



The Camp Model for Entrepreneurship Teaching

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Abstract

Moving people from their normal work place or school environment to a camp site can be an efficient means for team building, creativity training and innovation boosting. A camp setting opens for tight and intense processes among participants, promising to take them beyond daily life dominated by goal oriented and rational behaviour. In camps, a playful atmosphere can be created and ease out-of-box thinking and constructive collaboration. Camps are not an alternative to normal activities, but complementary and a means to reshape and enforce normal activities.

The camp model can be applied in entrepreneurship teaching. Here, too, camps are not an alternative to class-room teaching, but a valuable complementary activity, easing creative processes, interaction across disciplines, and involvement of outsiders such as business leaders.

Entrepreneurship camps often depart from student ideas, but may also depart from ideas and innovation challenges picked in companies or educational institutions. Some camps focus at idea generation, often called Innovation Camps, while others focus at solution to innovation problems, often called Solution Camps. Some last a few days, while others last for weeks. Regardless of the precise form, however, all such camps use the same underlying learning and innovation principles. Core principles are: Diversity, horizontal thinking, parallel thinking, problem orientation, action learning, future orientation and facilitation.

In recent years, camps have appeared in entrepreneurship teaching in several countries. In Denmark, the model has flourished, with at least 40 camps being organised during 2005-2008. Three such camps are described here in detail. While very different in terms of points of departure and duration, they have had similar positive win-win effects. Students benefit from creativity training, practical application of their disciplinary knowledge, cross fertilisation with other disciplines and working with outsiders. Other parties involved, such as company staff and university Tech Trans staff, benefit from the competences, fantasy and energy of cross-disciplinary student teams, in addition to being part of an interesting innovation journey.

Key words: Student camps, entrepreneurship, teaching, learning, cross-disciplinary teams.



Introduction

In private companies as well as voluntary and public organisations, moving people outside their normal work place to temporary camps to solve particular problems or create something new has long been a known method. Camps open for out-of-box thinking and experiments. James March uses the metaphor Technology of Foolishness for such activity (March 1979). It implies leaving daily organisational life and its rationalised logic temporarily to embrace experimental creativity and innovation processes. March stresses that this does not imply abandonment of the rational logic in organisations as such, but rather re-enforcement of this logic by injection of elements of creativity and innovation.

The camp model and concepts such as Technology of Foolishness is increasingly used in entrepreneurship teaching. In just one country, Denmark, more than 40 student entrepreneurship camps have been organised during 2005-2008. Sometimes these camps are labelled Innovation Camp, stressing idea generation, while in other cases they are called Solution Camp, focusing on identification of innovative solutions to posed problems. However, at its core the method is the same. The method is increasingly embraced by policy formulating bodies such as the EU (EU Expert Group 2008).

The essence of the camp model in entrepreneurship teaching is:

- A limited number of students and teachers/facilitators, usually 20-50 persons and from various disciplines, is taken to a physical facility outside the university
- Participants work intensely in cross-disciplinary groups within a limited time frame, usually less than 48 hours, to raise new ideas and/or propose innovative solutions to formulated problems
- External people, such as business managers and experts, participate in various ways: outlining innovation problems, working with the students in mixed groups and/or evaluating results
- A camp organiser is heading the event and group facilitators are attached to each of the groups
- Clear tasks and challenges are formulated – but program details are kept secret
- A positive, collaborative, lively and work intensive atmosphere is created
- Time pressure is tough to enhance concentration
- An award is often given to the winning group(s) in the final stage

The camp goals vary across stakeholders:

- Students are driven by various motives: study points (although not always possible), an interesting, different and 'close-to-reality' learning experience, and the chance of building relationships to business people and future employers
- Private firms often participate and sponsor for two adverse reasons: to 'pay back' to universities (altruistic motive) and to find inspiration and news way to solve innovation problems in their companies (utilitarian motive)
- Universities and colleges are predominantly driven by student learning goals, but also aim to build new relationships to 'outsiders', particularly private firms



The core learning goals for students are:

- To train the ability to raise and evaluate ideas and elaborate solutions to concrete innovation problems
- To train the ability to work in cross-disciplinary groups
- To train the application of theoretical and disciplinary knowledge to the solution of concrete problems
- To train action and future oriented work, i.e. creating and capturing new knowledge rather than capturing and understanding an established body of knowledge
- To train working under time pressure and goal oriented – as in a private company or a voluntary/public organisation outside Academia
- To enhance the personal motivation, empathy and mindset related to entrepreneurship

The camp model is compatible with the overall outcome goals formulated by the National Council of Graduate Entrepreneurship in the UK, i.e. the competences students should carry along when they leave university (Gibb 2005). This approach points to the importance of fostering personal motivation, empathy and an entrepreneurial mindset in addition to specific competences and skills related to the entrepreneurship field.

