

# IMPROVING VIRTUAL TEAMWORK IN AN INTERNATIONAL PROJECT

Thesis

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Degree programme of Agriculture and Rural Development Internationality, Business, Animal Husbandry

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# SAVONIA UNIVERSITY OF APPLIED SCIENCES lisalmi

THESIS Abstract

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Abstract:	
pilot project of three countries and aims for develo	
came to an end in 2006.	d businesses. The project work started in 2004 and
In the project practical problems were defined by t dents have been trying to solve them. This is done learning. The first mentioned method is based on there is also new information gathered during the	with cooperative learning and problem based equality in the group. PBL is quite similar to it but
Some faults could be seen in the virtual teamwork of a thesis which was put into practice as an action teamwork by using the web tools and by developing this was done by getting familiar with the methods adapting them into a presumably better direction. tioned the web meetings, group opponent method	n research. The aim was to improve international ng already existing studying methods. In practice that were used and have been used before and As an example of these improvements can be men-
ple involved to the project, from students to the leasen in the practical work one can say that there h for; the international teamwork got better and com	
The results could be improved more by modifying and by getting more familiar with the meaning of s improvements could be researched for example in stration.	
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	ASEK on kolmen maan yhteinen pilottiprojekti, jonka ja luoda vuorovaikutusta maatalousalan oppilaitos- projekti toteutettiin vuosina 2004-2006.
maatiloilla maaseutualan opiskelijatyönä. Ongeln	a viljelijöiden käytännössä havaitsemia ongelmia nien ratkaisussa on käytetty yhteisöllistä oppimista ja ustuu tasavertaisen ryhmän keskusteluihin ja ongel- na haetaan myös lisää tietoa.
hittyi vasta vaihtojen loppua kohden. Tästä synty sena tutkimuksena. Tavoitteena oli kehittää yhtei massa olevia opiskelumenetelmiä kehittäen. Käy oleviin sekä aiemmin käytettyihin menetelmiin ja	isenä vuonna puutteita verkkoyhteistyössä. Se ke- i idea opinnäytetyöhön, joka toteutettiin toiminnalli- styötä internetin välityksellä verkkotyökaluja ja ole- tännössä tämä toteutettiin perehtymällä käytössä soveltamalla niitä oletettuun parempaan suuntaan. n muun muassa verkkokokoukset, ryhmätuutoroin- variaatiot.
	skentelyalustaa käyttäjäystävällisempään muotoon utukseen intensiivisessä projektityössä. Nämä voi- ali- ja terveysalan opinnäytetöinä
Avainsanat:	
Kansainvälinen ryhmätyö, ongelmalähtöinen ryhmätyöalustat	oppiminen, yhteisöllinen oppiminen, virtuaaliset
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#### 1 INTRODUCTION

NASEK is an international Leonardo pilot project. The name "NASEK" comes from the words "Network for the Agricultural Section to Exchange Knowledge". In the project the students are solving agricultural problems with a problem based learning method. NASEK has started with six partners from three countries. There are four schools: from the Netherlands there is Groenhorst College from Barneveld, from Austria HBLA Ursprung from Elixhausen and from Finland Ylä-Savo Vocational Institute and Savonia University of Applied Sciences, from Iisalmi. Besides the schools there are Land en Tuinbouw Organisa (LTO Nederland) and Aequer.

The first round of NASEK started in spring 2005. Then there was also a thesis made by Emmi Juntunen and Ulla Vuorela (PICTURE 1). Their topic was to introduce ways of project planning. They were also helping the Finnish group to organize their exchange to Austria during the project. Our final project continues their work; not the same subject but the action research to another direction.

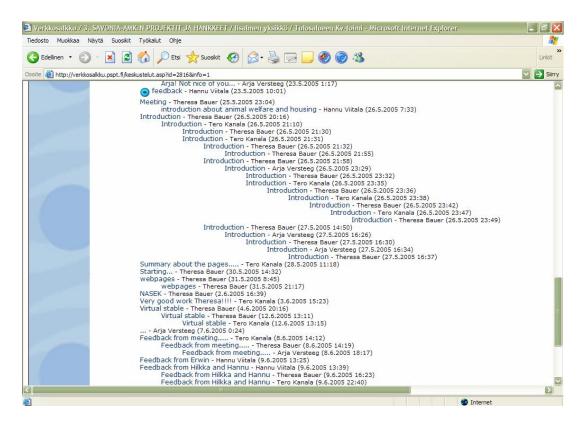


PICTURE 1. Emmi Juntunen and Ulla Vuorela (Luhtala 2005)

In 2005 there were problems with keeping contacts to other partners and with using the web tool. As a web tool we used "Verkkosalkku" (vs.savonia-amk.fi) which we have al-

ready used in Savonia for several years. We worked the way that one country visited to another country and the third one worked via internet.

It was easy to realize from the feedback of the first round that we could not use all the possibilities that the web tool has to offer and the communication could have been better. In discussions in groups we found out that our partners did not know all the options as well as we expected. For that reason it was uncomfortable for them to use Verkkosalkku. The project was almost over for the first round when the project's "webmasters" work in Verkkosalkku reached the way it could have been with all those discussions during the student work (PICTURE 2).

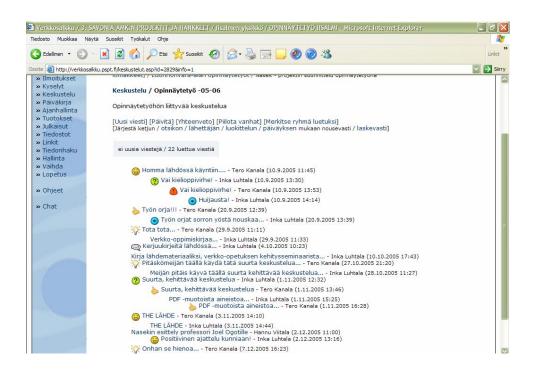


PICTURE 2. Verkkosalkku, NASEK environment, discussion forum. (Verkkosalkku, Savonia.) As a material for our thesis we have used also the Savonia's eLearning platform Verkkosalkku's material from NASEK environment. User rights and a password are needed to access this platform.

In the second round when there might have been even six countries involved knowledge of net working became more important. Then each "old" partner would have been working with a new partner and working face to face would have been impossible. In any case the partners had to make the web pages together and we all had to improve our cooperation. For all the students in the project we had to create international connections and to help to work in international groups.

We believed that the project would be a success if everybody could use the same web tool. Our goal was to help to select the Finnish student group of Savonia from students who were starting in Savonia on autumn semester 2005 so everybody would have started from the same line with the web tool. We use Verkkosalkku as our web tool. It is a good tool for this kind of work because everything needed is there; for example discussion forums, files where to add text and pictures and it can be used also in English.

Our schedule with this thesis was not very busy because we started as third year students in Savonia University of Applied Sciences and still had one year of our studies left. Tero Kanala studied in the Netherlands for three months in autumn 2005 and he started to write the theory part there while Inka Luhtala stayed in Finland and helped in the student selection and tutoring the selected Finnish group. We helped each other's work via Verkkosalkku (PICTURE 3). Most of the theory part of this thesis was ready before the student exchanges started and the reports were written during the project while getting the results. The thesis will be presented in autumn 2006.



PICTURE 3. Verkkosalkku, NASEK opinnäytetyönä –environment, discussion forum. (Verkkosalkku, Savonia.)

We were involved in NASEK project as students in 2005 and besides that we have done some other international studies. That is why we were interested to do this thesis and we could affect on the topic quite a lot. We could use our own experiences during this work. This is not a traditional topic for agricultural students' thesis but our studies also contain project studies and internationalisation. A Bachelor of Agriculture can work as a trainer or project worker in the future and this project gives good experience for that kind of work. Nowadays the work of a Bachelor of Agriculture includes more virtual teamwork.

Bigger goals for this work are mainly to improve working in NASEK project in the future and to give good advice for other international projects. Practically speaking we believed that we could be useful in this project as previous members of the project and also as familiar Verkkosalkku users. We could teach new project members how to use Verkkosalkku and to create web sites. We hoped that we would manage to encourage the students to achieve and keep up with international connections. We also tried to be a link between the students and the teachers to improve their communication.

