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Styrian Innovation Challenge@school

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Abstract
13 styrian schools of economics, 25 classes, about 500 pupils and 4 different tasks which could chance the world: This was the initial position for the "Styrian Challenge" in November 2014.
Innovative pupils of different schools in Styria/Austria accepted the challenge for the ideas competition.
The goal of the challenge is to show pupils the power of innovation, creativity and entrepreneurial spirit. In short Workshops (3 hours per class) the teams worked out ideas for practical and current tasks from the local economic system. The teams were supported by practical Innovation Managers.
For a special motivation, the challenge was designed as a contest. The tasks were displayed at the same time at each school in each class. The teams worked simultaneously. With a live (video)feed, the pupils were able to watch other pupils in other schools working at the same task.
The target was to generate a concept supported by a plausible business model. After each session the concepts were presented and a jury nominated one team per class as the stage winner. The teams got a voucher for a special training in communication or job application.
Keywords: Innovation Management, creativity, entrepreneurship, morphological matrix, semantic intuition, reverse brainstorming

1. Introduction
The Innolab Graz is part of the program for innovation management from the University of Applied Sciences Campus 02. One focus of the Innolab is called InnoSchool - in this context a wide range of activities for pupils from different age groups and school types takes place (e.g. innovation workshops, inspiring events, support in the idea finding process for business plan contests). InnoSchool wants to foster the spirit of innovation of the young generation and raise awareness for entrepreneurship, creativity and thinking outside the box.
One of these events is the Styrian Innovation Challenge, which took place for the first time in November 2014. The idea behind the Challenge is to get students in contact with different methods of creativity and inspire them, while they create ideas for real companies in an amusing and challenging atmosphere.

2. Overview
As part of the Global Entrepreneurship Week the Innolab Graz and the Degree Programme Innovation Management designed a systematic innovating challenge of Styrian business schools. 13 Styrian schools with 25 classes (just before the final examination) took part in two days in November 2014.
The students worked in three-hour workshops, which are accompanied by experienced innovation managers from the Innolab Graz and the Degree Programme Innovation Management to figure out solutions to real problems of local companies or partners.
The task always got all the students in the participating schools at the same time, so the chances are evenly distributed and the work could begin. At the same time a video conference between the participating schools will be opened by the moderators. To see the students what is being done in the other groups is an additional motivation.
At the end of the morning and the afternoon, a stage winner in each class was appointed. From these stage winners an overall winner was chosen from the Innolab team and a special prize was received.

3. Process
Initially, there is a brief introduction to the topic, then creativity methods are introduced, with which the problem is handled by the students. Students work in teams (approximately 5 students / team). During the workshop contact with other teams in other participating schools was kept via Skype or Google Hangout Zoom.

The teachers have no tasks during the workshops, but should be present as a contact person in the class.

4. Tasks and an example for the schedule

In our case, we defined 4 different tasks:

I. Create the next evolution of a “brown bag lunch – sausage” (from a local butcher)
II. Create the next evolution of an energy-product (by Dextro-energy)
III. New products made from stone (a Styrian gemstone polishing plant looking for new product ideas and applications)
IV. How could the Bank branch of the future look like (Deutsche Bank, Raiffeisenlandesbank Steiermark)

The tasks I and III were provided from local companies, tasks II and IV were announced at open innovation platforms and the students had the possibility to submit their ideas after the challenge.
The schedules for the different tasks are similar. As an example of our defined schedule for the energy-product will be presented at this point (it is very important here that all classes walk through the same schedule synchronously):

15 minutes:

- Introduction (Who we are; the background of the challenge, the goal, the schedule)
- Ceremonially open of the envelope and introduction the task
- Divide the teams to the table groups

45 minutes:

- Explain the defined method (in this case the morphological matrix), work out the matrix by students and deduce 3 versions
- Finally choose one of this for further working

45 minutes:

- Define a target group, create and visualise one typical “Persona”, completing and adding the product

30 minutes:

- Design a poster (slogan, visualization of the idea, the target group) and preparation of finally presentation (everything is allowed)

30 minutes:

- Presentation by the different teams, peer review, election of the stage winner by the students and transfer of the voucher.

5. Methods

The methods were chosen for their simplicity and rapidity of execution.