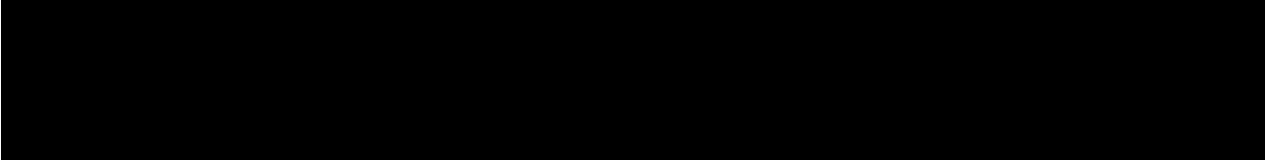
This line of reasoning is confirmed by empirical data in a recent study of the impact of entrepreneurship education and training based on Global Entrepreneurship Monitor data. The study demonstrates, in accordance with the Kirznerian concept of alertness to opportunity stimulating action, that in high-income countries opportunity perception mediates fully the relationship between entrepreneurship education and training at higher educational institutions in a country and its rate of new business activity, while the mediating effect of skills perception is weaker (Levie & Autio 2008).

Principles behind the camp model

The camp model draws on well-established principles taken from the innovation and entrepreneurship field.

The principle of diversity: Diversity is important in two different ways. First, students are recruited from different disciplines to work with concrete tasks in cross-disciplinary groups, often for the first time in their life. This provides several benefits, such as giving them insight into other disciplines, making them understand their own discipline better, and, not least, resulting in more interesting ideas and innovation results than work in single-disciplinary groups. Second, students work across the important borderline between Academia and business, applying their theoretical knowledge to concrete problems in businesses or voluntary/public organisations, meeting and working with people rooted in practice rather than theory.

The principle of horizontal thinking: This principle (which also is labelled ‘divergent’ and ‘lateral’ thinking) is closely related to the principle of diversity, expressing the need to think out-of-the-box and cross-disciplinary rather than along vertical lines inside disciplines and established knowledge fields. This has long been recognized as important, e.g. by De Bono observing that it was an engineer and not a physiologist who discovered the purpose of the long loops in the kidneys tubules, using his knowledge about a counter-current multiplier (De Bono 1968). Moving across fields and spheres are well-known drivers in idea generation processes and entrepreneurship. Great ideas are typically found in the intersection between sectors, domains, disciplines and cultures (Johansson 2004). Horizontal thinking is particularly important in the early stages of a



camp where the minds of participants are opened to other knowledge fields and people - and their own fixed positions challenged.

The principle of parallel thinking: Camp participants work much of the time in groups where parallel thinking is important to achieve creative collaboration and coordinated action (De Bono 1995). Minds should be tuned on the challenges of the group and participants should do their best to work in the same direction, particularly in the result oriented stages of a camp setting. Although disagreement and discussion is a must in camps, participants should nevertheless share a constructive approach and aim for a high level of concentration, with side-stepping and disturbances being avoided. This may lead camp organisers and group facilitators to take practical steps to enforce concentration such as asking participants to hand over their watches and mobile phones.

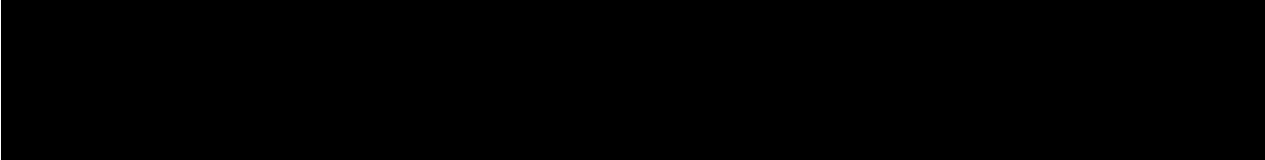
The principle of problem orientation: Problem Based Learning (PBL) is a well-known learning approach and often seen as core to the entrepreneurship teaching field (Hanke et al., 2005). Departing from a problem rather than a topic changes the rules of the game in the learning process. Knowledge and topics are no longer 'supplied' to passive learners, but asked for by active learners who face challenges when trying to solve a problem. The camp model takes as its point of departure that we must move beyond teaching 'about' entrepreneurship into teaching 'in' and sometimes 'for' entrepreneurship. The overall learning goal for university students is to achieve deep disciplinary knowledge combined with breadth of knowledge about entrepreneurship, innovation and leadership as well as experience related to this field. Therefore, personal attributes and skills need to be trained, such as:

- Self-efficacy
- Creativity and opportunity recognition skills
- Ability to deal with complexity and ambiguity
- Complex problem solving

The principle of action learning: Action is made a key ingredient in the camp learning process. Generally speaking, 'doing, thinking and talking' are core ingredients in this type of learning process rather than 'listening, reading and memorizing' (Löbler 2006; Scharmer & Käufer 2000). This doing side is consistent with Kolb's experience based learning circle, suggesting that praxis (or simulated praxis) is core to the learning process (Kolb 1984). It is, however, important in such camps to move beyond well-known praxis fields through experimentation and future orientation in order to embrace "newness".

The principle of future orientation: Creating/discovering, evaluating and exploiting venture ideas is the heart of the entrepreneurship field (Shane & Venkataraman 2000). This presumes future orientation. Fostering ideas and solving innovation challenges means moving into unknown territory rather than absorbing past and present knowledge. It is about 'seeing' and evaluating a possible future state or solution before it has become reality, labelled 'presensing' by C. Otto Scharmer (Scharmer 2007).

The principle of facilitation: Facilitation is important in two ways. First, the group process needs attention and facilitation. Hence, trained group facilitators monitor the group processes and intervene when appropriate, advising the group on how to get across barriers, obstructing the process if ideas fly too low, and easing the psychological atmosphere and physical well-being of the group members in order to maximize collaboration and concentration. Second, facilitation is needed in a deeper sense, too, related to the learning process. Contrasted traditional class-room



teaching, the teacher role is here changed to the facilitator role and students converted from passive consumers of existing knowledge to active producers of new knowledge.

In addition to these overall principles, a number of specific framing and process principles for camps can be identified:

Framing principles:

- Neutral location, outside university/class room
- Involvement of outsiders, particularly from private companies
- Well defined roles for camp organiser, group facilitators and participants
- Participants split into cross-disciplinary groups

Process principles:

- The flow should be guided by outcome/solution orientation, related to the overall camp goal
- Participants should know little about the camp program before they arrive
- The flow should be prepared well and structured in detail
- Facilitators should energise or support/obstruct the process through interventions and exercises
- Time pressure should be tough

Zooming in on three Danish camps

The exact number of student camps in Denmark during 2005-2008 is not known, but at least 40 student camps have been organised in these years. Most camps last 2-3 days, but a few have stretched over weeks. Most camps focus at the ideas students foster themselves, with external people such as entrepreneurs taking a facilitator and/or evaluator role. Other camps depart from innovation ideas and challenges formulated by companies and using the resources students possess to create a win-win outcome. Yet other camps are university and tech-trans oriented, departing from university patents, using the resource of students to formulate ideas on the application of these patents in practice.


Camps are financed by various sources: schools, students, private companies, entrepreneurship facilitator organisations etc. A camp is a cost-heavy teaching activity needing special funding for transport, accommodation, meals etc.

What goes on at a camp? To get a sense of the processes and results we now zoom in on three camps, tasting the energy, frustrations, learning outcomes and victories of the students through student and facilitator statements captured during or immediately after the camps.

The three camps are different in their points of departure: Camp no. 1 departs from student ideas, camp no. 2 departs from company ideas, and camp no. 3 departs from university Tech Trans ideas.

Camp no. 1: A student idea camp

In November 2005, a university college organised a 48 hours camp with 36 students from 6 different educational lines. The prime organiser was an experienced lecturer in the field, Ulrik



Blom. During 2005-2008, he has organised or co-organised about 20 student camps and 1 teacher camp.

This camp in November 2005 focused at The Future Home. The camp started by expert pep talks: one about innovation and another about new trends in the design of homes. The task for the students groups was:

Develop new innovative ideas for homes:

- Anything which can be sold through retailers, also internationally
- Future oriented – but not science fiction
- Possible to implement
- New functions/new design/new concept/distribution/commercialisation

Students were divided into cross-disciplinary groups. A group facilitator in each group should inspire the group and solve practical problems such as supplying food and beverages to maximise concentration. During the entire camp, an expert in home design was at the disposal for the groups.

