



Education and Culture DG

Leonardo Da Vinci

innoSkills

InnoSkills: INNOVATION SKILLS FOR SME'S
Leonardo da Vinci Transfer of Innovation Project
LLP-LCV/TOI/08/481

INFORMAL LEARNING GUIDE

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Partners

Italy

Treviso Tecnologia – Special Agency for Innovation of Chamber of Commerce
www.tvtecnologia.it

Tinnova-Special Agency of the Chambers of Commerce of Florence and Prato
www.tinnova.it

Austria

E-Learning Concepts Rietsch KEG
www.eleaerning-concepts.at

Czech Republic

University of West Bohemia
www.zcu.cz

Germany

LiNK MV
www.linkmv.de
Institute for Project Support and Competencies Development - Pro-Kompetenz
www.pro-kompetenz.de

Portugal

Parkurbis, Science and Technology Park of Covilhã, SA
www.parkurbis.pt

Introduction

The InnoSkills EU Leonardo project is based on the Guide to support Innovation in SMEs, developed by the European project InnoSupport and supplemented by materials from other projects of InnoSkills consortium.

The goal of the project is to support the development of SMEs innovation processes, through the reinforcement of its middle management professional skills, allowing them to identify, acquire or strengthen their innovation management techniques.

The project began in October 2008 and lasting two years during which it led to the creation of eight work packages (WP), described as follows:

WP 1: Reviewing existing materials on the innovation management

WP 2: Update and integration of existing materials

WP 3: InnoSkills Guide materials localisation and translation

WP 4: Designing and realising the Innovation Management website

WP 5: Testing on the field of materials converted for the online use

WP 6: Dissemination and exploitation

WP 7: Quality Management

WP 8: Project Management

Partners of the project are: Treviso Tecnologia from Italy (Coordinator), E-Learning Concepts Rietsch KEG from Austria, University of West Bohemia from Czech Republic, Link MV and Pro Kompetenz from Germany, Tinnova from Italy, Parkurbis from Portugal.

The particular objective of the project was to develop a Guide to Innovation for each partner country. It was specifically declined on the basis of characteristics of different areas giving examples, best practices, tools and resources able to grasp the specificity of each contexts, thus responding to particular needs of learning and training.

All materials and products developed were made available on the Website www.innosupport.net, which allowed users to access easily the contents of the Guide, multimedia features and content sharing.

Specifically, the products developed under the project are:

- Innovation Management Guide and learning materials to support innovation in SMEs
- Self Assessment Tool to determine learning needs of the users
- Web Portal, www.innosupport.net, that allows collaborative and informal learning scenarios on creativity and innovation management

During the project, each partner has conducted an experimental activity on the field with the materials implemented online, involving different types of users and adopting different approaches of working methods.

Experiences have shown that contents, materials and tools developed can be used in very different contexts, involving multiple types of actors (entrepreneurs, trainers, consultants, students, etc...). It was therefore possible to collect a series of case-studies and best practices described in the Informal Learning Guides and which will be presented below.

They are a useful reference point for those who want to secure a key ingredient of innovation in their daily activities.

Summary

The Project Innoskills has provided a specific phase of field-testing of materials and contents produced and made available within the Portal www.innosupport.net.

Each partner of the consortium has therefore projected and managed different kinds of investigations. The aim was to identify, for each geographical area of reference, case studies and best practices on the use of the portal and the tools for the “informal-” and “cooperative-” learning made available online.

The result is a composite and highly differentiated experience. It has revealed how the InnoSkills Guide, the contents and the tools devised and implemented within the portal www.innosupport.net, may respond to different needs from diverse contexts. Some of them are: the resolution of organizational problems within companies, the project of new educational initiatives that meet specific learning needs and the use of appropriate tools for managing innovation. The users involved were entrepreneurs, employees of SMEs, consultants and professional men, workers in the world of training, university students. This variety of users puts in evidence how the materials produced meet the interests and the needs of heterogeneous targets.

The “Informal Learning Guide” is therefore a further contribution specifically developed within the Project Innoskills. It collects and presents the most significant results emerged during the test on the usability dedicated to the portal www.innosupport.net in general and tools available online connected to the informal and cooperative learning:

- The InnoSkills Guide for the Innovation Management, accessible online and downloadable. The user has the possibility to evaluate and comment the contents.
- The Self Assessment Tool of training needs: an online questionnaire that allows users to build personalized learning paths within the various chapters of the InnoSkills Guide.
- The “Innovation Rooms” provide users the tools to encourage innovation management.
- The possibility by the user to place online personal contributions in innovation, to share with the online community.

The Guide is constructed in three parts.

The first one gathers and describes the test experiences of the Platform built by diverse partners:

- the Italian experience, described by Treviso Tecnologia, conceiving a special training course on innovation;
- the German case, brought by LiNK MV, presents the use of creativity techniques to solve organizational problems;

- the Portuguese case, described by Parkurbis, with the involvement of SMEs in projects funded by the European Community;
- the Czech experience, illustrated by the University of West Bohemia, focused on improving organizational association and team work;
- the Austrian experience, carried out by E-Learning Concepts, about the realization of a seminar on business management for university students;
- still an Italian case, by Tinnova, where a group of selected users between entrepreneurs and researchers have tested and evaluated various elements of the portal www.innosupport.net

On the other hand, the second part presents online tools available within the Innovation Rooms www.innosupport.net. These tools promote collaboration and sharing of aspects connected with the innovation issue. They also belong to the following categories:

- Brainstorming
- Mind mapping
- Collaborative text processors
- Whiteboards
- Online polling

Descriptions and explanations are intended to guide the reader to use them effectively in order to make the most of benefit.

The last part of the “Informal Learning Guide” analyzes the experiences and the tools described. Moreover it permits to discuss the development of the main elements that identify the different approaches and the paths generated by the partners in the Project Innoskills.