#### 2 BACKGROUND

#### 2.1 NASEK-project

NASEK is an international project for agricultural students in Europe. NASEK comes from the words "Network for the Agricultural Sector to Exchange Knowledge". The project coordinator Mr. Harm Holleman said in the project contract that the project is made to develop international cooperation and to create communication between the agricultural schools. One goal for this project is to create a permanent and working international study network. Another goal is to create cooperation and communication between students, teachers and farmers. In practice this means that one of the results of this project is student-made websites that can be used by farmers, students, schools and agricultural organisations. The outcomes of the students' research work during the project work are presented there and there are also descriptions of the working methods and advice for future in this and other similar projects. (Holleman 2003.)

NASEK has been started with four partner schools from three countries: Groenhorst College from Barneveld, the Netherlands, HBLA Ursprung from Elixhausen, Austria and Ylä-Savo Vocational Institute and Savonia University of Applied Sciences from Iisalmi, Finland. In NASEK project there are a couple of supporting organisations from the Netherlands: work placement organisation Aequor and advising organisation Land en Tuinbouw Organisa (LTO Nederland) (PICTURE 4). (Holleman 2003.)



#### PICTURE 4. The NASEK partners. (NASEK -outcomes.)

The project started in spring 2004. NASEK-project is financed by Leonardo da Vinci II foundation and controlled by Leonardo da Vinci in the Netherlands. One share has also been paid by each partner school. The higher goal for NASEK project is to develop problem based learning in an international background. (Holleman 2003.)

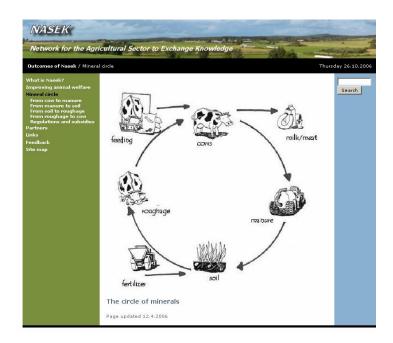
#### Knowledge monitor

In the first part of this project the partners collected a knowledge monitor. It is the result of a survey for the local farmers in each country. It has been used to find out the problems that the students need to solve. The partners got help fro LTO with defining the problem. The subject should always be interesting and topical. In spring 2005 the subject was "Improving animal welfare and health in housing on a dairy farm" (PICTURE 5). This subject is always topical when farmers are making new stables or improvements to their old ones. (About NASEK.)



PICTURE 5. Improving animal welfare, the Virtual Stable (NASEK -outcomes)

In year 2006 the topic of the project was "Mineral circulation on dairy farms" (PIC-TURE 6). This is a very hot topic in the Netherlands. The laws around fertilizes are changing there and new solutions are needed. (APPENDIX 1.)



PICTURE 6. the Mineral circle (NASEK -outcomes.)

#### Arrangements

After the knowledge monitor was ready the student work started in spring 2005. Three countries we involved then. The project was arranged the way that each partner was a host-, a guest- and a web partner on their own turn. The host partner was dealing with

the excursions to farms and taking care of the guest partner who was travelling to the host partner. The web partner was in contact via the internet. Usually they were searching for statistic and theoretical information. They were also analysing the host- and quest partners' work and giving them some feedback. This was done three times so every partner could be a host, a quest and a web partner. (About NASEK.)

This year we were hoping that every "old" partner could find a new partner for themselves. Then there would have been only hosts and guests. There were problems with finding new partners and in the end the only new partner was Norway. So the exchanges were done in pairs and the Norwegians and the Austrians were one pair while the Dutch and the Finnish were the other one. The first two did not meet the last two in real life but still they worked as teams. It meant more work through the internet and made the communication more challenging. (APPENDIX 1.)

#### 2.1.1 Problem based learning

In this project the students are working with a Problem Based Learning method (PBL). They receive one part of the problem which has been selected from knowledge monitor. First they need to define the problem and then try to solve it. There is a guide for that type of learning. Working with the method should be going step by step. Steps are defined quite specifically but in practical work it seems to be a little bit different. Every group had their own ways to solve problems and they skipped some steps. (NASEK education system.)

Important in this method is to sometimes stop to think where we are. That was missing last year. Some group evaluations might also lead to better solutions. Feedback from members of the other groups might give some new perspectives. More about PBL in chapter 3.1.2 Problem based learning.

#### 2.1.2 Working in the internet and outcomes of the project

In this project Verkkosalkku is used for communication via the internet. It is used as a eLearning platform in Savonia. Verkkosalkku is used in NASEK project because it can be used also in English and it is very practical for this type of working. More about Verkkosalkku later in this thesis (Chapter 3.2.1 Verkkosalkku).

The outcomes of this project are published in the internet. There are web sites called <u>www.nasekoutcomes.net</u> where the outcomes of the previous round already exist. There is also more information about making those pages later in this report (Chapter 3.2.3 Web sites). All information on those pages is made as a result of this project work and it is all made by the students. (Holleman 2003.)

NASEK outcomes are also a part of larger NASEK pages called the Virtual Headquarter. That is the main page of NASEK (<u>www.nasek.net</u>) (PICTURE 7). The headquarter is divided into four parts: NASEK Network, Contact International Farmer and Student, Education System and NASEK Web page. (About NASEK.)



PICTURE 7. NASEK Virtual Headquarter. (NASEK -virtual headquarter.)

In the future Virtual head quarter there will be a place where students, teachers, schools and companies can communicate. It should be a place where students can for example make connections to international work placements. (About NASEK.)

#### **3 VIRTUAL TEAMWORK**

Virtual teamwork has got more common today. It is a very common way to work at home and also called eWork. Teamwork is also commonly used in schools as a learning method (PICTURE 8). One type of teamwork is collaborative (also called as cooperative learning). In that type of teamwork the group is collected from people whose knowledge is in the same level in that subject. There is no teacher in cooperative learning, but the group members share their knowledge, rebuild it and that way they gain new information for each others. (Häkkinen & Arvaja 1999. p.2.)



PICTURE 8. Cooperation in NASEK 2006, students and a tutor. (Manninen 2006)

3.1 Variations of teamwork methods

#### 3.1.1 Cooperative learning method

The idea of cooperative learning relies on discussion between equal persons. It is used in groups where the members do not only share the same level of information but they look at it from different perspectives. The idea is to effect on the way how persons understand the issue. Often those two things cause knowledge conflicts and explanation is needed. (Häkkinen & Arvaja 1999, p.4.) Before it is possible to form new kind of information the existing opinions need to be unloaded and built again. During that process persons are usually adding new information to the old one and during the discussions and explanations the others' opinions are added. The rebuilt explanations are then totally new and usually on higher level than the previous information. This is a chain reaction which affects on the other group members' opinions and knowledge. Their own information is processed into a need to change their opinion and that way to gain new information. (Häkkinen & Arvaja 1999, p.4.)

Discussions are also one part of problem based learning which is started with conversations and brainstorming. There information is unbuilt and after that it is gathered in a logical order. That happens also in cooperative learning. (Häkkinen & Arvaja 1999, p.4.)

#### 3.1.2 Problem Based Learning

Problem Based Learning is a way of learning by using the idea of the cooperative learning method. In PBL the group builds new information on the facts they already know in the group. PBL method is based on seven steps which are common in learning process for humans. PBL starts with describing the scenario that the students need to work on. This is usually made by a teacher or a tutor. Then the students start to work according to the seven steps form.

- Clarifying the concept. During this step the students need to make clear what the topic is about. Some meanings of strange words and concepts need to be clarified. Students form their own picture about the scenario and they also form their own opinions.
- 2. **Defining the problem**. In this stage the students need to start thinking about the problems in this scenario. This period should not be too long and the problems should not become too complicated in the beginning. This also shows the level of knowledge that the group has.
- 3. Analysing the problem/brainstorming. In this period the students collect together the things that are included in the scenarios. Usually it is a list of words and small sentences which are called concretes. In this stage every little thing

students can think is useful. This is about what the students know and for a short period there will be only their thoughts. At this moment it is not necessary to make new information. In collaborative thinking this is the first step for sharing the information.

