knowledge.

Through Nonaka's and Takeuchi's model it can be clearly seen that organizational learning requires processes and tools to support the cycle continuously. Students and teachers have much tacit knowledge and they gain more of it by living, doing things, and experimenting. Since this knowledge is often quite subjective they many times consider it not worth sharing or discussing. This way even the learners may fail to realize that they have learned something.

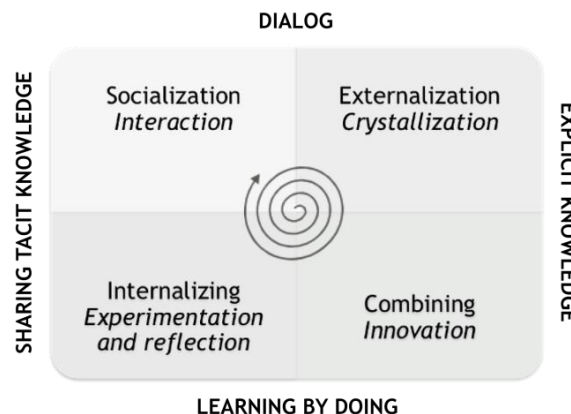


Fig. 2: Flow of information with supporting learning tools.

Figure 2 shows some of the most important tools and processes that support this cycle. Externalization also allows evaluation of the subjectivity or reliability of the information, since the explicit formulation needs to be agreed on mutually. By combining different sources of explicit knowledge, e.g. coaching materials and Internet, and then comparing, applying and refining own ideas and ways of doing things, new explicit knowledge is created. This information needs to be tested in real world in order to experiment how it works, and to get internalized experiences.

2.1.2 Dialogue for Knowledge Sharing

At Voimala dialogue is the most important tool for reflecting on experiences, creating new ideas and concepts, and sharing insights. Dialogue is used both in teacher and student trainings and it is organised in a special way everybody sitting in a circle without obstructions (e.g. tables) between participants. The purpose of dialogue is to expand our thinking by coming up with new perspectives, alternative ideas and deeper understanding instead of a discussion where the goal is typically to make a decision and to narrow down from the ideas that we have Isaacs (1999). Dialogue encourages everybody to share their ideas and thoughts but it also teaches to listen to others, respect for all thoughts, waiting for others, and talking openly and straightforwardly.

Dialogue is throughout the whole training the red thread that is needed in most of the actions. In the beginning of the student trainings there is much innovation and idea creation for the mandator. Teachers innovate and build some ideas in order to improve their own work and working environment. These innovation and idea creation sessions are based on dialogue and they lead finally into “birth-giving” sessions where participants prepare and lead activities that respond to a creation of a concrete solution in the team. These sessions are done usually in small groups of 2-4 participants where key findings are shared with the team and through them a consensus is created so the activities can direct towards improvement and desired actions.

These are examples of combining different sources of explicit knowledge to generate new knowledge that the team can use to further develop for example their everyday practices in the team, or the excel in the project they are doing for a mandatory. Before closing the trainings participants and the coach evaluate the process, what has been learnt of it, how intense or memorable it was as an experience, and how well it can be applied into practice.

2.2 Feedback and Evaluation of the Learning Process

At the teacher trainings analyzing of the learning process and providing feedback is done, by using Motorola tool, which consists of four simple questions. 1. What went well in the project or session? 2. What can we do better next time? 3. What did I learn? 4. How will I take what I learned into practise? Motorola is typically prepared individually but it can be shared with other participants providing further discussion.

The students will receive feedback of their performance from the coaches throughout the training and after the whole project is completed. The mandator gives also feedback for the students after the project is completed and results can be observed. At the end of the project the students analyze their individual learning process, the group performance, and results. They have also an opportunity to give feedback for the mandator and for the coaches. Through feedback, and analyzing the results after, each training the coaching concept has formed into its present form.