Part I - The usage of the platform in the lifelong learning context

1. The experience of the University of West Bohemia (Czech Republic)

Situation

Business Innovation Center Plzeň (BIC) collaborates on development of project proposals with the Technology Center of the Czech Academy of Sciences (TC). At present they exchange the related documents through e-mail and were looking for a more efficient tool. The University of West Bohemia, one of the InnoSkills partners, in an informal meeting with the BIC director informed her about the InnoSkills platform and the tools provided by it. The BIC immediately realized the potential of the collaborative tools presented in the corresponding Innovation room and asked us (the UWB) to prepare the brief training for consultants working at BIC and TC.

Solution

The members of the UWB team (Jiri Vacek and Milan Edl) first trained themselves in the use of collaborative text processors Zoho Writer and Google Docs. After testing of both applications we prepared the short description (see Innovation Rooms – Collaborative text processors), and then it was prepared the training for 5 participants (3 from BIC, 2 from TC).

First we briefly introduced the principle of collaborative tools, possibilities of both applications and their advantages and disadvantages. The participants could create their accounts and practically train the use of both applications.

Lessons learnt

It appeared that currently the Zoho Writer is more convenient for the purpose of both companies, as it allows working simultaneously on the same version of the document, locking only the paragraph being modified to other users.

All participants realized that both applications are rapidly developing; both Google and Zoho today offer a lot more collaborative tools than text processors, they can be used for working on spreadsheets, presentations and many other applications. The tools are quite user friendly and after gaining the first experience in the training the participants can use them for common work. The training introduced the participants to new technologies of cloud computing.

The only remaining issue that was not resolved is the security of the documents stored in the common pool somewhere at the net. The users should consider the protection of their confidential data.

2.The experience of TINNOVA, the Special Agency of Chambers of Commerce of Florence and Prato Business *(Italy)*

TINNOVA is the Special Agency of Chambers of Commerce of Florence and Prato. It is a service organization dedicated to promoting technological and organizational innovation in small and medium enterprises, with a predominant activity in the provinces of Florence and Prato. The growing need for recovery and growth of business competitiveness in both local and foreign markets, requires to consider all of the processes that characterize a company, the innovation process as continuous improvement one. Organized to be effective in a “company”, it requires time and resources for and, compared to generating change, risks to be borne. TINNOVA decided to establish a direct and consistent contact with local businesses, as a strategic choice to encourage innovation and widely disseminate expertise. From this approach follows the way developed in using the Innosupport platform, proposing to companies and research centres of the territory to test its contents and tools. These subjects were also added to support innovation business entities associated with areas of advanced services.

Solution

The wealth of content on www.innosupport.net web portal was used by a panel of selected companies and researchers for testing a variety of contents. These were viewed and studied directly with entrepreneurs and researchers. The informal established relationship allowed to also collect qualitative elements provided by the relief, that not easily would be recovered with traditional mode of submission of a questionnaire. This approach allowed to reach a good number of qualified users on innovation themes and get authoritative judges about content and tools of the platform.

Lessons learnt

A: 27 users between companies and research institutions responded positively to the request to test the contents of the platform, reflecting the fact that the “thirst for information” on now much abused “innovation” term is still very strong, especially nowadays it requires each production activities to roll up their sleeves to better position itself in global markets with new look and momentum.

B: the “face to face” informal contacts to learn platform’s contents was acceptable to participants and allowed to emerge innovation management needs, which an entrepreneur would hardly spoken about with other companies present.

C: bring practical experiences (case studies) of companies that have successfully used methods and techniques presented in the platform really helps the entrepreneur to approach arguments since that moment lived with great suspicion.

3.The experience of Treviso Tecnologia, the Special Agency of Treviso Chamber of Commerce (Italy)

Situation

Treviso Tecnologia – the Special Agency of Treviso Chamber of Commerce – carries out life-long learning, either funded or standard courses, with the aim to tweak formative solutions in accordance with the needs of our customers: SMEs, consultants, teachers, public organizations, students, workers, etc.

During last months, a great number of customers felt the need of a formative activity at their disposal, able to make themselves familiar with the matter of how to manage the innovation in an easier and more practical way. This matter is considered a strategic element able to face effectively the current circumstances of economic crisis. It has particularly emerged the exigency of “ready-to-use” instruments/tools immediately employable in their organizational structures. More than a theoretical deepening they demanded concrete instruments and methods that can be used in the field.

Treviso Tecnologia has considered to tweak a solution of blended learning that would foresee the fruition of online supports/services together with the traditional lectures. This choice has been guided by the will of offering an opportunity of training through a portal where finding contents, materials, instruments, resources. On the one hand there is the positive aspect given by the vis-à-vis interaction with the expert trainer; on the other hand we have reduced the number of hours in the classroom, often very onerous either for the employers or the workers.

Solution

The portal www.innosupport.net has been adopted for supplying a seminar on innovation management lasted two days every two weeks, for a total amount of 14 hours of training in the classroom held by an expert trainer in the “innovation management”.

During the traditional lectures, the trainer has often made reference to the portal contents/services giving the participants indication and advices about how to use it and how to consult it. There has been paid particular attention to exercises/practices and to the introduction to the best practices.

The trainers, in particular, have invited the participants to enter the “innovation rooms”, taken from the usual context of PMI and directly connected with the original surroundings which the same participants were coming from. The participant has been called to fill the online “Self Assessment Tool” in order to obtain information on the specific contents to deepen, according to the fields of their main interest.

Lesson learnt

First point: we received 60 requests for participation: this result was totally unexpected and not considered in our planning. This means, for us, that we touched a very important issue within SMEs and, more, that we suggested an attractive learning proposal.

Second point: The “blended learning” methodology/method used has been appreciated by the participants basically regarding the presence of the expert trainers, whom has permitted to familiarized in a pragmatical/practical way with the innovation management.

In the “Innovation Guide” has been fundamental the presence of specific cases of studies coherent with the original surroundings of the participants. In this way, they could understand which elements were associable to their own working surroundings/reality. It could be useful to distribute the “Self Assessment Tool” before starting the training session for developing a way of learning better adapted to the target.

