

INNOVATION CAMP

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Abstract ^{3/4} *Innovation Camp is a one-year program aimed at motivating pupils in primary, secondary and high school to develop new products for the companies of the future. This program is developed by Østfold College of Engineering in Norway, financed by “The ministry of local government and regional development” (Kommunal og regional departementet, KRD) and several others. Innovation Camp involved 900 pupils at 12 different schools in the county of Østfold. These pupils participated in an innovation process carried out in the spring of 2001, and 75 of these pupils was picked out to go through a 12hr non-stop contest. 28 pupils with 11 ideas in the age from 10 – 18 years were rewarded. A professional marketing company gave the pupils help, producing Internet pages, brochures, and roll-ups. Later on all of the products was design protected by “the Norwegian patent office”. At last, the 28 winners presented their ideas for media and public at “The national conference of entrepreneurship”. This boosted the pupil’s self-confidence in a way that no classroom could teach or give them. The girls dominated with 18 of 28 participants, a total of 65% female participation.*



FIGURE 1.
PUPILS PRESENTING THEIR PRODUCT IDEAS AT EXHIBITION

BACKGROUND

Based on a report from ECON in 1999, Norway will probably lose 800000 working places in industry business the next 20 years. Old traditional production jobs will vanish due to high labour costs in Norway, and new ones have to be created. Motivating youths to start their own companies, and to think innovative, is a key in the process of creating new industry and working places in Norway, able to cope with the demands of a new decade. This involves a new profile in the engineering education, where it is necessary to educate innovative young engineers, able to create new companies, instead of educating students for jobs that will disappear in the next 20 years. Norway needs a new engineer type, the one that is able to create his own job and run his own company. This motivation process must start early, and entrepreneurship programs have been started up at several levels down to primary school. In Norway these programs are not more than 10 years old, and regards to England and USA, which started up their programs in the sixties and thirties, Norway is far behind.

Innovation camp was carried out in Østfold County, located in the south east of Norway, with traditional old industry structure that is vanishing. The county has 240000 inhabitants, and people over 40 years have one of Norway’s lowest educational levels. There are approximately 40000 pupils in primary, secondary and high school. In Østfold the first official entrepreneurship program was started in 1999, and the second in 2001. Innovation camp is a project inside of this last program, and the program is named “Entrepreneurship for youths in Østfold” (Entreprenørskap for unge i Østfold). Innovation camp was developed by Østfold College of Engineering in Norway, financed by “The ministry of local government and regional development” (Kommunal og regional departementet, KRD) and “The Norwegian industrial and regional development fund” (Statens nærings og distriktsutviklingsfond, SND) under the supervision of “The County council of Østfold” (Østfold fylkeskommune). Primary participants in the projects was: “Confederation of Norwegian Business and Industry, region Østfold” (Næringslivets Hovedorganisasjon Østfold), “Young Enterprise Norway” (Ungt Entreprenørskap Norge), “Norwegian government consultative office for inventors” (Statens veiledningskontor for oppfinnere, SVO), “The Norwegian Patent Office” (Patentstyret), “National education Office, Østfold County” (Statens Utdanningskontor Østfold) and Sarpsborg Community, (Sarpsborg kommune).

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PROJECT PLAN

The project plan for Innovation Camp was set to satisfy two superior political goals:

- **Primary goal:** Motivating youths to develop new product ideas, and to give them self-confidence and experience in this.
- **Secondary goal:** Exhibit youths from Østfold County with their product ideas at the “National congress for entrepreneurship” in November 2001.

The secondary goal boosted the primary one, because no one wanted to “loose face” at the national entrepreneurship exhibition, and no effort was spared to help the youths making a good figure at the exhibition.