5.1 Morphological matrix

As already mentioned the morphological matrix was selected for the task I. and II.
A morphological matrix is a powerful tool for generating ideas, based on potential variations in a problem's characteristics.
A morphological matrix is a form of random stimulation that can be used solo or in groups and which has been around for a while. It does not have a sexy name like some creative techniques, but it is ideal for generating ideas when you have an idea about what you wish to do but not how you might go about doing it. [1]
To use the techniques, first list the attributes of the product, service or strategy you are examining. Attributes are parts, properties, qualities or design elements of the thing being looked at. For example, attributes of a pencil would be shaft material, lead material, hardness of lead, width of lead, quality, colour, weight, price, and so on. A television plot would have attributes such as characters, actions, locations, and weather. For a marketing strategy you might use attributes of markets open to you, uses of the product, and skills you have available.
Draw up a table using these attributes as column headings. Write down as many variations of the attribute as possible within these columns. This might be an exercise that benefits from brainstorming. The table should now show all possible variations of each attribute.
Now select one entry from each column. Either do this randomly or select interesting combinations. By mixing one item from each column, you will create a new mixture of components. This is a new product, service or strategy.
Finally, evaluate and improve that mixture to see if you can imagine a profitable market for it. [2]

5.2 Sematic Intuition

The method can be carried out quickly and requires no preparation or prior knowledge on the part of the participants. But she has great wastage because the word combinations often do not lead to useful ideas.

In the simple variant of the method a list of terms is first collected from the topic. Then two words out of the list will be combined to form a new word. Finally, it is about what might lie behind this new combination of words. Check for new ideas or associations to the task.

The method worked perfectly for the task III: “New products made from stone”.

5.3 Reverse Brainstorming

Reverse brainstorming is a good technique to try when it is difficult to identify solutions to the problem directly. [3]

Reverse brainstorming helps you solve problems by combining brainstorming and reversal techniques. By combining these, you can extend your use of brainstorming to draw out even more creative ideas.

To use this technique, you start with one of two "reverse" questions:

Instead of asking, "How do I solve or prevent this problem?" ask, "How could I possibly cause the problem?" And instead of asking "How do I achieve these results?" ask, "How could I possibly achieve the opposite effect?"

How to Use the Tool

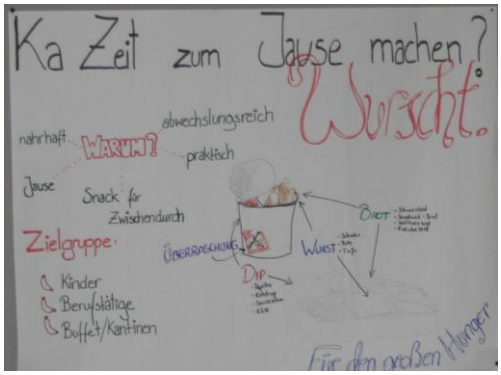
1. Clearly identify the problem or challenge, and write it down.
2. Reverse the problem or challenge by asking, "How could I possibly cause the problem?" or "How could I possibly achieve the opposite effect?"
3. Brainstorm the reverse problem to generate reverse solution ideas. Allow the brainstorm ideas to flow freely. Do not reject anything at this stage.
4. Once you have brainstormed all the ideas to solve the reverse problem, now reverse these into solution ideas for the original problem or challenge.
5. Evaluate these solution ideas. Can you see a potential solution? Can you see attributes of a potential solution?

Reverse Brainstorming was chosen for the task IV: “How could the Bank branch of the future look like”. But it was really tough to work with…

6. Outcomes

During the two days over 1000 ideas were created and the students discovered their huge creative capability. Out of the 25 stage winners, one Styrian Challenge winner team was selected and an additional jury award was assigned.

The winning team had the idea to create a custom made snack box for events, school kids or professionals. The personalization approach for a “brown bag lunch” showed an interesting innovative perspective.



The jury Award was given to a gemstone cover for wireless LAN routers, which shows a creative design and has the advantage, that the company can put this idea easily into practice.

In addition the participating schools as well as the University of Applied Sciences Campus 02 had high media coverage during the event and the aim to raise awareness for innovation and entrepreneurship was achieved.

7. Learnings

The Styrian Challenge took place for the first time and some learning experiences were made along the process and will be considered in the planning for the Styrian Challenge 2015.

The stage winner team in each class was appointed by their own classmates and from these 25 winner teams, a jury, consisting of employees of the Innolab and the degree program for innovation management, elected the Styrian challenge winner 2014. The students were briefed, that they should assess the level of innovation and the creativity of the presented ideas from their classmates. But in reality, personal relationships and sympathy respectively antipathy influenced the decisions of the students. So in the end, the stage winners were not the most innovative ideas and the jury decided to award an additional jury winner team.

Concerning the tasks, it was interesting that the students were highly motivated to develop ideas for local companies. The direct relation to a real company in the region showed to be very attractive. So for the next year, all tasks will be from local companies and it is planned, that the owner of the company will explain the task in a short video and the students see this at the beginning of the challenge.

Beside these two main points, the organization team decided to expand the interactive parts like the video conference between the participating schools and the exchange via social media during the contest.

References

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