- 4. **Problem analysis/systematic classification**. This is the second step of cooperative learning. In this period the students need to collect together the information that is defined in the second step. When the students are analysing things they need to put together contexts and to create the ways to search for new information and make questions to solve. In this period it is also useful to make questions if someone doesn't understand something. The result of this step is usually a mind map; that is often the easiest way to put all thoughts together.
- 5. Formulating the learning objectives. In this step the students need to dignify what they already know and what they need to search for. They need to make questions or topics that they need to work on. Sometimes this is hard and sometimes it is useful for an outsider/tutor to help them. He/she shouldn't make the questions but to help the students in finding those. The questions and the topics should be made clear and all the terms should be understandable for everyone in the group.
- 6. **Self study**. During this time the students work by them selves or with the group. The best way is to find their own sources but tutors can give them tips, too. It is also important that the students can evaluate the reliability of their sources.
- 7. **Reporting**. Reporting might be a presentation or a report. The most important thing is that the group has found solutions for questions that they have made for themselves. There has to be a connection to the scenario that they have made. It is important that there is also an evaluation of the group work. Reporting can be the final product or just an assessment for the second round to go deeper in the subject.

(Huusko, Jokinen & Sarajärvi 2001.)

#### Roles in Problem Based Learning

Meetings are also important in PBL. Meetings are not exactly meetings; they are more like teaching sessions which are called tutorials. Tutorials are collected together when PBL starts or there are some problems during the project. There are some important roles in the tutorials.

- 1. The **chairman** collects the tutorial together. His/her main role is to give permissions to speak. The chairman also needs to keep control and give limits to the conversation. His/her role is to activate the conversation and take care that everybody can say what they want to and the others are listening. This year the tutors replaced chairmen in the net meetings. That was a practical solution since groups' chairmen were involved to be active members in the net meetings, then they could focus more to the context.
- 2. The **secretary** writes down all the ideas from the brainstorm. He/she has an important role to collect everything together. He/she has to be active to solve problems and creative to make contents. Secretary has also an important role in updating the task what the group has done in each country and informing the web partner.
- 3. Two types of observers. The **tutor** is usually a teacher or a senior student. The tutor's job is to help the group to solve the problems during the project. His/her duty is not to give exact answers but to give tools or thoughts to clear the group's ideas to solve the problem. The tutor is not taking part in the process; his/hers job is just to observe the students' work as an outsider.
- 4. Usually an **observer** in the group is necessary. The observer watches over the quality of the work and gives critical feedback if something is not going well. The observer is some kind of an inside opponent. In PBL in NASEK the main observer is the web partner who always needs to be aware of what the rest group is doing.

There are also several other important roles in teamwork but these are the most important roles in PBL in groups. (Huusko, Jokinen & Sarajärvi 2001.)

#### Variations of Problem Based Learning

There are some variations in using of PBL. What is common to these variations is that the seven steps of PBL are used in them. One type is to use circles of the seven steps and other type is using it as a work shop. The PBL variations give structure for learning and encourage students to go more into their topic. (Poikela 2003.)

Basic idea in **circulated PBL** is to go deeper into the topic. The result of the first round is introductions for the second round (FIGURE 1). In this type of working it is important that the students formulate limits for their learning objectives at the topic the way that deeper thoughts will be left to the next round. The information from previous rounds might be useful to solve problems in the following round. A tutor is very important in this. A tutor can give the group some information about using and the possibilities of this method. (Poikela 2003.)

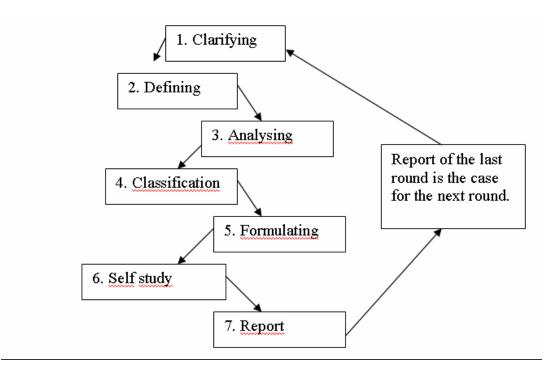


FIGURE 1. Structure for Circulated PBL (Poikela 2003.)

While working with circulated PBL there is a possibility to look at one's own work and see if there are mistakes on it. Then there are also many points to insure that one has found the answers to the questions that the group has made for themselves to solve. If there still are some unsolved matters left they can be handled in the next round.

Working with **PBL workshops** means that you work with your scenario in different compositions of the group. It can be simple work with PBL's seven steps or cyclic working. In the first method the problem is defined and analysed in a big group and then worked out with smaller groups (FIGURE 2). After this a report is made together. (Poikela 2003)

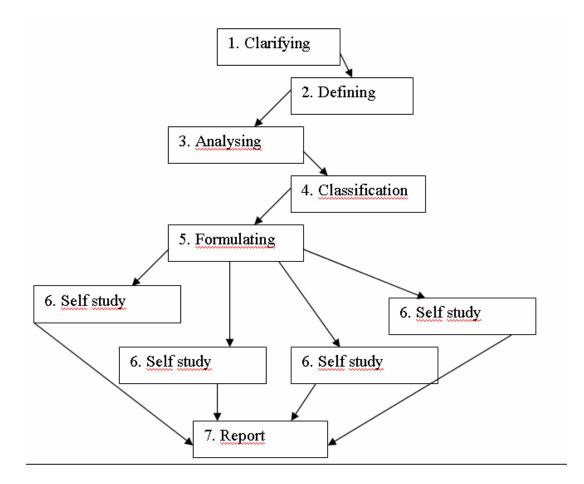


FIGURE 2. Structure for PBL in workshops. (Poikela 2003.)

The second type is working in circles. First round might be defining the problems/scenarios for smaller groups. In that case the first round would be made in a big group and then the topic would be defined to smaller and the smaller groups could start to work on the defined topics. In the end the big group can get together again and see if the smaller groups have answered the questions that were defined in the first round. (Poikela 2003.)

#### 3.1.3 Opponent support in cooperative learning

In eLearning an opponent is often used to improve the quality of the work in internet. A teacher is usually doing this work in conventional teaching but for growing students' own knowledge it is important to get to know each others work and to learn to evaluate one's own work. (Herno, Peltonene, Sirkka & Väänänen)

When using an opponent the points of view are usually very different. It is not the most important thing to evaluate if the work is good or not; more important is to find out the different points of view and find the answers which include every perspective and does their answer work if we look at this in that angle. An opponent can also make questions if there is something which is not clear or make a note if something is missing. The most important thing is to raise the students' interests and to support the group to make their work with high quality. The opponent's job is also to start the discussion about the topic. (Herno, Peltonene, Sirkka & Väänänen; Verkkopalvelun sisällöntuotanto.)

The opponents should be able to read or see the work of the other groups. In pages "Verkkosalkun sisällöntuotanto" one can find a list about what an opponent should focus on while evaluating the other groups' work. Most important is to see what is inside the text and to open up the most interesting parts. It is not the opponents' duty to say if it is good or there is something to improve but to go through the whole text and to give some comments about it.

- § The structure of the work
  - Is the work following the topic and is the main information about it there?
  - Is it logical and in balance?
  - Are the subtitles proper?
- § The content of the work
  - Are the perspectives from the content about the topic?
  - o Is there any other points of view?
  - o Is the work clear?
  - Have they picked up the most important things and have they explained those well enough?
  - o Is everything based on facts?

- Could there be any other explanations?
- Is something relevant missing?
- Has the group justified their conclusions and their understandings?
- § How have the material and sources been handled?
  - What good have they found out?
  - Have they used reasonable sources?
  - Have they passed some topics?
  - Is some important material missing?
  - How have they handled the examples?
  - Have they selected good examples?
  - Have they understood the examples in a right way?