TABLE I
PROJECT PLAN FOR INNOVATION CAMP

Nr	Activity	Schedule
1	Develop detailed activity plan	Nov. 2000
2	Establish working group	Jan. 2001
3	Develop marketing plan/activity	Feb. 2001
4	Produce marketing material and web pages	Mar. 2001
5	Inform schools in Østfold county	Apr. 2001
6	Start marketing campaign phase 1	Apr. 2001
7	Develop concept for 12hr camp	Apr. 2001
8	Start marketing campaign phase 2	May. 2001
9	Evaluation of response and web page maintenance	May.2001
10	Establish resource group and jury for 12hr.camp	May.2001
11	Evaluate ideas and invite participants to 12hr camp	May.2001
12	12hr.Innovation Camp	6/6 2001
13	Pick out participants for national exhibition	Jun.2001
14	Establish support group for winners/exhibitors	Jul.2001
15	Marketing workshop, produce marketing gear	Sep.2001
16	Design protection by “the Norwegian patent office”.	Oct. 2001
17	Exhibition at “National congress for entrepreneurship”	7-10 Nov.
18	Evaluate and follow up response	Jan 2002
19	Exhibition at teachers congress	15/3 2002
20	Exhibition at Business congress	25/4 2002
21	From idea to business process, Østfold innovation Ltd.	Autumn

Project leadership

The project was established inside the national entrepreneurship program “Entrepreneurship for youths in Østfold” (Entreprenørskap for unge i Østfold), financed by “The ministry of local government and regional development” (Kommunal og regional departementet KRD).

- **Program leader:** *Hans Erik Fosby*, “County of Østfold – trade department”
- **Project leader compulsory school:** *Terje Beck* “Confederation of Norwegian Business and Industry”
- **Project leader College:** *Bjørn Gitle Hauge* “Østfold College of engineering and natural sciences”

The Innovation Camp project was also financed from outside the entrepreneurship program because of the youth profile by

- **Project partner business:** *Vidar Dramstad* “The Norwegian industrial and regional development fund”

PROJECT GROUP

Official authorities manned the project group, coming from business, governmental and educational organisations. This group consisted of people that was recognised by their interest in making things happen. To establish a stable network/partnership, part of the group had been working together for almost a year, before the plan was carried out.

- **Bjørn Gitle Hauge**, Projectleader “Østfold College of engineering and natural sciences”
- **Tore Hansen** “Community of Sarpsborg, trade department”
- **Stein O. Ekeland** “Norwegian industrial and regional development fund”
- **John Gundersen** “National education Office, Østfold County”
- **Svein Oshaug** “Project leader first Entrepreneurship program ”
- **Svein Vikhals** “Østfold College of engineering and natural sciences”
- **Christer Engstrøm** “Young Enterprise Norway”
- **Bjørn Horten** “Østfold Innovation Ltd.”
- **Lars Erik Solvang** “Norwegian governm. consultative office for inventors”
- **Bjørn Edvardsen** “County of Østfold – cultural department”
- **Leif Lervik** “Østfold College of engineering and natural sciences”
- **Erling Strand** “Østfold College of engineering and natural sciences”
- **Dag Inge Fjeld** “Bates Marketing consultants Ltd.”
- **Bente Liljan** “ViaFantasia innovation Ltd.”
- **Christer Lundem** “GRIFF kommunikasjon Ltd.”
- **Karsten Jacobsen** “Project leader National Innovation Nett”
- **Grete Henriksen** “Project leader secondary school tecnology program”



FIGURE 2.
PROJECT GROUP PARTICIPANTS UNDER THE 12HR CAMP

THE INNOVATION CAMP CONCEPT

During the last 10 years, a lot of different “Camp’s” has been arranged for youth’s in Norway. Young people are gathering together for almost a week, working together on different problems as a part of a contest. The most well known “Camp” in Norway is the “Computer Camp” (Data Camp) held at the “Viking ship hall” at Hamar. More than 1000 youngsters are working on a computer contest for a week, some of them almost without sleeping. They work and sleep inn the same place inside the big city hall. Winners of the competition are rewarded with big prices, but the main reason for participating is the social relationship and the common interest in computers. Today, several computer camps’ has also been carried out in other places in Norway, also in the county of Østfold. Several computer companies that are looking for bright young brains have financed these computer camps.