4. The experience of Parkurbis, Science and Technology Park of Covilhã (Portugal)

Situation

During the development of the piloting phase of the project InnoSkills, one of the biggest problems on the involvement of the target groups was the lack of time to participate on seminars and long workshops. Considering time as a very valuable asset for SMEs, the plan for the piloting phase was completely changed in order to respect the target group needs and easily involve them on the process. So, for the piloting phase a short workshop on the use of the platform was developed, many contacts were made by e-mail, and many presentations were made on other project meetings.

Considering the importance of time, one of the most interesting aspects valued, by SMEs, on the use of the InnoSkills platform, during the piloting phase of the InnoSkills projects, one particular tool – online polling, in particular, Survey Monkey – presented itself very useful in two different dimensions and for two different purposes.

Case 1:

One major obstacle for the SMEs participating on the Piloting Phase of the InnoSkills project, is the lack of time to spend with the participation on projects. Even though the value of the project and the contents available are very important and interesting, people need all their time to develop their own work, on their own firm.

In order to present results of the InnoSkills project, is extremely important to collect information from the target group, participating on the piloting phase, but they don't have the time to participate on several workshops, and many of the participants on the piloting phase are spread over a large territory. So, how can we collect feedback from the target groups?

Case 2:

The InnoSkills project has been presented on a group of partners of one other project, which required working with SMEs, implemented interviews and collected all their feedback, with the support of consultants. The SMEs are spread on the territory and time is also a very valuable asset for them. They just can't spend much of their working time on meetings with the consultants. The results of the interviews are also very important for statistical analyses by one different partner of the project. Is there a simple way to collect the information and make it available to all that need to work with it?

Solution

For both cases, it was used the online polling tool Survey Monkey.

In Case 1, on the project platform was created a survey, were the participants in the piloting phase would evaluate the platform and present their comments on what

should be improved or what fits perfectly on their needs. This allows each participant to present their comments to the project partnership at anytime and from anywhere, through a simple and easy to use tool.

In case 2, the partnership of the project created online surveys, with the same questions already created on paper version, trained the consultants on how to use it, and all the interviews were registered online. This allowed not only the use of a simple tool and the reduction of a great amount of paper that could easily be lost but also allowed other partners from the same project, to use all the information collected for statistical analysis of the data.

Lessons learnt

- The online polling tools are very easy to use and a simple way to collect information of target groups
- However, if the target group doesn't understand the purpose of the survey, many questions may remain unanswered, and, the survey loses its value.
- If all the process is conducted by a trained consultant or someone related to the project, the survey allows to collect clear and concise information;
- It can be much more easy to work if the target group is previously selected, based on a list of criterions, in order to be representative of the population of the project;
- In some situations it is not possible to use the online tool (e.g., the interview is conducted in a place without internet). So, whenever is not possible the use of the online survey, the consultants or other accompanying the process can use the paper survey and later submit the information on the survey online;
- When constructing the online survey, it is important to consider the possibility to return to the filled survey and correct or insert new information. One other possibility is to consider the identification data of the person/SME as compulsory. So, when necessary to add new information about one SME with a survey already created and submitted, it's easy to identify and connect both surveys.

5.The experience of LiNK MV (Germany)

Situation

The piloting was undertaken with a company dealing with ICT solutions and services. It is a small company located in Rostock. It offers web-based IT-solutions for enterprises regardless of sector, training institutes and public authorities. The business activities are in the region and the Federal States around. The business especially with Open-Source products covered by services runs very well. In order to strengthen the competitiveness and enter new markets the management and the team are forced to acquire customers abroad. They are faced to an increasing pressure on turnover and profit margin. BUT the foreign language skills of the employees vary from very good to poor. The management wants them to boost the skills on one very high level. How to manage this within a very short time and with high quality? A brainstorming was suggested in order to collect ideas. Is this creative technique suitable for this purpose or are there probably other techniques which could lead to better results?

Solution

A consultancy office drew the attention of the management to the Innovation Guide available on the platform www.innosupport.net. Creative techniques are explained here in detail and relations to practical use are pointed out. A workshop with the management and the employees took place. The trainer from the consultancy office who uses the platform for consulting purposes regularly explained the platform, the idea behind it and especially the modules about creative techniques. Some techniques were completely new for the company and they learned a lot about it. Finally they decided to have a closer look at two techniques:

- the 635 Method and
- Online Brainstorming

After checking the functions, best uses, benefits and challenges Online brainstorming was not considered as appropriate for the idea generating process in the this case. So a session with the 635 method was undertaken. Five participants (manager, software development, marketing and sales) joined in. The session was led by the trainer. Innovative and amazing ideas were collected, further improved, refined and finally, the session delivered a very satisfying result. The management is now able to turn the ideas to a binding plan of different measures.

Lessons learnt

The material provided by the Innovation Guide was very useful. The team got a broad knowledge about creativity techniques and their appropriate best uses in practice (day-to-day business). The monitoring by an expert was essential in that phase. The company was not that familiar with these topics. The mixture of online material

which is available further in future at any time and the initial attendance by an expert was necessary. In that way the success of the process was backed up.

6.The experience of E-Learning Concepts (Austria)

Situation

The project partner E-Learning concepts is a very small firm specialised on e-Learning services. It's managing partner, a TRIZ specialist, is a docent at the University of Economy and Business Administration in Vienna. Therefore, we decided to perform the piloting courses in cooperation with the Institute of Small Business and Entrepreneurship and with the Institute of International Business. The majority of students at both institutes are working at small firms in different positions eg. human resource manager, marketing assistants, sales manager etc. Others are planning to take over firms of their parents or they are planning to create own businesses. All of them are looking to learn how to create innovative business solutions, how to manage innovations, how to go international etc. These students represent the target groups of the Innosupport platform. In particular Bachelor students are interested to learn about "ready-to-use" instruments/tools.