Finally, all the ongoing projects and the development of the company, leadership, team organization account for the experimentation, reflection and learning-by-doing part of the Nonaka’s and Takeuchi’s cycle. This cycle is at the core of all learning at Voimala. It is a process that provides the opportunity to learn many ways, in several levels, and several different skills, but it is essential to realize that learning this way takes time.

2.2.1 Feedback from the Students

Feedback has been very good. The table contains feedback upper secondary level students who participated in the coaching during autumn 2010 and spring 2011. The students have assessed the following matters related to coaching on a scale of 1-4, where 1 = disagree, 2 = partially disagree, 3 = partially agree and 4 = agree. In addition to this, they responded to two open questions: 1. Name three things that especially stayed in your mind regarding success, 2. My greetings to the students participating in upcoming courses at Voimala.

Altogether 101 upper secondary level students participated in Voimala’s Business Coaching during the time period from August 2010 until January 2011. The majority 71,3% of the participants were girls and 28,7% were boys. The age range was between 16 and 20 years: 49,5% of participants were 17 years old, 24,7% were 16 years old, and 15,9 were between 18 and 20 years old. There were nineteen closed questions to be answered. Figure 3 presents the average of all responds, womens’ responds, and men’s responds.

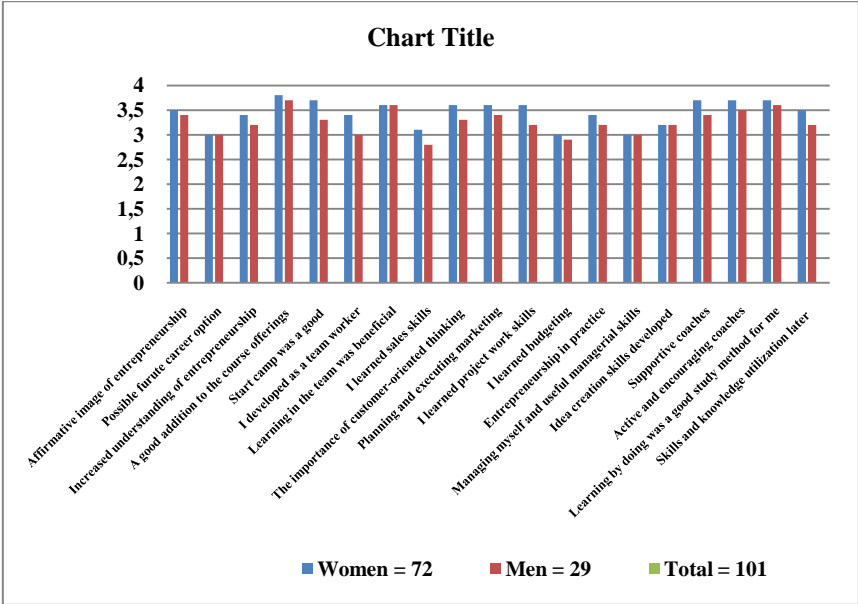


Fig. 3: Flow of information from tacit to explicit knowledge.

The questions were as follows: 1. I have an affirmative image of entrepreneurship. 2. Practicing entrepreneurship is one of my career options in the future. 3. My understanding about entrepreneurship grew during coaching. 4. Voimala’s coaching is a good addition to the course offerings at my educational institution. 5. Start camp was a good addition to the Busi-

ness Coaching. 6. I developed as a team worker. 7. Learning in the team was beneficial. 8. I learned sales skills. 9. I understand the importance of customer-oriented thinking in profitable business. 10. I learned about planning and executing marketing. 11. I learned project work skills. 12. I learned budgeting. 13. The project taught me entrepreneurship in practice. 14. I learned about managing myself and about useful managerial skills. 15. My idea creation skills developed during the coaching. 16. The coaches supported me and my team during the coaching. 17. The coaches were active and encouraging. 18. Learning by doing was a good study method for me. 19. I believe that I can utilize knowledge and skills accrued in coaching in the future.