“Computer Camp” is a well-known phenomenon, but not the only one. At the University in Bergen students are invited to participate in a “Bio-med Camp”. This camp is targeted towards students that are interested in biological chemistry. The university of Trondheim is the location for the national “Cyber Camp”, aimed towards students with interests in cybernetics. Every year, Andøya rocket range is organizing a “Space Camp” for students at high school and college level. The “Space Camp” concept is originally from NASA, and The European Space Agency, ESA, has a similar camp in Belgium. “Space Camp” is targeted towards motivating youths to study, natural sciences, engineering and astronomy.

Links to different Camps

- <http://www.spacecamp.com/>
- <http://www.ping.be/eurospace/>
- <http://www.spacecampaTurkey.com/eng/amac.htm>
- <http://www.unge-forskere.no/space-camp/>
- <http://biotech.unf.dk/>
- <http://www.unge-forskere.no/cybercamp/>



FIGURE 3.
POSTER FROM US SPACE CAMP PROGRAM

Space Camps is spread all over the world as a part of national programs with huge budgets and sophisticated exhibitions and scientific instruments.

Turkey has also a big “Space Camp” centre to motivate young people to study technology science, se FIG 4.



FIGURE 4.
SPACE CAMP TURKEY

After going through the different “Camp-concepts”, it was clear to the project group that “Camp’s” was a well-established name and concepts for young pupils/students. Most of the different camps had duration of a week, but there were also examples of one-day Camps. The project group decided to go for a 24hr. one-day camp, but reduced this to 12hr. non-stop because of participation from primary school. The project was to go over a year with four main phases:

- Phase1: **Idea gathering around in the schools**
- Phase2: **Innovation Camp 12hr non-stop**
- Phase3: **Market refinement of ideas**
- Phase4: **Pupils meet industry exhibition**

Phase 1 involved marketing of Innovation Camp around in all of the schools in Østfold County. Teachers and pupils had to be motivated to come forward with product ideas and participate at the 12hr. non-stop camp. The Community of Sarpborg supported the project with expensive prices and marketing materiel was produced and sent out.

Phase 2 was the “Innovation Camp”, and had to be a non-stop contest, motivation and teaching process. Specialists in different disciplines were to attended the camp and help the young participants with their ideas. Female business managers/entrepreneurs had to act as models for the participating young girls. A lecture – contest – challenge program was made, that ended up with 1min. presentation for all participants at midnight.

Phase 3 was to refine the winning ideas from Innovation Camp and to produce professional marketing gear. All of the winners were to have a “godfather”, and all the professional help that a normal company used to market ideas. The ideas were also to be design protected by the Norwegian patent office.

Phase 4 was to exhibit the ideas for tree days on the ”National congress for entrepreneurship” in November 2001 to attract “business angels”, and financial help. This should be the right place for this. Two other exhibitions were also to take place in the spring of 2002 to motivate teachers for the program, and attract regional industry partnerships.

MARKETING IN FRONT OF INNOVATION CAMP

Since the Innovation Camp program was totally new, it had to be extensively informed about, and the marketing campaign had to be professional and directed towards the youths. Information to teachers and school administrations was sent out by the National education Office and by Young enterprise Norway. 120 teachers were directly informed on an entrepreneurship conference in Østfold county April 3, and information material and posters was handed out to them. GRIFF marketing company designed a “sharp” poster and marketing campaign, directed towards teenagers. Se Fig.5. This poster was very provocative towards older people, especially men in grey suits. Some few teachers refused to display the posters at the school...! The text translated reads: “These can’t create a shit, can you?”



FIGURE 5. INNOVATION CAMP MARKETING POSTER

Posters and invitations was sent out to all schools in Østfold County in April 2001, and slide shows was shown on cinematographs for two months in the 5 biggest towns. Web page was active, E-mail and SMS number also. The project group waited a lot of response via mobile phone/SMS.