Then groups started formulating ideas. Brain storming methodology was used during the early phase. First version ideas were shared across the groups, using the open innovation principle. Through short presentations all students were informed about all ideas and asked to give immediate responses. Second version ideas were evaluated by two on-line experts from The Danish Centre for Design in Copenhagen and Innovation Lab in Aarhus. Their role was not only to evaluate the ideas but also to inspire students to improve certain aspects of their ideas. Based on these inputs, the groups selected their final ideas and continued working with these.

The groups then started to work on implementation oriented aspects: creating a 'proto-type', analysing market opportunities, formulating strategies etc., culminating in a plenary session presentation round. Here managers from a bank, a furniture company, a high-tech company and a business school were asked to evaluate the ideas and formulate responses to the groups. Finally, the three best ideas were selected and awarded.

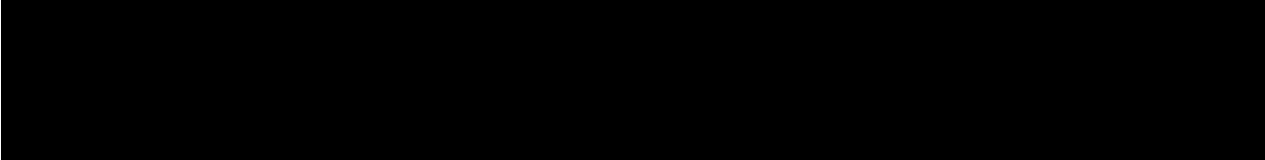
Criteria for awarding were the quality of:

- The idea
- The argumentation
- The presentation

The winning group formulated an idea for a coffee/tee can with ability to signal the temperature of the liquid inside at its surface. This idea simply sprang from irritation during the camp concerning empty coffee cans. The group departed from the simple question: Why don't we have cans where one can see immediately that it still contains warm liquid and is not empty?

When receiving the award the winners said: "We think ourselves that we have found a product idea with great potential. We certainly are not finished yet..."

Evaluations of the camp were very positive. All participants, i.e. camp organiser, group facilitators and students filled an evaluation formula.



After the camp, the camp organiser formulated a guide to teachers from other Danish universities and colleges with practical advice and inspiration on how to organise student-based camp (Blom & Christensen 2005).

Camp no. 2: A student camp aimed at company innovation

Camp no. 2, labelled 'Work Camp 06', was a very ambitious camp for 42 university and university college students, lasting for 5 weeks during the summer of 2006. The camp built on innovation challenges/problems formulated by 8 Danish companies and NGOs, including large Danish companies like Danisco (food company), Grundfoss (machine company), Novozymes (bio-tech company) and Gyldendal (publishing company). The camp was organised by these companies/NGOs in collaboration with Copenhagen University and other universities, and facilitated by Zentropa WorkZ, which is a Danish innovation facilitator company linked to a film producing company. The 42 students came from a number of universities and colleges, including Copenhagen University, Copenhagen Business School, the IT-University, the Danish Technical University, Roskilde University and schools of architecture and design.

The role of the parties was:

- Copenhagen University and other involved universities should recruit students, find funding for student fees and involve teachers/facilitators in the project.
- Zentropa WorkZ, specialising in facilitation of 'dramatic innovation' processes, should provide the physical location for the camp, take the camp leader role and provide facilitators to the 8 groups. The director of Zentropa WorkZ, Lars Lundbye, initiated the camp and functioned as camp leader.
- Companies should, in dialogue with Zentropa WorkZ, formulate an innovation challenge they were facing, allocate at least one member of staff to the process, and sponsor the event with about 15.000 US \$.
- Students should provide their knowledge, talent and energy. Some students were awarded study points by their university for participation in the full program, while others were denied study points.