Here are some responses that were given to the first open question: 1. Name three things that especially stayed in your mind regarding success: “The significance of communicating, saying things out loud and listening to other people.” “The functioning of the team, customer satisfaction, and importance of listening of customers.” “The importance to cooperate, listening to the team, and making compromises.” “It requires a lot of work and social skills, but it is very rewarding.”

Here are also some responses that were given to the second open question: 2. My greetings to the students participating in upcoming courses at Voimala: “A beneficial course, a fun change to normal studies and making new friends.” “Fun and relaxed way to learn, tell one’s opinions, the camp and meet-ups unite.” “One needs such knowledge and skills in the future, it’s definitely worth to participate.” “A good opportunity to learn hands-on skills about entrepreneurship, a great addition into normal boring audition lessons, many new friends and having fun.” “The entrepreneurship coaching provides a very strong basis for people who are interested in entrepreneurship, and these skills are helpful in the future. If you throw yourself into it you will succeed for sure.”

2.2.2 Feedback from the Teachers

Here are some samplings from teachers’ feedback that they have given using the four Motorola questions. 1. What went well in the project or session: “Cooperation was good, and there are many opportunities when everybody’s knowhow and experiences are utilized.” “Good conversations that gave new viewpoints and the cooperation between different units.” “Effective and relaxed atmosphere, teamwork, and the concretized results.” “The feedback system works well since reconstructive feedback is not discouraging, the way of working that proceeds rapidly and provides concrete results.” “Clarifying ideas, boosting the thinking, and great learning environment.”

2. What can we do better next time: “I would have needed more concrete tools, precise questions, and post-it notes, pen and paper for the contemplation exercises.” “The innovation was difficult, it should have been more assertive, and at times it was difficult to understand the instructions that should have been more simple.” 3. What did I learn: “Some new background theories and tools, and deeper understanding of the school world.” “Activating own thinking, innovating and creating new ideas, new theoretical basis.” “A new attitude towards

practice, many new ways of working, new pedagogical viewpoints.” “Changing my own viewpoints, getting rid of the old patterns, and new ways of confronting the students.”

4. How will I take what I learned into practice: “Activating the students and making learning fun, updating my knowhow about social media, more courageous innovation.” “Tools that I can take into practice, orientation methods, encouraging and supporting the students more.”

3 The Concept of Coaching

Voimala’s Trainings are lead by coaches instead of teachers. The developer of Partus coaching methods states some significant differences between teaching and coaching. Teaching is oriented from outside in, executed by others, and it is focused on information, skills, prowess, and performance level. The assumption is regular, steady development. Coaching is oriented from inside out and based on the personal motivation. It focuses on values, attitudes, behavior models, and outcomes expecting rather change, than development. The core of coaching is to help organizations and individuals to learn learning and developing. When teaching aims developing the basic competences, coaching aims creating breakthroughs. This is maybe the most profound difference between teaching and coaching.

3.1 Coach’s Thesis

Coaching skills can be learned through many years of experience with teams, the same as, building teams. In order to form, a high-performing team needs an experienced coach. The function of the coach is to help the team creating an atmosphere of trust through trusting relationships. Only trust allows rich dialogue to take place and dialogue is the life force of every team. The coach should have an understanding that diversity causes challenges but can be turned into strengths, and conflicts are an opportunity to develop the team.

One of the most important tools for a coach is the personality, which should not be hidden behind the coach’s role. Coaching requires openness and understanding of different situations in order to know when to intervene and when not. Coaching needs a lot of patience since what the team is capable of can only in the end. Before the end each team must experience its highs and lows, which are necessities in the process of development and growth.

Every coach should be aware of that only about 10% of teams reach the top, but through good coaching many teams can reach a good performance level. Part of good coaching is supporting and guiding the team to create leading thoughts, mission, and vision. Those factors help the team to direct its energy towards its shared goal. At last but not the least it is good to keep in mind that one success does not make anyone a master coach. Only after coaching many teams successfully it is possible to be master in coaching Partenen (2008).