(Verkkopalvelun sisällöntuotanto.)

After the group has got their feedback from the opponent group it is most important to analyse the feedback and to think about how to respond to it and how to improve the quality of the work. It is the responsibility of the opponent group to make their feedback supporting but critical and the working group has to be open for the feedback to be able to improve their work. (Verkkopalvelun sisällöntuotanto.)

#### 3.1.4 International teamwork

International teamwork is offering many challenges; for example you are dealing with different kinds of personalities from different background and languages. People have differing ways to deal with teamwork and also the ways to communicate may differ; some use more verbal communication when others do it more nonverbally. Also the nation's historical background affects the behaviour of individuals and groups. People's sense of power distances affects on the ways of communication. (Khan-Panni & Swallow 2003, p.31 to 33.)

Nationalities have a role in communication and ways to work; they give meanings to words and also to behaviors. "Yes" and "no" may have a different meaning in some places; somewhere a yes is a yes and a no is a no while in somewhere else they both might mean "maybe". Nonverbal acts are a remarkable part of common communication. (Khan-Panni & Swallow 2003, p. 67 to 68.)

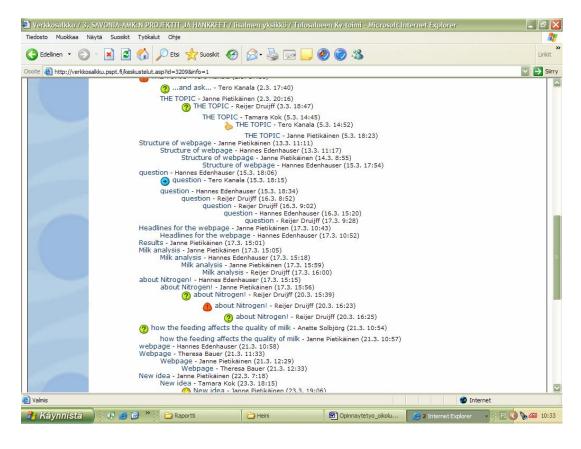
In this project there were four countries involved. The cultural differences between these countries are not remarkable; they are all western countries and communication is similar in every one of them. The challenge in communication via the internet is the missing visual and auditory communication. All that is left is words which cover only seven percent of face to face communication; tonality and non verbal communication are left out. (Kralicek 2006.)

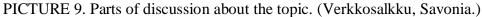
Teamwork in the internet should be really neutral, straight and polite. Since it is impossible to see and feel your group members' emotions it is hard to back off or make those other necessary movements that are normal in face to face conversation. The best way to cooperate is to get to know your group members and act according to that.

#### 3.1.5 Cooperative learning in internet

Cooperative learning is usually based on an intuitive face to face discussion but there have been many researches about this type of learning also in the internet. In that case it should be made sure that the discussions are all the time synchronised; however it might be useful to have time for processing the participants' information. It is impossible to use non verbal signals like hands or tonality to help you while working via the internet and so it is necessary to put everything you think and mean on words. It has been interesting in the discussions in the internet to see the metaphors that the students use to make their point of view clear and on the other hand to see how the students read between the lines and understand each other. (Häkkinen & Arvaja 1999, p.7.)

Having a stimulating environment for the discussions is also important while working in the internet and so are the tools that support the discussions, for example being able to send pictures etc. Sometimes it is hard to convince the other part or to understand one another without seeing and knowing each other. In any case the discussions should be constructive so that everyone can use it for rebuilding their own information (PICTURE 9). (Häkkinen & Arvaja 1999. p.8.)





#### 3.1.6 Problem Based Learning in the internet

Also for PBL as one type of cooperative learning the working environment should be stimulating and it should be possible to use all the seven steps during the project. In one Finnish project they have successfully very strictly guided the process of PBL. (Porti-mojärvi & Saarinen 2001.)

In that project they used a programme called WebCT. The used environment was built the way that in the programme there were links to the most usable places where the steps would be easiest to do. It might be useful to control that the students can find the tools for every step of the process work while using this method. This way they don't need to skip any steps during their project work and the results might have higher quality. (Portimojärvi & Saarinen 2001.)

#### 3.2 Virtual teamwork programmes

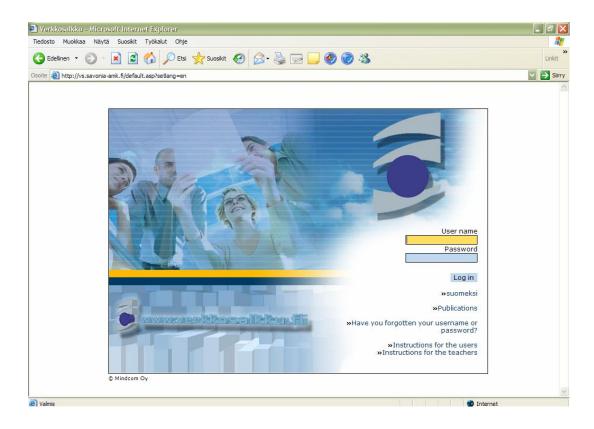
Tools for communication, such as email, chats and others are useful while working as a team. There are also programmes which are made for this kind of working. The impressions "web tools" or "learning/working platforms" are often used when talking about them. Usually schools and companies have created their own kind of web tools for their need in cooperation with delivering companies. These programmes usually include the next four elements.

- § A place where you can make, update and deliver files
- § Tools for teamwork and communication
- § Tools for analysing the information
- § Tools for management

#### (Koskinen 2002, p.64.)

In the internet one can find several these kinds of programmes and it is possible to select the best kind of programme for your own needs. One very common programme for eLearning is Blackboard. There are also programmes that can be rented for a few hours at work for a short while in an intensive project or just to have a virtual meeting.

In NASEK project we are using Verkkosalkku as a virtual teamwork programme (PIC-TURE 10). Verkkosalkku is a Finnish made web tool that is used for example in Savonia. Savonia has also taken part to the developing of Verkkosalkku. In this thesis Verkkosalkku is used as an example to tell more about what you can do with a virtual teamwork programme or a web tool.



PICTURE 10. Verkkosalkku front page. (Verkkosalkku, Savonia)

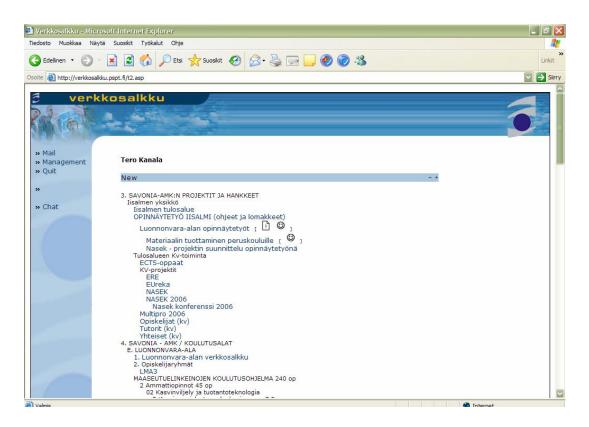
### 3.2.1 Verkkosalkku

Verkkosalkku is made by a company called Mindcom Ltd, a company which creates contents for web pages and tools for companies to develop their eWork. They have developed Verkkosalkku in a two step project for several years and Savonia has been a very active partner in the process. Verkkosalkku is mainly created for eLearning but they have tried to make it flexible to use and easy to work with in different kinds of work in the internet. These are the six qualities that Verkkosalkku provides.