Solution

The training arrangement had to fit to organisational and quality requirements of the university. Two courses, each of 28 hours, were announced in the spring semester 2010. Each course offered 20 places. The courses were structured as followed:

1. Introductory session (welcome, presentation of the participants, introduction to the course and the tasks)
2. Introduction to the analysis fields (SMEs and E-Business, Why and how SMEs go international)
3. Students prepared individual home works (analysis of their firms innovation potentials or SWOT of their firms e-Business activities)
4. Podium discussion with a SME entrepreneur
5. Groups of 2 students each were organised, each group had to identify an innovative Austrian SME and to provide an analysis of E-Business activities applying different analysis methods (e.g. students conducted interviews with the management of the firms, applied SWOT, TRIZ etc)
6. The groups presented their cases in written and in the classroom

The Innosupport platform was used by students for refreshing their knowledge on different analysis tools (eg SWOT) and as studying material (e.g. innovation audit, TRIZ). Beside of the Innovation platform the e-learning platform of the university was used, e.g. an online course script and other sources were available in a download area. A white board was used for interim discussions/coaching between the trainer and student groups.

Lessons learnt

The Innosupport platform was very useful for organising courses based on the blended learning approach. Contents to important topics of innovation management are collected in ONE platform. This was emphasized by students to be very advantageous.

Part II– Useful collaborating tools in innovation processes

1. Brainstorming

Background

Brainstorming is a creativity technique designed to generate a large number of ideas. In this way a group is able to find approaches for solving a problem in a fast and productive manner. The technique can be used for every kind of theme, everywhere and by everyone. As much ideas as possible, even “crazy” ones, are generated. The evaluation of these ideas and the discussion about them takes place later on. Here, quantity goes before quality. Practical constraints and feasibility are disregarded at first.

Normally people get together in a room take paper or small cards starting to generate ideas and write them down. Another way is to call out all ideas that come in mind to a moderator who writes everything on paper. Brainstorming is nothing systematically and usual roads of thinking have to be turned off.

But what exactly is Online Brainstorming? It enlarges the radius of a brainstorming session enormously. People who could not be present can take part too. It is possible to give notice of the idea generation process to the public and other people can join in.

Staff members do not have to be present simultaneously and ideas can be produced step by step (asynchrony). Ideas remain stored and other participants can add new ideas later on. In this way more time is needed but on the other hand the pressure to produce a lot of creative thoughts in a very short time drops.

One tool which you could test is named brainreactions.net. It is free of charge as long as no more than 5 users are working with it. The setup is quite easy and does not require any technical knowledge in that field.

Best uses

- Idea generating in small groups
- In case that people cannot be present at the same place
- In case that people want to join the process at different times
- In case that experts are asked to support the process
- In case that the idea generating process can last a little longer

Benefits

- Free access, easy to use, flexible and independent of time and place
- Storage of ideas, organisation of more than one session
- Participants can be present at the same time but they are not forced to be
- External subject matter experts can be asked to join the group

Challenges

- Diachronic search for ideas demands a more extensive budget of time, Fix a time budget before
- Problem solving via remote work is possibly not as creative as discussing things in a group – Team work releases energies rather than remote, asynchronous work
- Challenge for moderator – has to supervise the process and the rules
- Requires discipline from participants
- Participants have to follow the idea generating process self-contained and online
- Results have to be summarised and circulated among the participants

Brainstorming Tools

In the sections “Innovation rooms” on www.innosupport.net the tool brainreactions.net is presented. Here a tutorial and the link that leads you directly to the application are provided.

Have a go!

www.brainreactions.net

Ways to save money on winter heating bills.
 Already sealed the windows. No longer using central heat (floor board, gas powered, no control per room.) Space heaters in bedrooms only, running at night.

[← Previous](#) | [Random Brainstorm](#) | [Next →](#)

[Email Ideas](#) | [Invite People](#)

Brainstorming Tip: Focus on generating a high quantity of ideas. Don't judge ideas. Invite other people to add ideas.

New Idea: 500 Characters Left

Sort Ideas By: [Most Recent](#) | [Most Popular](#) [Add Idea](#)

9. keep couple of plates (not bowls) filled up with water. Higher humidity results in higher effective heat at the same absolute temperature. View 21 minutes ago	0 votes View Votes
8. Switch suppliers View 5 days ago	0 votes View Votes
7. Never leave electrical devices on standby - switch them off. View 5 days ago	0 votes View Votes
6. Put kitchen foil at the backs of wall heaters if you have them View 5 days ago	0 votes View Votes
5. Check and upgrade loft / wall insulation as necessary View 5 days ago	0 votes View Votes
4. Wear warm clothing - several comfortable layers are better than one thick one View 5 days ago	0 votes View Votes
3. Learn to knit and crochet (socks, blankets, hats, etc.) View 23 days ago	0 votes View Votes
2. cuddle dude! I lived in a place with no heat one winter and those things saved my life! View about 1 month ago	0 votes View Votes
1. Seal Windows View about 1 month ago	0 votes View Votes

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Brainstorm Info

Creator: [abicle](#)
 Created: about 1 month ago
 Activity: 21 minutes ago
 Users: 5
 Ideas: 9

Top Brainstormers

Username	Ideas
Hendels	5
silverbells	1
swindle	1
peachseek	1
abicle	1

Resources

www.innosupport.net Modules 4.2 Brainstorming und 4.3 Brainwriting

Website Brainreactions

www.brainreactions.net

Website „Wer denkt Was“ (in German)

www.werdenktwas.de

Website brainr.de

www.brainr.de

Website bubbl.us

www.bubbl.us

Tips & Tricks

Even brainstorming online has to be planned properly. A moderator has to “pull the strings”. In case of asynchronous brainstorming (time-shifted) a time frame should be fixed.

Set up rules (i.e. no evaluation or judgement of existing ideas) at the beginning

In advance a short introduction to the tool and how to use it

The group of people should be small

Online brainstorming allows watching the ideas of other participants and to use them as a starting point or input for own creative ideas.