3.2 Different Coaching Styles and Roles

Every coach needs to have many different kinds of qualities, and understanding to choose in different situations the right style or tool to coach. It might sound easy, but in reality it requires a lot of practice and learning. Besides, every coach needs to have a passion for coaching, and a strong will to commit in the coach's role. In order to coach one must build a team, and then coach individuals within the team. Other basic principles for coaching are asking questions, having time to discuss and chat with students also informally without goals, and remembering to give more positive than negative feedback.

A coach, can have many different roles depending on the situation, and on the phase, and need of the team. At least a coach needs to be an influencer both in the background and in the opinions. Sometimes the coach needs to be active, asking questions and other times passive, maybe providing answers. The coach needs the quality of being demanding or caring, and always inspiring. The role of a coach might require being a messenger, encourage participation and commitment, and most importantly feedback provider. Figure 4 gives an idea of coaching styles Downey (2003).

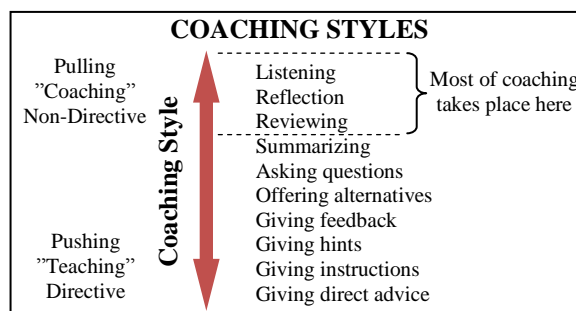


Fig. 4: Coaching Styles.

The coach should strive to release hidden potential in the team and its members, and help the learner to solve his/her problems. Coach creates a safe atmosphere for the learner, trusts in the process, and helps students to set goals. This enables the student to take responsibility on acting towards one's goals. The journey is often more important than the destination. A coach challenges, since the student's own motivation and learning objectives should always be the starting point.

Coach believes more in the students than they do themselves and guides the process by giving tools. Coach focuses in the values, attitudes, behavioral models and end results. Actions and objectives and directly tied to Voimala's vision and rules. At the same time the coach helps teams and individuals to learn and develop new, concentrates on breakthroughs and strengths, expects goal-oriented behavior and demands more. Coach needs to be present and available.

Coach has many responsibilities but there are also some matters that the coach is not responsible for. Since the coach is not a teacher, the job is to support the development of the team and challenge and motivate the individuals. Coaches are not part of the students' projects, and they do not participate in the work otherwise than as a supporting person on the background. The coach makes sure the students do the right things at the right time by asking questions and making them realize through the questioning what needs to be done. Coach is not an expert of all different subjects the students might get in touch with during their project, but the coach is an expert the learning process.

4 Voimala's Coaching Types

Coaching creates positive views and experiences about entrepreneurship. According to the innovation thinker Frans Johansson, ideas are formed when we bring concepts from one field into a new and strange field. When well-established ideas collide and unite with other fields, branches, and cultural concepts, revolutionary ideas are accomplished. The driving force in Voimala is doing together, having fun, and learning by doing. The trust in ones actions and skills will form through succeeding.

4.1 Coachings for Students

With students the learning emphasizes learning by doing, team learning, and coaching-based guiding. The goal is to make young people more aware of entrepreneurship as one option for employing oneself. Coaching sessions are held either at Voimala's premises or at the school of the students and are led by the coach and an entrepreneurship student from Proacademy. The extent of the different coachings, vary from one high school course or study week to five study points.

Learning methods are very similar regardless of the type of the training. The basis in the trainings is a team project for a local company, which is usually started in a camp. Sometimes the whole project will be completed in the camp. Other important methods are short lectures and discussion (dialog) from day's topic and how it relates to the project and how this new information can be used in the project. Sometimes the trainings include also reading applicable professional literature and writing essays.

The contents of students' trainings vary slightly depending on the working life project, but the basic idea of learning entrepreneurship remains strongly in every training. The real life project requires versatile knowhow about different business issues so that the students can get the best potential out of their skills. During the training students can learn about marketing, sales, product development, customer relations, teamwork and roles, project management, budgeting and financial planning, and business law.