The organisers formulated expected benefits for the involved companies this way:

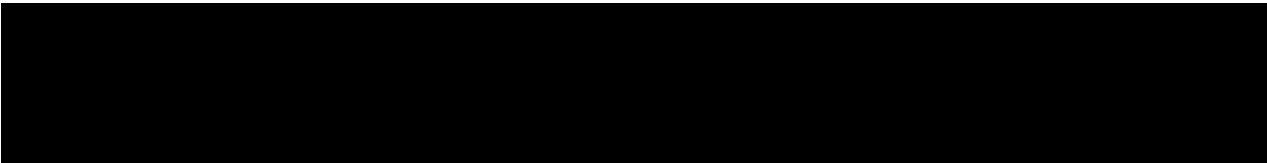
“Direct benefits in terms of an innovation input/solution:

- A visualised analysis related to the formulated innovation problem/challenge
- A description of the concept
- A plan for implementation

Indirect benefits to be expected:

- Development of staff innovation competences
- Access to cutting edge knowledge from Danish universities and design schools
- Insight into innovation methods and competences at Zentropa WorkZ
- Access to talents from Academia”

The Danisco case illustrates the type of innovation challenge/problem proposed by the companies. Under the heading 'Platform for user-driven innovation', Danisco formulated its challenge/problem this way:



“Create a business concept, where the interaction between Danisco and consumers, costumers, food service operators, appropriate NGOs, authorities etc., form a platform for mutual exchange of ideas and knowledge which generate value for all parties involved, short term as well as long term”.

The solution was a prospect under the heading ‘Foodos – concept for an online community’. The solution not only included ideas for new products, but also proposed a way to rethink the dynamics along the food value chain: distribution, service, marketing, production, product development and finance. The prospect encompassed concept description, background analysis, business plan and visualisation.

Two statements from Danisco staff indicate great satisfaction with the process and the result:

- “This has been an eye-opener to be part of” (Signe Ørberg)
- “Work Camp is a fantastic opportunity for Danish companies to meet students who, under very competent process guidance, provide input to a complex problem and challenge in the company. Danisco now has a much more solid foundation for the development of a unique platform for innovation in the food industry” (Flemming Vang Sparsø)

The camp process consisted of five phases, with a preparatory phase before students were involved and an implementation phase after student involvement had stopped. The five phases were:

- Pre-analysis, provided by Zentropa WorkZ in collaboration with the company
- A team of students and concept developers create in collaboration with company staff solutions to the formulated innovation challenge/problem
- An intensive innovation day at Zentropa is organised for all parties
- A concept description, visualised and documented, is handed over to the companies
- Implementation phase, provided by Zentropa workZ in collaboration with the company

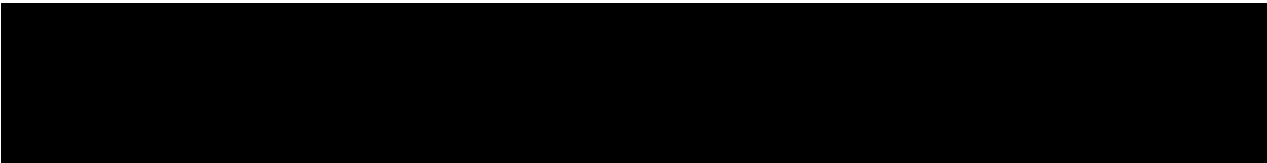
The camp followed the terminology Zentropa WorkZ normally uses for innovation across five stages: Flirt, incubation, birth, growth and exam.

- Week 1: *Flirt* – introduction, roles, preliminary analysis, problem clarification
- Week 2: *Incubation* – market analysis, user observation, idea generation and visualisation
- Week 3: *Birth* – Prototype development, business idea, user tests
- Week 4: *Growth* – Business plan, development plan, intellectual property rights and production analysis
- Week 5: *Exam* – Product description, marketing material, presentation, reporting

Students were very positive in their evaluation of the work camp. On a scale from 0 to 5, with 5 being top score, the average overall student score was 4.5. The scores for specific areas were: Quality of innovation: 4.5; Understanding innovation: 4.0; Relevance for your study field: 3.9; Cross-disciplinary process: 4.1; Personal skills: 4.3; Quality of camp format: 4.7; Final result: 4.2.