2.Mind Mapping

Background

A mind map is a diagram used to represent words, ideas, tasks, or other items linked to and arranged around a central key word or idea. Mind maps are used to generate, visualize, structure, and classify ideas, and as an aid in study, organization, problem solving, decision making, and writing.

The elements of a given mind map are arranged intuitively according to the importance of the concepts, and are classified into groupings, branches, or areas, with the goal of representing semantic or other connections between portions of information. Mind maps may also aid recall of existing memories.

By presenting ideas in a radial, graphical, non-linear manner, mind maps encourage a brainstorming approach to planning and organizational tasks. Though the branches of a mindmap represent hierarchical tree structures, their radial arrangement disrupts the prioritizing of concepts typically associated with hierarchies presented with more linear visual cues. This orientation towards brainstorming encourages users to enumerate and connect concepts without a tendency to begin within a particular conceptual framework.

The mind map can be contrasted with the similar idea of concept mapping. The former is based on radial hierarchies and tree structures denoting relationships with a central governing concept, whereas concept maps are based on connections between concepts in more diverse patterns.

Best uses

- problem solving
- outline/framework design
- anonymous collaboration
- marriage of words and visuals
- individual expression of creativity
- condensing material into a concise and memorable format
- team building or synergy creating activity
- enhancing work morale

Benefits

- vastly superior note taking method
- use of the full range of left and right human cortical brain skills
- distinguish words or ideas, often with colors and symbols
- greater creativity when recording ideas and information
- associate words with visual representations

Challenges

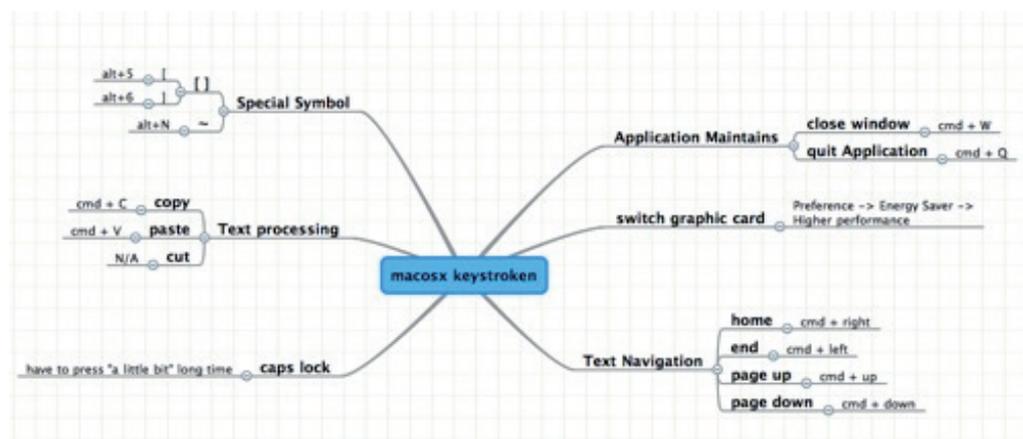
- Participants had to agree with all generated ideas
- Organize huge amount of information starting from a mind-map
- Unfamiliar technique to apply

Mind Mapping Tools

Our section „Innovation rooms“ at the Innosupport portal www.innosupport.net offers and describes two mind mapping softwares:

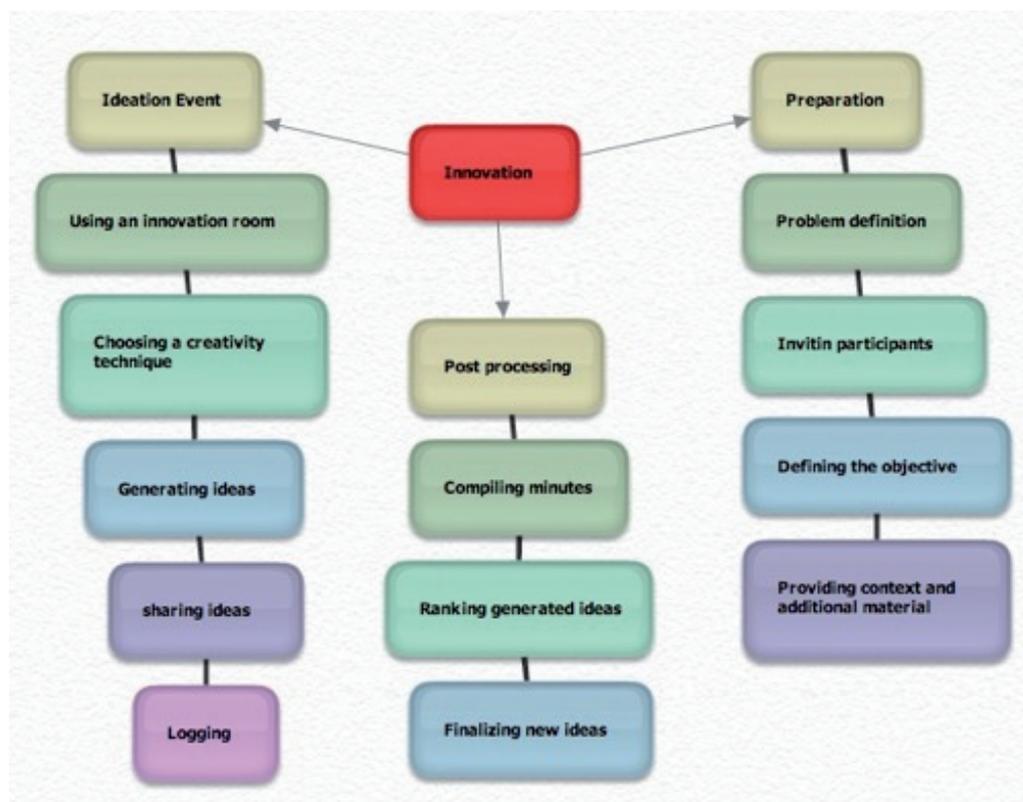
(1) MindMeister

<http://www.mindmeister.com>



(2) Bubbl

<http://www.bubbl.us>



Resources

- Introduction to MindMeister and Bubbl on www.innosupport.net
- How to draw a mind map: http://www.mindtools.com/pages/article/newlSS_01.htm
- The <http://techlogg.blogspot.com/2007/03/web-based-interactive-whiteboards.html> mind map inventor's web site: <http://www.thinkbuzan.com/>
- A great range of mind map example: <http://www.mind-mapping.co.uk/mind-maps-examples.htm>