4.1.1 Voimala's Business Coaching

In Voimala's Business Coaching entrepreneurial young people learn the basics of business by learning by doing. Business Coaching starts with a 24 hour Start Camp to initiate the students with each other and with the coaches, to create team spirit, and to start innovating the project received from the client. The base in Business Coachings is that students innovate and execute a real life project, for example a campaign or an event, for the client during the coaching.

After the start camp there are 5 meet-ups where, the project is made and the students familiarize themselves with business related issues like sales, marketing, budgeting, project management and team work through the guidance of the coaches. The coaching culminates in the execution of the project, followed by a feedback meeting to reflect on what has been learned.

4.1.2 Voimala's Summer Coaching

Voimala's Summer coaching offers a summer job as an entrepreneur for the summer. A group of approximately 15 students who have completed the Business Coaching course are chosen in the Summer Coaching. The young people conduct a service or sales related project in the guidance of Voimala's coach. The project lasts from 4 to 8 weeks. The project starts with an intensive preparation week. During that week the project is planned and the students study different skills that they will need during the project. The extent of the coaching is two high school courses or three study weeks.

In summer 2010, nine high school students established a café in the centre of Tampere. Voimala's coach guided the students throughout the summer, but the responsibility for the café's operations was with students. The café was open seven weeks and made profit nearly 10.000€ during that time. The turnover was 19.000€. It was such a great experience for the students that five of them will start a café this summer again on their own.

4.1.3 Voimala's Business Camp

Voimala organizes various different types of camps for upper level students who are interested in entrepreneurship. The goal of those camps is to generate business ideas, increase business knowhow, and to form new networks and partnerships among the participants by utilizing participative methods. Besides Voimala's coaches the students are, directed by experts and teachers from various areas. The camp lasts one week and the extent is five credit units.

Voimala's Business Camp for university students, aims through participatory methods to develop business ideas and increase business knowhow. By innovating and working together in the camp the students can create new networks and partnerships among each other.

4.1.4 Voimala's Steel Coaching

Voimala's Steel Team is formed from students who have already participated in Voimala's Business Coaching. The Steel Team continues conducting a working life project in the guidance of Voimala's coach. The goal is to create a team, which employs itself with projects along with studies, develops its knowhow and strengths, and operates as an example for other young people. The goal is also to create new business ideas.

The first Steel Team was established in January 2011. A group of four students run and managed a snack kiosk during their one week winter holiday break in a massive event for young people. The students organized the kiosk and planned the selection they were selling. Some of the products they baked themselves. The happening reached about 1500 young people every day.

4.2 Coachings for Teachers

Every teacher can become a master of learning and inspiring. In Voimala's camps participants search together new energy and flow into their work by learning new, sharing information, knowhow and skills, and deepening insights of learning. For teachers' there are two different trainings: Voimala's Energy Camp and Voimala's Power Camp. Both trainings have the same basic principles. The idea is to participate first in Energy Camp to get the process started. After the Energy Camp, follows Voimala's Power Camp, where teachers can deepen their knowhow.

4.2.1 Voimala's Energy Camp

The purpose of Voimala's Energy Camp is to empower teachers' coaching skills and produce new ideas and thoughts for entrepreneurship education. The camp deals for example with entrepreneurship as a characteristic, how it can be coached and differences between teaching and coaching. The coaching offers teachers tools for coaching style teaching, new ways of doing things in their everyday work, and enthusiasm and energy to take with them into their own working environment and life.

4.2.2 Voimala's Power Camp

After the Energy Camp, teachers can deepen their entrepreneurship education know-how and create concrete models and practices in Voimala's Power Camp. The goal for teachers is to create concrete models for advancing entrepreneurship to educational institutions without forgetting multidisciplinary. The use of different brainstorming and creative tools is practiced at the camp. At the same time the problematics and special nature of every educational institution is examined deeper. The Coaching offers teachers versatile insights in teaching and coaching, ideas how to realize entrepreneurship education in their own work, empowering

experiences, and networks to develop their own work. Teachers' camps last for two days, and are led by coaches from Voimala and Proacademy.