After two months with a traditionally marketing campaign and press coverage, the project received only two registrations, and a lot of “Spam” (bullshit messages) on the mobile phone/SMS messages. This was very disturbing, and the project leader decided to visit as many schools as possible and talk to the pupils before Innovation Camp was to start. 12 schools were visited and the project leader talked to 900 pupils. Still no response! Only two registrations more came in. The project leadership decided to carry on, and to engage a company that was specialised in innovative techniques and “idea swarming”, se Fig.6. The company “ViaFantasia” visited 250 pupils right in front of the camp and carried through with their innovation process. This “idea swarming” created a lot interesting ideas, but still low response. The schools was contacted and asked why they did not participate, and the answer was: “These ideas must surly have been invented!?” The pupils needed confidence for that

they were able to create new product ideas, and the teachers needed also confidence for that the pupils ideas was new and interesting. The project revealed a new syndrome:

“This is surly been done before”- syndrome

The schools with the most interesting ideas was contacted, and every one was positive when someone outside the compulsory school system, the College and industry, gave them confidence fore the uniqueness off their ideas. Shortly after, 75 participants were registered for participation on the Camp.

The marketing process gave new and essential information:

1. **Traditional marketing has limited effect.**
2. **Direct contact must be established with teachers and pupils.**
3. **“Idea swarming” must be carried out in the classes to stimulate and motivate in front.**
4. **“Authorities” outside the school must give pupils confidence for the uniqueness of their ideas.**
5. **Schools must be given self-confidence for that the pupils ideas is valuable for commercial business**

The most essential thing to do in front of an entrepreneurship contest as Innovation Camp, is to carry out “idea swarming” as a part of the normal class teaching, and that authorities from industry or college, must participate to give the pupils and teachers self-confidence. The negative syndrome must be changed from:

“This is surly done before”

to

“You have something unique there!”

The project has shown that entrepreneurship programs out in the schools as a part of the ordinary teaching is necessary to create a new generation of entrepreneurs, and that “idea swarming” is popular among the pupils.



FIGURE 6. VIAFANTASIA Ltd. PERFORMING “IDEA SWARMING”

THE CAMP

The climax was carried out on the 6th. of June 2001, when 75 pupils from primary, secondary and high school met at the Østfold College of Engineering to carry out an 12hr. long contest to refine and develop their ideas further. Specialists in different areas were gathered to help the pupils through the contest. The camp started out with an “idea swarming” and an innovative learning process. After this different lectures were given, and after each lecture different exercises and problems was to be solved. The participants ranged from 10 years up to 18 years, and they were mixed together in groups of 8 to stimulate collaboration and development of new ideas and products, se Fig.7. Every group was equipped with computer and Internet connection. All of the participants were given T-shirts and a cap to create a spirit of community. Food was served three times, and the contest carried on for 12 hours without a stop.



FIGURE 7.
INNOVATION CAMP SCENE OFF ACTION

For these 75 participants, an apparatus of 20 people was ready to help, and to keep up the spirit. Representatives from all industrial and governmental agencies working with programs for creating new businesses were there to help.

TABLE 2
Program for Innovation Camp 6th of June

Schedule	Activity
1200	Information and installation
1300	“Idea swarming”
1400	Lecture in sales techniques
1600	Exercise/contest in salesmanship
1700	Lecture in product development
1800	Exercise/contest in idea description
1900	Lecture in marketing
2000	Exercise/contest in market description
2100	Exercise/contest in making TV commercial
2200	Lecture and example in endurance
2300	Production of presentation material
2400	1 min. presentation, “Elevator kick off”

The exercises were delivered to a jury. In the evening a female role model in endurance, presented her way off life and the struggle to succeed, and the taste of success.



FIGURE 8.
LECTURE IN ENDURANCE

Her advice was to never give in, and if you loose something you have learned something new, and that you should dare to take risks. Hardship makes you strong. She was a brilliant lecturer and all of the girls looked up to her and gave them new strength and confidence. Her name was Ann Jorid Pedersen, manager of Basecamp Spitsbergen at Svalbard. After making presentation material, all of the product ideas had to be presented in public by their owners. Every group was given 1. minute presentation on a stage, in front of the jury and the other pupils/participants. This presentation was given the name “Elevator kick off”, because one minute is all you get if you meet an investor in a elevator, or one the street, and you want to sell your idea to him/her, se Fig.9.