Selected student statements underpin these high scores:

- “I only have positive words to say about Work Camp, although it was extremely tough and I often felt like running away screaming. However, looking back, this intensity was the prime



quality. We were very close and depended deeply on each other. I feel like I have passed the manhood test to the practical world”

- “I am now convinced that I can contribute insights and inputs which companies themselves cannot create, and that creativity is strengthened rather than weakened by a rucksack filled with theoretical and disciplinary knowledge”
- “It has been interesting to observe how the tight framing and constant time pressure functioned as catalysts for a very high productivity”
- “It is simply wild that we achieved so much in just 5 weeks...Working across disciplines means that you may achieve a target spending only half of the time because there are so many competences to draw on”
- “You (Zentropa WorkZ facilitators) were just super. The good energy running through the course sprang predominantly from you. You were in top mood every day. The atmosphere, engagement and energy was some of the best part of this course”

The positive experience of Work Camp 06 led to a new course one year later, Work Camp 07, which followed the same concept and flow with only minor adjustments. An important step forward was that universities now were better prepared and most students ended up receiving study points from their participation. Again in 2008, a new camp was organised.

Camp no. 3: A student camp aimed at university commercialisation


The International Danish Entrepreneurship Academy (IDEA) and Aalborg University organised in November 2007 a Commercialisation Camp at Aalborg University, lasting 48 hours and involving 40 students from 6 universities and colleges. Students covered a wide range of disciplines, but were mainly recruited from the natural sciences and engineering. Three university patents were the point of departure. The task was to identify viable ideas for practical application of these patents.

A creativity furthering methodology was used during this camp, labelled ‘The Creative Platform’ (Byrge & Hansen 2007). This methodology aims to open for unlimited application of knowledge and experience through horizontal thinking. With such ambition it is core, as we have seen in other camps, that group composition is guided by the principle of diversification, with participants covering multiple fields of knowledge and experience. With such a framing, and backed by a lively, work intensive and collaborative atmosphere, it is normally possible to reach a higher level of abstraction and find surprising and unusual ideas and solutions to posed problems.

A challenge for this camp was the complexity related to simply understanding the patents. One patent was apparently easier to understand than the two others, so we shall take a closer look at this patent and the work of one of the groups, called Group 5. The patent was about a new type of cement, characterised by being lighter than normal cement and able to endure very high temperatures and absorb grease.

We shall now follow how the students in Group 5, trying to raise ideas on practical application of the patent, experienced the camp by means of a blog report.

Students arrived Friday at 12:00 and were then introduced to the camp. They were asked to leave all watches and mobile phones with the organisers. Then the three patents were presented and



explained to the students by tech trans staff, including suggestions by tech trans staff on application options.

At 15:00 the groups started generating ideas – and the group facilitator Mette Ullersted started reporting to the blog. The following statements are picked from Mette Ullersted's blog, written and uploaded during the camp as the process unfolded in the group:

Friday 15:36: The process is not moving forward as it should. Students are too nice and polite. They dare not relax and release their creative potential. Therefore, they are asked to go to the parking site outside the building where they are exposed to a so-called 3D case. They are instructed to describe for another student in detail and in a sensual way the home of their Grand Parents during their childhood. Through this exercise they may open up, start laughing, fooling and this way be in a better shape to move forward.

Friday 17:16: Michelle, one of the students, is enthusiastic about the patent they just have been asked to work with: "I almost shouted with joy when the patent was given to us. I have lots of ideas so it feels really good". Reflecting about the process so far, she says: "We are moving fast. It is a truly interesting process because we never know what is going to happen next".

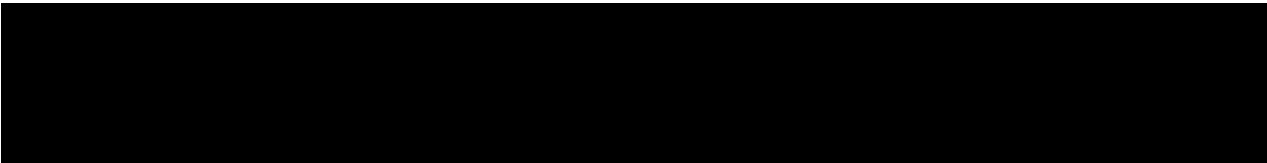
Friday 18:19: Morten, another student, reports on their preliminary ideas on how to apply the new type of cement: "We have divided our ideas in green, blue and red. The green are much like the ones proposed by the Tech Trans people. The blue are more likely applications, and the red are 'far out' ideas such as coffins and flying carpets".

Friday 20:08: The group has just returned from a lecture by Henning Sejer Soerensen, an innovation researcher attached to the Danish Technological Institute. Before entering the plenary room, the students expected to be asked to present their preliminary ideas. In stead they were given a lecture. A student, Laila, says: "I think the lecture by Henning was a good alternative to student presentations...his lecture can help us think more 'out-of-the-box'...Perhaps we should drop some of our ideas because they are not sufficiently ambitious, and reconsider some of the far-out ideas from the red box".