Tips & Tricks

- **Eliminate Environmental Distractions.** Start your session in a quiet, light environment where you will not be disturbed until you are finished.
- **Eliminate all paper / digital distractions.** If you are doing your mindmap on your computer, turn off MSN, email, Kazaa, and everything else that you have running except the mindmapping software. It is too easy to "take a small break" that turns out to waste 30 minutes. If you are using paper, make sure your desk is clear, except for the paper and your writing materials.
- **Start with a good question or idea.** Think about what you want to accomplish during your session, and start with an idea that is precisely defined, so it will help you work towards your goal.
- **Start with that goal, but feel free to deviate from it.** As your brainstorm grows, follow your creativity and expand it however you like. Don't feel constrained by that bubble in the middle, because it is only there as a starting point.
- **Don't try to make it too clean or professional.** Remember you are doing this for yourself, so there is no reason to constrain your creativity.
- **Write down every semi-decent thought or idea that comes to you.** Do not judge your ideas too heavily before you put them down, because you may change your mind later and regret throwing them out.
- **Color code, doodle, scratch out** and do whatever else you want to your brainstorm, if it will help you get a better understanding of it. Again, you don't have to be neat and tidy. Think of your brainstorm as art, and act creatively.
- **If you need to, familiarize yourself with the materials before your session begins,** but try not to impair your creative juices during your brainstorm by reading from a textbook or sheet.
- **Get started right now!** Use a tool such as MindMeister, or Bubbl, and start your brainstorm. The best time to start is as soon as you can.

3. Collaborative Text Processors

Background

A collaborative text processor (editor) is a form of collaborative software application that allows several people to edit a file using different computers. There are two types of collaborative editing: real-time and non-real-time. Real-time collaborative editing is synchronous (simultaneous), meaning that users can edit the same file at the same time. Non-real-time collaborative editing is asynchronous, which means that editors do not edit the same file at the same time. Collaborative real-time editors generally permit both synchronous and asynchronous editing in any given instance (Source: wikipedia).

There are several free kinds of software available which run via user's internet browser. That means, there are no downloads required and there will not arise problems with different versions, firewalls etc.

Web-based collaborative processors can be used as synchronous tools supporting all involved co-authors to share and upgrade the same document. In such a case, participants have to agree on a meeting time for common work.

Take care:

- If used asynchronously, there must be one file owner who creates the final version of the document.
- Participants have to follow the agreed procedures and rules.
- It is strongly recommended to use document version identifiers.
- Participants and trainers may have to train the use of the applications.
- There may be delays due to heavy Internet traffic.

Best uses

Shared development and revisions of documents.

Benefits

Free, easy access and simple to use for co-authors.

Easy import from / export to MS Office files.

Provides an immediate feedback & exchange of opinions.

Offers the ability to archive and retrieve document's version.

Participants do not need to move to a meeting location

No travel and subsistence costs.

Possibly first experience with cloud computing.

Challenges

Difficult to guarantee the confidentiality of documents.

It may be difficult to track all versions.

Whiteboard Tools

Section „Innovation rooms“ at the Innosupport portal www.innosupport.net offers and describes two collaborative text processors:

Zoho Writer

<http://writer.zoho.com/>



(2) Google docs

<http://docs.google.com/>



After registration, you can

- Create and edit documents from anywhere using in-built WYSIWYG editor.
- Collaboratively and simultaneously edit documents.
- Download and upload existing documents (doc, xls, ppt, html, etc.).
- Share documents with your team.

In Google Docs, each document has its owner, who assigns accession rights to other team members (read only, edit). At any time, only one user should have the edit right, while all the others can read. Otherwise it becomes difficult to track all the changes and create the consistent version of the document. The owner can consecutively pass the edit right within the group.

Zoho locks the paragraph anybody is editing, marks it by background colour and allows the others to edit other paragraphs of the same document. The control of work is easier.

Resources

http://en.wikipedia.org/wiki/Collaborative_text_editor

<http://apps.google.com>

<http://www.zoho.com>

Tips & Tricks

- Zoho allows accessing and editing existing documents even without an internet connection. Offline document edits will be synchronized when you are online.
- Documents can be easily shared between Zoho and Google applications.
- Agree date and time of common session, invite the participants individually, inform about objectives.
- Monitor and facilitate the session.
- Keep the number of participants rather small
- Give participants time to contribute, be aware that someone might have less PC skills.
- Both Zoho and Google offer much more collaborative tools than text processors – see
- <http://apps.google.com>
- <http://www.zoho.com>
- Both applications are continuously upgraded and new options are integrated.

4.Whiteboards

Background

Electronical **Whiteboard or Whiteboarding** are terms which describe a web-based software. The use of this kind of software allows a defined number of persons to work together online from different locations on a document, discuss a website, draft any schemes etc.etc.

Attention: whiteboard applications are not screen sharing services and they are not video & chat services.

So, you can not discuss with other persons what you have locally on your PC-screen. You have to upload that issues which should be discussed to an electronical whiteboard like to a board in a classroom.

There are several free kinds of software available which run via user´s internet browser. That means, there are no downloads required and there will not arise problems with different versions, firewalls etc.

Web-based whiteboards are synchronous tools involving all invited participants being online simultaneously and often interacting at the same time. This makes it a very dynamic and fast-paced mode of interaction. Participants have more or less no time to reflect on a topic or question. To combat this, trainers or group leaders can prepare participants in advance with specific discussion topics or questions.