FIGURE 9.
ELEVATOR KICK OFF

The funny thing that happened was that several boys were afraid of going on stage, but no girls! The female role model had given the girls self-confidence to do this. On the basis of the exercises and the presentation, the jury awarded 14 ideas. The jury had decided to award as many as possible, and this gave the participants the feeling that everyone got something, and that a lot of pupils had gained in self-confidence. Evaluation after the camp was very positive, and many pupils told that they liked “Elevator kick off” and wanted more of it!

PROFESSIONAL MARKETING GEAR

Winners of Innovation camp belonging to secondary and high school was picked out to present their ideas at the “National congress for entrepreneurship” in November. The project group was afraid that pupils from primary school were to young, and to be on “Stand” for three days was to much for them. A marketing company, Markedspartner Ltd, was hired to produce folders, roll-up and web pages for the pupils during a one-day long workshop. All off the idea owners was given a experienced godfather from the college to help them during that day. Everything had to be finished that day, and if someone did not, the result was printed in any case. This motivated the pupils enormously, and everyone finished text and design on time. Professionals in design drawing and computer aided design was used



FIGURE 10. ARTIST DRAWING OF PRODUCT DESIGN

The computer aided design specialists, and software, was not successful in helping the pupils to get what they wanted. The artist was a key factor that made it possible for the pupils to present the vision of the product that they had inside themselves. Se table 3.

TABLE 3

Comparison of pupils helped in design by artist

Pupils original	Pupils helped by artist

After the design workshop was finished, and the prototypes of folders and roll-upos was ready, the pupils had to attend a second workshop. This workshop was held by the “Norwegian patten office”, and during that day all of the products was design protected and ownership agreed on.

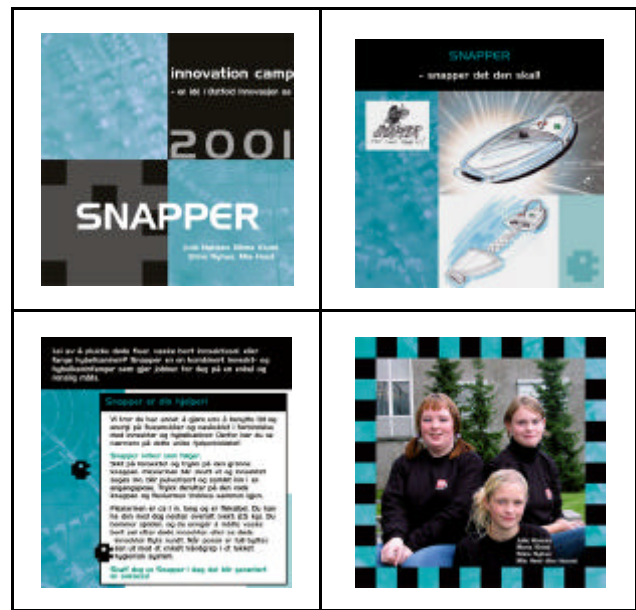


FIGURE 11. BROCHURE DESIGN FOR “SNAPPER” FLYCATCHER

THE EXHIBITION

In November all of the marketing gear was ready to use, and the pupils was trained for the big challenge, present their products for leaders in industry and government at the “National congress for entrepreneurship” . All groups had 300 brochures each to deliver out, uniforms and big posters. For two days they had to “be on stand”, the longest day for 10 hours.



FIGURE 12. INNOVATION CAMP AT EXHIBITION

28 pupils attended the exhibition, 65% of them girls. They did a marvellous job and got a lot of positive feedback. 8 different papers wrote about them, and radio and TV made programs. This was something totally new, and the press forgot about the congress and wrote only about the pupils and Innovation Camp. The pupils and left the exhibition with new improved self-confidence, and the impression that they had impressed industry and governmental leaders. Since the national entrepreneurship congress, Innovation Camp has been on exhibition four other places with success.