- § Creating of teaching material
- § Teamwork
- § Different ways to communicate
- § A place to create and update a personal curriculum
- § Updating a learning diary
- § Creating and updating a portfolio

(Tuotteet. Verkkosalkku)

Verkkosalkku is built up by modules (PICTURE 11). Using these modules and giving the users different kinds of rights to access the modules the webmasters can create environments for different kinds of work. In that way verkkosalkku is very flexible. It can also be used with many languages; at the moment the possible languages are Finnish, English, French, Swedish and Estonian. (Tuotteet. Verkkosalkku)



PICTURE 11. Verkkosalkku, content. (Verkkosalkku, Savonia)

As mentioned before, Verkkosalkku is mainly created for eLearning but it is flexible and easily used as a working platform, too. Primarily Verkkosalkku offers this kind of possibilities:

- § Studying independently or leaded
- § Working in learning groups
- § Describing your own learning
- § Updating a learning diary
- § Creating and updating a personal curriculum
- § Creating and updating a portfolio
- § Creating and updating texts
- § Taking part to tests

- § Creating surveys and analysing them
- § Defining and controlling information
- § Creating learning material to a material bank
- § Developing your teaching by using different kinds of pedagogical methods

#### (Tuotteet, Verkkosalkku.)

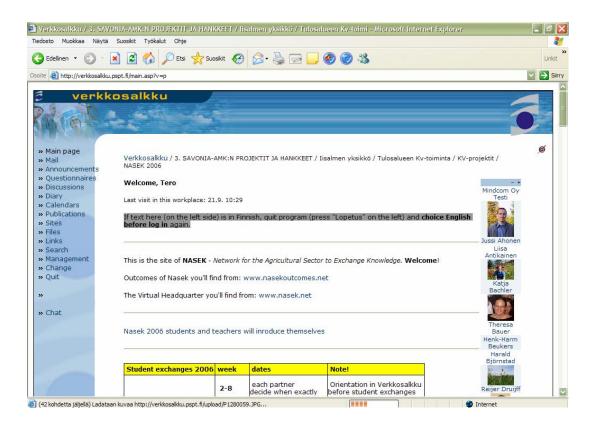
Verkkosalkku may be connected with your own email, too. If you have set your email address to your personal information your will get a note to your email when there is something new in Verkkosalkku for you; the email includes also a link to Verkkosalkku. (Tuotteet, Verkkosalkku.)

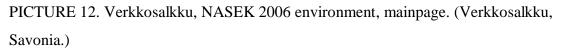
#### 3.2.2 Tools to work with: presented by using Verkkosalkku as an example

Mainly it is possible to operate in web tools with common programmes like Microsoft Word and Exel. You can use them as files, keep them updated and send to others. It is also possible to send them to someone who is not using this programme. Mainly all the web tools have common tools to work with and so has Verkkosalkku. (Tuotteet, Verkkosalkku.)

After logging in one can see all the learning environments that exist in one's learning platform. For example there might be an environment for every module or project you are working in. There is also a mail box where you can read mail from every environment you have in the platform. (Verkkosalkku demo.)

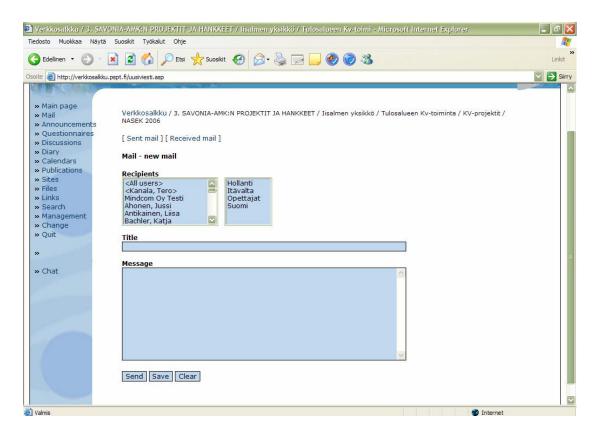
In the **main page** it is also possible to see other tools that can be worked with in the project (PICTURE 12). In Verkkosalkku the titles of the tools are situated on the left side of the page; there are for example mail, announcements, discussions, diary, calendars, publications, sites, files, links, search, management and chat. These tools can be used by clicking the title and it is also easy to move from place to another by just clicking the titles. (Verkkosalkku demo.)





In the main page there are some descriptions of the project or that specific module. There might also be some usable links. In Verkkosalkku the other users and pictures can be seen on the right side of the page. The personal information of the other users are shown by clicking their names. A green spot beside the name shows that the person is online at the moment and if the spot is yellow he/she has not updated the page for some minutes or has forgotten to log out. The main page of the working platform also shows if there is something new in the user environments. (Verkkosalkku demo.)

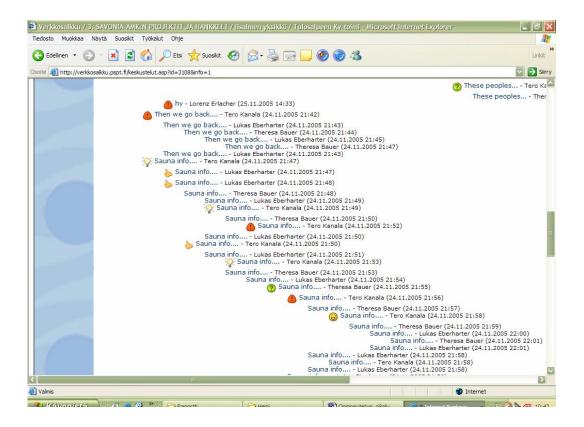
The **Mail** is a very easy way to communicate with the project group (PICTURE 13). Addresses are not needed; one can just select names from a user list and then send the message. It is also possible to check if everyone reads the sent messages. (Verkkosalkku demo.)



PICTURE 13. Verkkosalkku, NASEK 2006 – environment, mail. (Verkkosalkku, Savonia.)

The tool called the **Announcements** can be used as note board; there one can send a note if something is going to happen. The duration of the note can also be set meaning the date when it is going to appear and disappear. The settings of the announcements can be set the way that only a teacher or a project leader has the rights to make those. (Verkkosalkku demo.)

**Discussions** is a good place for example to have meetings in (PICTURE 14). One can join to different discussion groups depending on the working environment and on the subject in discussion. Every word that is said is saved in the discussion forum. Summaries can be printed out as a memo after meetings. (Verkkosalkku demo.)



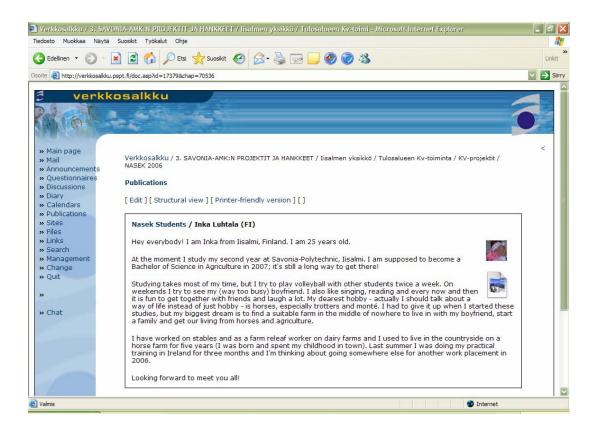
PICTURE 14. Verkkosalkku, NASEK 2006 – environment, discussion forum. (Verkkosalkku, Savonia.)

In the discussions it is easy to follow the conversation; it is going like a chain and you can make changes into the chain the way you want, for example according to the subject or time etc. If the conversation is not going on at the moment you can just hide the messages that you have already read before and then you will see only the new messages and the chain that they are included. (Verkkosalkku demo.)

You can also use **instant messages** to help you with the discussion, for example if you have a comment for only one user. This happens by first going to the main page and selecting the user from the right side of the page by clicking. While seeing his/her personal information there is also a place to write an instant message. This is going only to the person you have sent it to and the receiver sees it the next time he/she updates the page; a red line in the right side of the page tells him/her that there is an instant message. The message is shown on top of the page. (Verkkosalkku demo.)