Whiteboard sessions happen in “real” time, therefore, an establishment of clear procedures and rules is needed.

Best uses

- Ad-hoc group discussions (rather in small groups) eg on problemsolving approaches, project structures etc. when it is not possible to arrange a meeting soon
- Ad-hoc effective one-to-one tool

Benefits

- Free, easy access und simple to use for participants and trainers
- Provides an immediate feedback & exchange of opinions
- Offers the ability to preserve transcripts
- Participants do not need to move to a meeting location
- No travel and subsistence costs

Challenges

- Can be difficult to keep discussions focused
- Participants are unable to observe facial expressions, tone or body language, which can cause misunderstandings
- Can be difficult to know when participants has completed his or her contribution
- Participants have to agree on a meeting time for whiteboarding

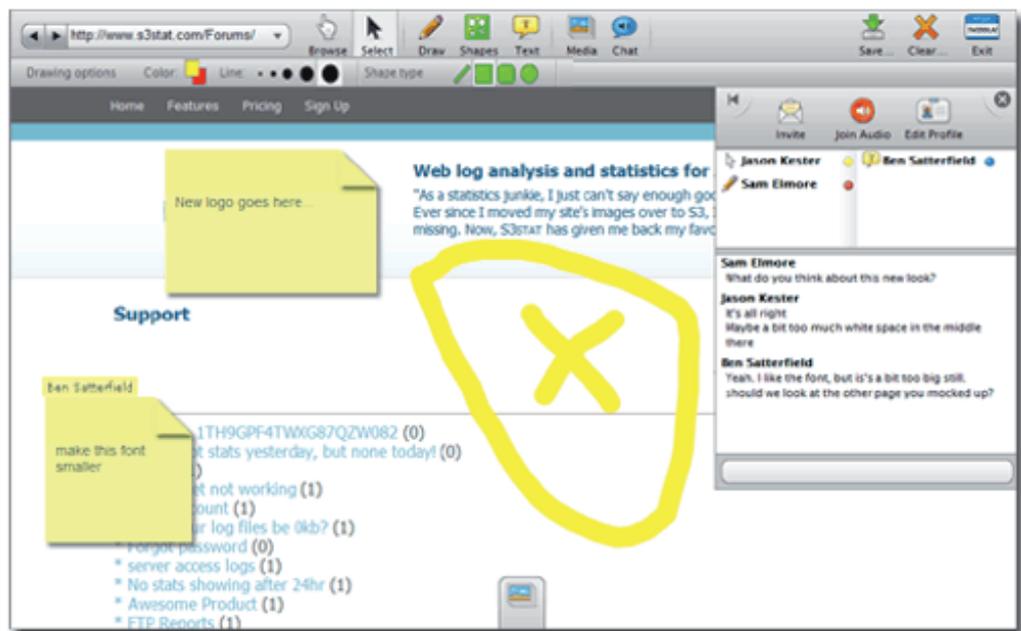
- Participants have to follow the agreed procedures and rules
- Participants and trainers may have to train the use of the whiteboard applications
- Conversation may delay due to Internet traffic

Whiteboard tools

Our section „Innovation rooms“ at the Innosupport portal www.innosupport.net offers and describes two whiteboard softwares:

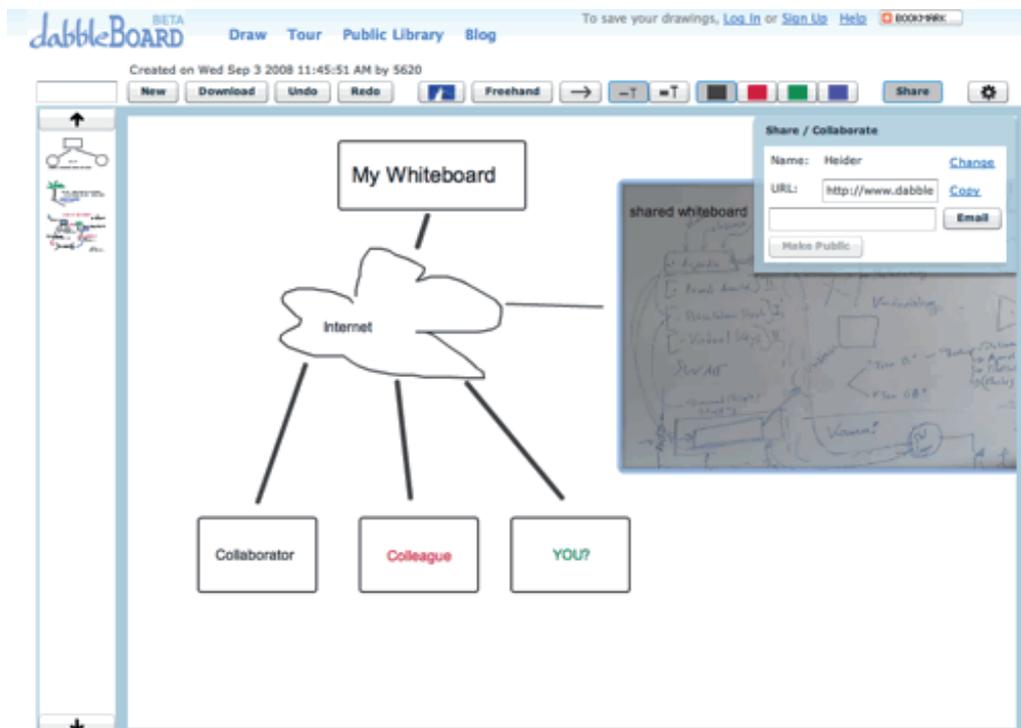
Twiddla

www.twiddla.com



Dabbleboard

www.dabbleboard.com



The whiteboard websites offer Guided Tours on how to use the applications.