Friday 23:01: Participants shall very soon present their ideas to the other participants. Morten still feels ok, but says: "It is hard now...I am getting tired. We learn a lot, but my head is starting to ache. There are so many ideas and they are so different...But Group 5 has a favourite idea just now, labelled Burning Stone".

Saturday 00:32: The students are preparing for bed and Mette Ullersted reflects about the outcome of the first day: "Now they are getting very odd which is fine. It is possible to reshape a strange idea into a realistic one. But it is hard to take an ordinary idea and make it visionary". She thinks the change of the group is caused by the innovation lecture by Henning Sejer Soerensen: "That really captured them. Later we made a lot of exercises on how to generate wild ideas. The group had to reflect on what Superman would do with this patent, and what Al-Qaeda would do".

Saturday 11:04: Morten felt a little tired this morning when the group started working at 9: "It was hard to relax and fall asleep yesterday after the long day. Ideas kept spinning in my head". The group is now concentrating on an idea about spraying the cement on burning houses so a kind of fire wall is created: "The idea is still far out, but that we shall find out soon, and then we shall talk to some experts from companies about our ideas".



Saturday 12:15: Group 5 has just returned from its meeting with business people with expertise in the commercialisation. The group got an even better idea during this session, but are still looking for more ideas. Laila says: “We went to a session earlier today where we were asked to kick all of our ideas into the corner, and start thinking about new and better ideas”.

Saturday 17:25: The groups are gathered for a plenary session. All 40 students have here drawn a picture of their brain, demonstrating their competences. So, students are now shopping brains and ideas from each other. Michelle says: “This is really good, I have acquired new knowledge. Perhaps somebody has made a project they regard as having no value, but for us it may be gold”.

Saturday 19:49: The group has just returned from a plenary session with elevator pitches of the selected ideas. Laila pitches the idea of Group 5: “Our concept is called Burning Stone. It can be used for art performances or to decorate gardens. The cement is shaped to a stone, dipped in oil and then lit. The stone sucks the oil and continue burning.”

Sunday 01:28: All groups must soon deliver a three page document on their idea. Morten says: “We are very, very busy now...we must in a quarter of an hour finish a document discussing competitors, marketing, strategy etc.”.

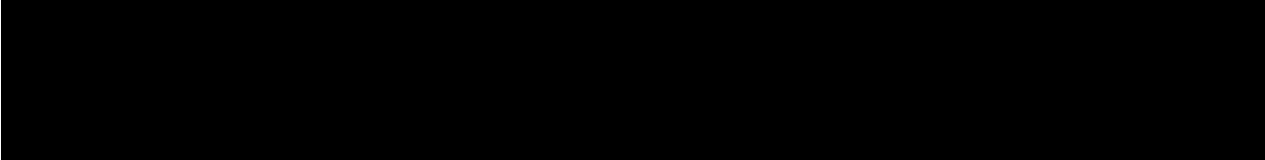
Sunday 09:44: In less than an hour, the groups shall present their idea to a committee of four business people with substantial commercialisation expertise. Morten says: “We are afraid that our concept with a burning, floating stone is rather difficult to understand. So we will describe it thoroughly and outline perspectives for the future.”

Sunday 10:17: The facilitator, Mette Ullersted, reflects on the process: “We have boiled 1.700 ideas down to just one idea. It has been a tough process. When we finally reached the idea, students went into their ordinary ‘work mode’. They picked their computers and started to work with the document as with any other student report...During the process students have been reluctant to accept some of my exercises, just wanting to work and not be disturbed, but they have benefitted from the exercises. One gets better ideas if energisers and exercises are used.

Sunday 12:24: The group has just returned from the presentation at the plenary session. Michelle says: “The pressure was enormous, but I think all groups performed well. Looking back at the camp she says: “At times I have asked myself: What are you doing here? I have lots of things to do back home. But the camp has given me some tools I can use for my study in Copenhagen.

Sunday 13:04: Group 5 did not win the price of about 5.000 \$. The winning project was called: ‘Sterile in 1 second’. Using the cement for transport of pigs, one can easily clean the wagon, simply by adding cement and putting it on fire. The chairman of the evaluation committee, Thorbjørn Machholm from Grundfos (a major Danish company) says: “The group has a clear understanding of the business model. There is a clear mission and it was explained well”. Other groups were also evaluated positively by the chairman, “Our judgement is there is a great potential in many of your ideas”.