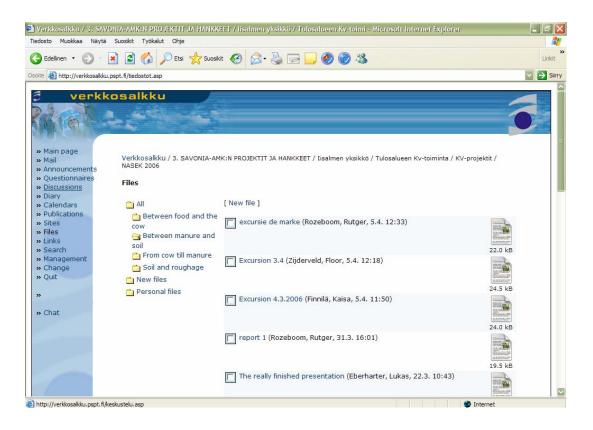
Personal **diary** is specially made to use as your learning diary. It is also a good place to plan your own work or just to unload your pressure. It is always private; no one else has the access to see it. (Verkkosalkku demo.)

**Publications** is the real working place in Verkkosalkku and the other tools are just supporting this part. Publications is a place where you can add files to, analyse your own work and have discussions in (PICTURE 15). For publications you can have different kind of accesses. As an owner you can give the access to other persons, change the content and also work there, make attachments and take a part to the discussions. As an editor you have an access to work in publications and make attachments. As a reader it is allowed only to read pages and attachments and to give feedback of them. (Verkkosalkku demo.)



PICTURE 15. Verkkosalkku, NASEK –environment, publications. (Verkkosalkku, Savonia.)

**Files** is a place to share general information (PICTURE 16). There you can select who you want to send the file to. Only problem is that you can not send whole folders to Verkkosalkku or it is more complicated; you need to pack the folder first and then send it and hope that the receiver has the same programme for unpacking your folder. (Verkkosalkku demo.)



PICTURE 16. Verkkosalkku, NASEK 2006 – environment, files. (Verkkosalkku, Savonia.)

In **management** you can add your own information and your picture. You can also make nuclear groups; for example in a study project like NASEK all the users may have access to that environment, but you can select your own group members or all the tutors as one group. This saves your time; you do not have to select all the names of the receivers from the list every time when you send mail or files. (Verkkosalkku demo.)

#### 3.2.3 Web sites

The outcomes of NASEK-project are on the web pages and they are available in <u>www.nasekoutcomes.net</u> (PICTURE 17). All of them are made by the students. Making those pages has to be easy because the students are busy during the project work. A programme from Avence Digital Ltd company was used in NASEK project for making the pages. It is based on a DfA method which means that they are Designed for All. It is a programme which is working in the internet on your own pages. There is a place to log in and then mainly it is just copying and pasting from the text that you have written earlier. (Design for All (DfA).)



PICTURE 17. DfA -web page programme. (NASEK -outcomes)

The main user can programme the page settings like type, colour and size of the texts etc forehand. Places for pictures are set ready. Even though you cannot create so much of the page you can still make very clear pages and it is easy. There is also a handbook of how to work in the pages in the appendixes. (APPENDIX 2). (Design for All (DfA).)

3.3 Cooperative and Problem Based Learning in NASEK

The main idea in NASEK was that agricultural problems were solved by PBL method by using farmers as a source. PBL had a clear role during the project. You could also see cooperative learning in different parts of the project. There was a very big role for cooperative learning in PBL. Students needed to define their problem by discussing (PICTURE 18). Conclusions were always made after some kind discussions. The biggest advance of this kind of working was that there will be farmers and students involved; farmers were representing the very important practical point of view and the students had the latest information from their studies and so they should have had a little bit scientific aspect, too (PICTURE 19). Using two basic ideas and improving them was an easy way to get out the best of both of them. Systematic developing of those might also have been the best way to solve the problems that were in the project last year.



PICTURE 18 & 19. Cooperative working in NASEK 2006. (Luhtala 2006.)

In a planning meeting in Barneveld, in November 2005, the planning group confirmed the using of this method on next year's round to improve the working in NASEK. (AP-PENDIX 3) With circulation the planning group hoped that the groups would limit their own topics and create more cross action in the group and conversation among different nationalities. The planning group hoped that the new topic would have been easier to start with PBL workshops and that it would have created more discussions between the groups. (APPENDIX 3.)

It was easier to control a big group as there was in year 2006 by making a clear timetable. This schedule was quite open but there were accurate times when certain parts of the work had to be done; there were also times for having net meetings (PICTURE 20). Since all the working groups were international and in every group there was two or three students from each country they had to keep contact and the result of the project had to be made together. (APPENDIX 3.)

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	A	В	С	D	Е	F	G	H	1	J	K		М
1	Days	1.	2.	3.		4.	5.	6.	7.	8.		9.	10.
2	-		Weeks	2 to 8. Start di	sc	ussion about			lefine own prol	blems to work	wi	th.	
3	First exhange												
4		Discussion	Excursions	Make evaluation		Short tutorial???	Excursions	Finish report	Meeting	Excursions		Meeting	Presentatoin
5		about the topic		for opponentgroup		Excursions		for opponents	Tutorial				
6							Lunch		2		0		
7		Excursions	Finish report	Analyse the		Excursions	Excursions	Make evaluation	Excursions	Finish report		Finnish material	Tutorial
8			for opponents	feedback				for opponentgroup		for opponents		for presentation	
9				Week betve	en	exhanges. E	valuation from	other groups	and feedback	for them	-		16
10							Second ex	hange	-x			25-	
11		Evaluation from	Excursions	Make evaluation		Short tutorial???	Excursions	Finish report	Meeting	Material for sites		Meeting	Presentatoin
12		first round		for opponentgroup		Excursions		for opponents	Tutorial				
13	1						Lunch	1					
14		Excursions	Finish report	Analyse the		Excursions	Excursions	Make evaluation	Start make	Material for sites		Finnish material	Evaluation
15			for opponents	feedback				for opponentgroup	material for sites			for presentation	<u>k</u>
16				· · · · · · · · · · · · · · · · · · ·			Webpages						
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PICTURE 20. A schedule sample for NASEK 2006.

The time table also included times when the groups could analyse any coming information. By using opponents it was a light effort to get the groups interested in each other's work, analysing and making questions and creating interests to see the results and to keep more contact via Verkkosalkku. That way the students were using more Verkkosalkku as a communication tool which was a problem last year (2005). (APPENDIX 3.)

In 2006 the topic of the project was **"How to improve the circle of minerals on a dairy farm".** This issue was divided into four pieces with a circle that was going to be the introduction for the students in NASEK-project that year. Each international student group chose their own "problem" from these four topics. (APPENDIX 3.)

For keeping up the discussions the groups needed to evaluate each other's work. Using opponents is also a small effort to keep up with the teamwork. In the timetable there were several times to read up the texts of the other groups and to give some feedback. There needs to be time for making the results to be evaluated and to make all benefits from this. There also has to be time to analyse the feedback in the schedule. The tutors need to take care that the groups consider the improvements that the opponent group has suggested. (APPENDIX 3.)

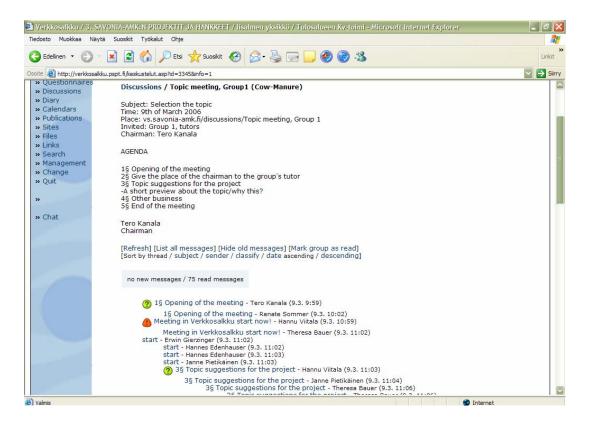
#### 3.3.1 Verkkosalkku in NASEK

In NASEK Verkkosalkku was the tool where the students could share their information. It was the place to have meetings in and to discuss about the topic and it was a place where they gave feedback and responded to it. Defining the problem was happening in the discussions in Verkkosalkku, too. (APPENDIX 3.)