Resources

Introduction to Twiddla and Dabbleboard on www.innosupport.net

15 Free Tools for Online collaboration

<http://sixrevisions.com/tools/15-free-tools-for-web-based-collaboration/>

Web-based interactive Whiteboards (tech-logg)

<http://techlogg.blogspot.com/2007/03/web-based-interactive-whiteboards.html>

Tips & Tricks

- Identify your objectives and plan how the whiteboard will be used in your problem solving process or training
- Define etiquette and security guidelines, encourage the use of emoticons
- Offer a practical introduction for those who are not familiar with the application
- Agree date and time of the session, invite the participants individually, inform about objectives
- Monitor and facilitate the session to keep participants on the topics
- Keep the number of participants rather small
- Give participants the floor to contribute, be aware that someone might have less PC I skills
- Summarize the main points at the end of the session
- Save a transcript of the session

5. Online Polling

Background

According to the Wikipedia definition, “an online polling is a survey in which participants communicate responses via the Internet, typically by completing a questionnaire in a Webpage. Online polls may allow anyone to participate, or they may be restricted to sample drawn from a larger panel”.

An online polling is a type of open access poll. These surveys can be available on a Webpage, to anyone interested on participate or can be restricted to specific target groups, through the use of links and passwords.

The uses for Online Polls software are many:

- Schedule events
- Make choices
- Collect information through structured surveys
- Identify trends
- ...and many others

With a quick search on the Internet, many different free software for online polling can be found, requiring, only, a simple registration without requiring the download of any kind of software.

Different opinions arise on the accuracy of the results of online polls. Some question the scientific quality of the results, based on the difficulty of controlling the participant sample and its representativeness of the population, while others defend that online polls results are no less accurate than those obtained through phone calls surveys. However, there are some tips and tricks that can be used, in order to obtain important information.

Wisely used, online polls can be an effective tool to upgrade the traffic of websites.

Best uses

- Collect information of controlled groups, instead of using personal interviews
- Identification of trends and making choices
- Collect information, eg evaluation of services, from long distance users

Benefits

- Easy to use
- Effective to collect information in a short period of time
- Simple solution to collect information from participants of different geographical areas
- Not expensive or, in some cases, free of charge
- Statistic information can be collected
- If working on an open access poll, the information collected represents the opinion of the most interest individuals

Challenges

- If not controlled, important information can be lost and inaccurate information can be collected
- It is very important to define simple and clear questions, if possible, with closed answers
- After closed a survey, it is not possible to add new information or correct inserted information.
- The participants on the online polls, in particular open access online polls, may not be representative of the larger population and, therefore, do not represent the opinion of the majority.

Online polling Tools

Our section „Innovation rooms“ at the Innosupport portal www.innosupport.net offers and describes three online polling pages:

(1) Doodle

www.doodle.com

(2) Polldaddy

www.polldaddy.com

(3) Micropoll

www.micropoll.com

The Online Polling websites offer Guided Tours or simple examples, models and guidelines to help the customer on the use of the applications

Resources

Online Polls: Find the best Web Polling Software for your needs

<http://www.labnol.org/internet/best-web-polling-software/6207/>

“Why online polls work?”

<http://tools.devshed.com/c/a/Website-Content/Why-Online-Polls-Work/>

Online poll sites

<http://web.informer.com/online+poll>

Best Practices for Online Polls

<http://www.ojr.org/ojr/stories/071210niles/>

Tips & Tricks

- Before the application of the survey, identify the group of participants
- Application to specific and defined target groups, informed about the aims of the surveys
- Get support of a consultant on the application of the surveys
- Use closed answers, like rating some statement or multiple choices

Conclusions and recommendations

One of the key issues for the development of innovation skills within SMEs is to remove the barriers for participation in training. It is well known, that SMEs want to reduce their training budgets, they need just-in-time learning and they need to maintain the continuity of the business. Therefore, they require a minimal disruption in the day-to-day activities due to training. SMEs expect a quick impact from training in terms of innovation skills for employees and managers.

The Innosupport Platform has been developed with a strong focus on SMEs. It offers many learning opportunities for specialists and executive staff in SMEs, for students and trainers. Many of the learning tools and learning options discussed in this guide would not have been available ten years ago, and there is little doubt that additional technologies and online tools that can support e-learning and Blended Learning are on the horizon.

The benefits of the use of the Innosupport Platform for SMEs such as learner satisfaction and understanding of materials along with improved 24 hours availability of learning resources and collaborating tools are powerful reasons for SMEs to explore the Platform. The increased cost effectiveness, reduced training time, and the ability to easily update training materials offer additional compelling reasons.

The pilots showed also that participants at pilots preferred the Blended Learning approach. Therefore, the following recommendations are addressed

- **(a)** to SMEs which would like to organise Blended Learning arrangements using the Innosupport Platform and
- **(b)** to trainers who would like to offer training using the Innosupport Platform.

Recommendations to SMEs:

- Look for an experienced training provider which is able to tailor “your” blended learning course or workshop (special for your sector, your products and services) using the Innosupport Platform to your needs.
- Start networking in training with other companies, training providers, sector organisations, Chamber of Commerce etc. with the objective to develop learning communities, create learning groups that achieve critical mass and make Blended Learning arrangements cost-effective and more attractive for providers as well as users.
- Consider the possibility of training partnerships between your SME and large companies.
- Share your experiences with other platform users. Use the possibility to make comments and/or to upload learning materials, case studies etc.

Recommendations to trainers:

- Explore all learning and collaborating opportunities on the Innosupport Platform.
- Involve the SME into the process of needs analyses and the development of the course or workshop using the Innosupport Platform.
- Understand the practical training barriers of SMEs, find solutions to reduce or to avoid them.
- Support should be given to interested SMEs in searching for financial support for training. Think about networks, bring SMEs with similar training needs together.

The project partners hope that the more global perspective and specific examples in this guide and on the project website - www.innoskills.net and www.innosupport.net - will help you to use the options of the Innosupport Platform in your context.