4.3 Results

Since 1.5.2008, 884 students and 140 teachers have participated in Voimala's coachings from over 20 high schools. The participants have accomplished 1056 high school courses for high school students, 360 study weeks for vocational school students, and 285 study points for university students. Other accomplishments are marketing campaigns and events, customer events, young people's events, a planned cruise package, a realized cooking course and a cake baking course, that have been executed for companies. There has been cooperation with over 20 local companies and organizations.

Voimala cooperates continuously with other entrepreneurship education projects, entrepreneurship associations and development organizations. We actively discuss entrepreneurship education and its meaning and practices also with the management of educational institutions. A new way to produce entrepreneurship education and coaching has been created in the project. The coaching sessions are inspiring, emphasize doing things together, and encourage brainstorming and creativity. They enable continuous cooperation between students and companies

5 Conclusions

We have created functional training concepts that advance entrepreneurship for secondary and higher level students and teachers. The methods are modern and inspiring, and the feedback received from the coachings is throughout the line excellent. The cooperation with companies has been fruitful and beneficial to both students and entrepreneurs (for example, the growth of sales on sales promoting days and new ideas for the development of business). The model can be duplicated for other areas (through a handbook and training). The conceptualization has been begun, and, for example, the coach's handbook describing the theory of coaching and practical applications is already done.

Our approach enables us to use learning-by-doing philosophy throughout in a long-term and goal-oriented process where the journey is often more important than the destination. Participants have great freedom and responsibility in setting themselves meaningful learning goals. The idea is that after the training the new way of learning can continue and develop within the participants and organizations where they influence at present and later. Peter Senge's and Nonaka and Takeuchi's theories about learning organizations and the social nature of knowledge also have a strong influence on our learning tools.

Voimala has been using this learning environment and these learning methods for almost three years now and they have transformed both the participants of the trainings, and our coaches. Participants gain true competences and a new way of thinking and doing things from

learning with these innovative methods. The coachings emphasize on learning by doing, team learning, self-directedness and learning to learn. Many students have been able to utilise experiences gained in the Business coachings in summer jobs, school and during leisure time. The teachers have noticed positive changes in the students during and after Voimala's coachings. Many students have become more active, and inspired, they take more responsibility for larger entities, and put themselves on the line.

Voimala encourages entrepreneurship and being active. The responses emphasized that it works well to make students execute projects in practice. Voimala can be seen the engine, pilot and pioneer of development in the Pirkanmaa entrepreneurship education. Voimala activities are seen important both with students and representatives of other interest groups. The young people feel it is significant that they have the opportunity to participate in Voimala's coachings, and that, activities continue and develop further.

REFERENCES

- Downey, M. (2003), *Effective Coaching: Lessons from the Coaches' Coach*. Texere Publishing, US; 3rd edition.
- Isaacs, W. (1999), *Dialogue, The Art of Thinking Together*. New York: Double-day Currency.
- Kolb, D. (1984), *Experiential Learning*. Englewood Cliffs, NJ: Prentice Hall.
- Leinonen, L., Partanen, J., Palviainen, P. & Gates, M. (2004), *Team Academy: A True Story of a Community that Learns by Doing*. PS-kustannus.
- Nonaka, I. & Takeuchi, H. (1995), *The Knowledge-Creating Company*. New York: Oxford University Press.
- Partanen, J. (2008), *Yrittäjän parhaat kirjat 2008*. Jyväskylä: Kopijyvä Oy.
- Siltanen, J. (2009), *Once you've tried it, you won't go back! - Studying a BBA Degree Via Running And Developing Your Own Business at TAMK ProAcademy. Learning by Developing - New Ways to Learn*. 2009 Conference Proceedings. Outi Kallioinen (ed.)