This year Verkkosalkku was the place to keep contact and to store the information that the groups had. Each group had their own file in Verkkosalkku files. The meetings were easiest to have in the **discussions** (PICTURE 21). First the chairman needed to make an agenda for the meeting. The role of the chairman is very important. He/she needs to introduce each topic and ask for the others to give comments and questions (PICTURE 22). The chairman also closes the meeting and prints out the memo. It is possible to print out the memo to Microsoft Word and then save it in the publications. This meeting system has been created and tested in practice during this project and an example of planning a meeting is attached to this report. (APPENDIX 4) It is also possible to use the **chat** forum to support the meeting. There the students can explain more and discuss things which are not so tightly relevant in the meeting.

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Announcements	NASEK 2006	
Ouestionnaires		
Discussions	Discussion groups	
Diary		
Calendars	[Mark all groups as read]	
Publications		
Sites	General General second episodi	
Files	Group 1: Austrian and Norwegian	
Links	Group 1: From cow to manure	
Search	Group 2: Austrian and Norwegian	
Management	Group 2: Between manure and soil Group 3: Austrian and Norwegian	
Change	Group 3: Soil and roughage	
Quit	Group 4: Austrian and Norwegian	
	Group 4: Between feed and the cow	
	Ideensammlung (only for Austrians) Law and rules in the agrarian buisness	
	Planning (Only for Dutch)	
Chat	Requiering i Norsk	
	Topic meeting, Group1 (Cow-Manure)	
	Topic meeting, Group1 (Cow-Manure) part 2 Topic meeting, Group2 (Manure-Soil)	
	Topic meeting, Group2 (Manure-Soil) part 2	
	Topic meeting, Group2 (Kali Roughage)	
	Topic meeting, Group3 (Soil-Roughage) part 2	
	Topic meeting, Group4 (Feed-Cow)	
	Topic meeting, Group4 (Feed-Cow) part 2 Topic meetings, Feedback	
	Web page meetin Group 1	
6	Web page meetin Group 2	
	Web page meetin Group 3	
	Web page meetin Group 4 Web page meetin Group 4 part 2	
	Web page meetin ordup + part 2	

PICTURE 21. Verkkosalkku, NASEK 2006 – environment, discussion forum. (Verkkosalkku, Savonia)



PICTURE 22. Verkkosalkku, NASEK 2006 –environment, discussion forum. (Verkkosalkku, Savonia.)

Other tools are a good support to keep contact and to share the information. Other tools are the tools that the tutors can use to give introductions and to keep contact with the whole group. The **mail** is a very important tool to keep contact inside the project. It was commonly used while planning the project.

## 3.4 Students selection for NASEK

Studying and all working in the NASEK project took a short period of time. This is why the project work was very intensive and the results needed to be found fast. There was not much time for getting to know one another and grouping which are important while developing the group spirit. This requires certain qualities from the group members and there should be several types of personalities in every group (PICTURE 23).

Individual qualities were not the primary issue when selecting the groups; to work well each group needs open minded, outgoing and innovative members who possess some level of basic knowledge of their own profession but in the end the group's cooperation is determining. The students were selected mainly in special interview occasions; Tero Kanala was participating the interview in Austria and Inka Luhtala did the same in Finland. Main qualities for selection were motivation and commitment to the project. These qualities were defined in a NASEK meeting in Finland. (APPENDIX 1.)



PICTURE 23. The Finnish NASEK group from year 2005. (Bauer 2005.)

### 4 METHOD DESCRIPTION: ACTION RESEARCH

We were using an action research method in this thesis. An action research means that the researcher is actively helping the research group to get them reaching goals. The researcher is all the time an active part of the project by teaching, helping and tutoring. He/she is all the time active to solve problems and to make plans for the future. It is also possible to work in a group as an equal member. The best thing still is that the group can find their own solutions and that way the group is progressing. That is also the best result that the researcher might get. (Salmela.)

An action research is always started when an assessment of the situation has been made and problems have been defined. Then the ways to develop the work are needed to find and to arrange things differently and during the project to fit those more in to the situation. After the work the process needs to be evaluated and a new assessment of the situation has to be done. (Salmela.)

That previous description is just about our work; there were some problems with communication and we tried to find new solutions. We were planning to work as tutors in the student groups and also to get the student opinion heard in the tutor group. We were available if there was a problem and we tried to help to solve it.

The action research is commonly described as a spiral. Juntunen and Vuorela described the first round of NASEK as the first round of the spiral. It has been evaluated so our work will be the second round together with the second round of NASEK. In a way we were continuing Juntunen's and Vuorela's work. The second circle might not be similar to the first one but definitely it has started from their spiral. (Juntunen & Vuorela 2005; Salmela.)

This kind of research is suitable for this kind of project. The project is developing all the time and the leaders have to be able to solve problems and to try something new. The researchers have to listen to the group that they are working with and to give the students a chance to be heard. Action research needs a lot of active reporting and evaluation. (Salmela.)

#### 4.1 Situation in the beginning, from our experiences as students

In the first round of NASEK project work in 2005 there were three countries involved; Austria, the Netherlands and Finland. The project work was done in three rounds and in each round one of the countries was the host, one was their guest and the third one was the web partner. For example in the first round the Austrian students travelled to the Netherlands and the Finnish were the web partners.

In that year there was not much responsibility given to the web partner and as the result the web partners were not noticed very well; their meaning and importance was not understood and on the other hand the web partners were not actively involved. The web partners gave the others some feedback and comments but eventually it seemed like the web partners' role of working via the internet was the same as having free time from the project for something else.

Another issue was that many of the tutors did not know how to use Verkkosalkku and so they did not realize its possibilities. Sometimes the face to face working partners seemed to be irritated when the web partner was asking for information of what was going on or to give more work for them. It was not realized that Verkkosalkku could have been used as a part of the process; there was no strict plan of how to use Verkkosalkku in the actual project work and the Finnish idea of using the publications environment in Verkkosalkku was too demanding and would have needed more guidance and time to get used to it.

In the first round (2005) the groups mainly focused on the host group's and guest group's ideas and products. The timetables for farm visits were very intensive and there was not enough time to handle the gained information and to transfer it into computer. The contact between the web partner and the other two groups were kept with telephone meetings and video conferences. The most handled issues during the phone meetings seemed to be the weather and parties; the web partner's existence was still unrealized. In the very end the existence was noticed but the web partner still was not seen as an active group member.

After going through all this and doing some thinking one could see the need for some changes in the arrangements of the practical project work. When this thesis was started

the idea was to try to find the good things in the project work and to use the experiences to make problematic things work better. The first thing that came to mind was to make the web partner more real; the web partner needed to have a real face. So it was decided that someone should visit all the partners and this way there would always be at least one person in the other group that everyone has had a face to face contact with earlier.

The second big issue was to get people more familiar with the working platform. It is easier to start the project work if everyone already knows how to use the platform, in this case Verkkosalkku, and the negative attitudes caused by not knowing how can be avoided. The publications seemed to be a bit too complicated tool for first time users of Verkkosalkku in such an intensive project and so it was better to just to forget about them and use more simple and interesting tools like the discussions, files and chat.

At some level the students got to know each other even before the actual project work started when they were practising to use Verkkosalkku; there were some discussions opened just for that purpose with some questions that everyone was asked to answer to. That way the students started to talk to each other via Verkkosalkku and the practising of using the working platform was just a small, handy side affect.

#### 4.2 Description of the working method

The thesis was started with planning work. As an outcome of it were using the web meetings, the opponent groups and the variations of PBL. The web meetings were tested before the first student exchange with just the tutors meeting (APPENDIX 5). There were eight tutors involved and it was noticed that this amount of people writing at the same time in the same web meeting is too much; there were too many comments appearing while one was answering to some previous issue and in the end this was found rather frustrating than developing. After this it was decided that in the web meetings during the student exchanges there would be only one person from one face to face group writing to the web meetings; this way the group has to discuss about the issue before giving comment to the other partner via the internet and the meeting memo shows that there have been only two persons and the group tutor present.

The opponent groups worked quite like it is described in the chapter 3.1.3 Opponent support in cooperative learning. The used PBL variation was the workshop method which is described in the chapter 3.1.2 Problem Based Learning.