Sunday 13:57: Looking back Laila says: “We are all exhausted now, but the camp has been great”. The group finds that it has been difficult for them to be foolish and make silly things



without knowing the purpose, but they also find they have tools and learning to bring back to their studies. Louise says: “We are now conscious about how to structure chaos, and how to get a good idea”.

Conclusion and perspectives

The camp method, which is well-known in creativity and innovation training in organisations, can be applied successfully to the entrepreneurship teaching field. It does not substitute class-room teaching, but complements it, creating a framework for intense cross-disciplinary creativity and innovation training.

Student entrepreneurship camps come in many forms: Some depart from student ideas, others from company or university ideas; and some focus at idea generation, often labelled Innovation Camps, while others are solution and implementation oriented, often labelled Solution Camps.


In Denmark, the entrepreneurship training camp model has spread rapidly the last few years. Facilitator organisations such as IDEA and Zentropa WorkZ have played an important part in the process. They have co-funded, backed and organised ambitious camps, and thereby demonstrated the high potential of the method, not only as a means to accelerate student learning, but also as a means to improve company innovation and university commercialisation processes, using the energy, creativity and knowledge of cross-disciplinary student teams.

The outcome of camps is generally positive for students as well as for businesses and universities. Evaluations and reports from the camps demonstrate clear win-win outcomes. Students gain an important and complementary learning experience, companies gain access to the student resource and powerful input to their innovation processes, and universities gain new ideas on how to commercialise university patents and innovative solutions.

Further expansion of the camp model is confronted with two major challenges: Funding and allocation of study points.

Camps need special funding. It takes extra funding to move students out of class-room to a location where they can eat, sleep and work. It also takes extra time on part of the university and partners. The planning of camps must involve academic university staff, but assistance by administrative personnel and student assistants is also needed.

The funding problem is related to another challenge: Allocation of study points for camp participation. Many departments and scholars regard camps as a useful extra-curriculum activity, but not as an academic learning experience deserving study points (which in Denmark and many other countries automatically is a source of funding). This is a paradox as nobody in fact doubt that student learn a lot during such camps. First, they gain insight into innovation processes and learn how to apply their disciplinary knowledge to the solution of concrete problems. Second, they learn how to work in cross-disciplinary teams, and through such collaboration they gain a better understanding of their own discipline. Third, they learn from close interaction with outsiders such as experienced company staff. Nevertheless, it is often argued that such learning, while relevant in future careers, is not an academic learning experience deserving study points.



This reflects a much deeper discussion about the character and role of contemporary universities and how Academia should be understood. Three widespread Dogmas at universities constitute barriers for the use of camps and other forms of action oriented and experimental learning:

- Do not touch practice!
- Stay within your discipline!
- Solid knowledge is rooted in the past!

The camp model challenges these Dogmas, pointing in the direction of another learning model and even another type of university, often labelled The Entrepreneurial University (Gibb 2006). In such a university, students no longer are captured in disciplinary silos during their entire study programme. They do gain solid disciplinary knowledge, but they also work problem-based, cross-disciplinary and future oriented. This opens for closer interaction with outsiders such as the business community, creating what Michael Gibbons has labelled Mode 2 knowledge and learning processes (Gibbons 1994). Moreover, it opens for a more balanced understanding of practice as something enhancing rather than disturbing academic learning (Scharmer & Käufer 2000). Finally, such a university embraces future oriented learning processes rather than neglecting this side and leaving it to the post-university careers of the students, which, with the words of C. Otto Scharmer, is a major weakness of contemporary educational systems:

“We pour considerable amounts of money into our educational systems, but haven’t been able to create schools and institutions of higher education that develop people’s innate capacity to sense and shape their future, which I view as the single most important core capability for this century’s knowledge and co-creation economy” (Scharmer 2007: 3).

By not taking this latter challenge on board, universities are in fact not delivering a satisfactory service to contemporary societies. As most university alumni’s, whether they choose to start their own company or find a job in an existing organisation, soon after their final exam will find themselves working with future oriented projects in cross-disciplinary groups, it is imperative that they are trained in these fields during their studies. The camp model is one way to prepare for this typical challenge for university graduates.

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