The project work during the student exchanges was observed all the time and possible faults were reacted on as soon as possible. The student exchanges were evaluated after the first and the second round by the tutors and also the students were asked to give feedback about the project. This is how the progress of the process was followed. There is one tutor's written feedback in the appendixes (APPENDIX 6). In the end the tutors had a meeting and evaluated the work of the whole round.

#### 5 RESULTS

In this chapter you find the main results of the action research and of our work during the NASEK -project in 2006. The affects of introducing the new working platform to the students compared to the previous year and the description about the workout of defining the problem and the web meetings are reported here. Also the influences of the tutors, timetables, crisis situations and cultural differences are considered here.

After every exchange everyone was asked to give feedback and so it would have been possible to make necessary changes into the second exchange program or contents if they had been needed. In a project and learning process like this it is also important to know the opinions of each party and to react soon enough if there seem to be negative feelings involved.

#### 5.1 The deeds and affects of introducing the working platform

The start was difficult and our work did not go exactly the way we planned. There were problems with financing and it seemed like the trip to Norway would not have been possible to make; our plan was to travel together to each partner and everything was arranged for that. The promised financing was called off three weeks before the planned travelling date and so everything had to be reorganized. The Finnish coordinator Hannu Viitala managed to find a way to finance the trip to Norway for one of us and that helped us to get the last partner involved with Verkkosalkku. After all this we decided that Tero Kanala travels to the partner countries to train them to use Verkkosalkku and Inka Luhtala stays in Finland to guide "our kindergarten".

Because of the financing problems we had to cancel the planned trips to the Netherlands and Austria, but that was not a real problem because Tero Kanala had already been there and taught them the basic things about Verkkosalkku. He spent three months in the Netherlands in autumn 2005 and met the new students there. During that period he also travelled to Austria and was present in the selection of the new NASEK students. The selection was made by interviews. The most important qualities for the selection were enthusiasm for the project and outgoing personality; in the beginning there were 30 volunteers in Austria, but in the end there were only 11 in the interviews, of which they dropped out two who were not really interested in the project or were too shy. Inka Luhtala was one of the persons who were interviewing the Finnish students; there were nine volunteers and the purpose of the interview was more to get the students interested and involved in the project than to drop anyone out. Of course all the students had to fill the same qualities; to be interested and outgoing.

In Austria Tero Kanala had two days time to work and the first day was used to get familiar with Verkkosalkku and the other day to learn the working methods of NASEK. The teaching methods were quite free and at first Tero showed the basic things about Verkkosalkku. (APPENDIX 7, 8 & 9) After the students felt comfortable enough they started working on their own and testing their skills. The most used tools in Verkkosalkku were chat and instant messages.

In the Netherlands there was about four hours of time and all of it was used to teaching to use Verkkosalkku because the students were already familiar with the PBL method in the learning process. With Verkkosalkku the students did quite the same things as the Austrians.

In Finland the start was quite easy because most of the students were already familiar with Verkkosalkku and so the issues for the Finnish were practising PBL and financing the project; the Finnish students had to finance the travelling without specific funding from the schools and so they had to find a way to collect at least some of the travelling costs (PICTURE 24 & 25). Juntunen's, Vuorela's and Viitala's PBL exercise from year 2005 was used on this round too; it was just a little updated. (APPENDIX 10) The students found PBL quite demanding and at some parts hard to understand.



PICTURE 24 & 25. Päivi Kallionpää and Inka Luhtala trying to get financing the trip to Holland. (Pietikäinen 2005)

As it was said earlier there were problems in finding the funding for the trip to Norway. Finally a limited amount of money was found for making the trip. It meant that only one person could fly to Norway and the decision was that Tero Kanala would go. The program in Norway was pretty similar to the Austrian program and the students' reactions were the same, too; the most used tools were chatroom and instant messages. There were also connections between Austria and Norway already on the first afternoon when the Norwegians got the access to Verkkosalkku.

It seemed that most of the students were active in Verkkosalkku after they had been introduced to this tool and some of them even took it as a part of their daily routines. It was difficult to stimulate all the students to take part in the conversation that was going on in the discussion forum of Verkkosalkku but there were always active users from every partner country. The using of the web tool was most active during the times when each partner had a NASEK meeting in Verkkosalkku and some hours that were written in their schedule.

## 5.1.1 The web meetings

The web meetings happened in Verkkosalkku discussions. The tutors had an active role; there was a meeting for every group and in every meeting a tutor acted as the chairman. The chairman's mission was to introduce the agenda and the technique to the group beforehand and to prepare the meetings (mainly to write the agenda) into Verkkosalkku. The idea was that in every group just one of the physically present members was doing the writing and the written issues were discussed with the group members first. This led to the situation where just two persons besides the chairman were supposed to be writing things in the meeting and the meeting was easy to follow and there was enough time to read everything and respond. The chairman was there to follow the conversation, to open up new topics of the agenda after the group got through with the previous one and to end the discussion or the whole meeting when the time was right. The chairman was also supposed to interfere in the discussion if it seemed to be going out of line or not going anywhere at all. (APPENDIX 11.)

#### Problems in the web meetings

As expected in using new working methods, there were some problems in the web meetings as well. Once again the difficulties of expressing yourself in just written words without a tone of your voice or body language were seen. The differing styles in discussion could cause problems in understanding each other; some of the students seemed to be used to chatting in discussion forums in the internet and the provoking way that may be useful there was not working well in web meeting. Some of the students were also impatient to get answers and the tutor's role as a controlling but not too restricting participant of the meeting was seen to be very important. Those are seen clearly in meetings (APPENDIX 12).

The tutors found their work demanding; it is difficult to just sit and guide by questions. Often it feels easier to just give the answer you like best. It seemed to make the work of the students more difficult if the tutor was interfering too much and too many denies confused them and drove them to separate directions. After an open discussion even the most separated group started to talk about the same things and with a little encouraging they managed to find some solutions.

It seemed that the foreign language was one reason for the problems, too; the groups were often talking about the same issue with very different words. Good examples about this are the issues of "health care" and "preventing the diseases"; the main issue is the same and the students wanted to survey the same thing but had misunderstandings and different kind of cultural points of view (in some countries people talk about preventing diseases and in other countries about general health care which basically mean the same). The role of the tutor here is to notice the misunderstanding, then to clarify the issue for him/herself and finally to guide the group towards understanding.

## 5.1.2 The affects of the tutors

The role of the tutor was found demanding, as mentioned. The creativeness of the students and information needed to be brought up and so the tutor guidance should consist of questions and repeating the students' old information. In the beginning of a process (e.g. a discussion or a web meeting) the importance of a tutor was bigger; the students often needed some help to get started. Towards the end the tutor's role was more following and finally helping to gather the information together.

The biggest difficulty in tutoring seemed to be guiding with questions. As mentioned in the chapter about the web meetings, too much of controlling and any forbiddances were unwanted and they usually led to a situation where the students were asking the tutor what to do next and that is not the idea of tutoring. The tutor is there to support the process, not to tell how to run it. Of course the tutor's mission is to interfere if the process is not going anywhere or is getting out of line and if the students seem to be getting frustrated or having negative feelings of working. Encouraging and guiding comments help the students to work on and it is not bad at all if they can trust the tutor; it is easier to go and tell about problems if the tutor has not already recognized them.

### 5.1.3 The affects of the schedules

As mentioned before, the NASEK –project has been a very intensive course and this kind of working was new for most of the students. Often it was seen that they were focusing on the calendar or clock more than on the actual work and the impatience could easily cause conflicts; the students were not used to work via Verkkosalkku and to the fact that the respondent is not necessarily in the internet all the time. This could have been prevented by synchronizing the schedules and making sure that there is time for discussions and feedback almost every day. Of course there are some days in the program when there just is not time to go to the computer class; for example if the groups are visiting some places that are located further away. The farm visits have to fit not only into the project schedule but also into the timetables of the farmers and so it is hard

- if not even impossible - to get everything happening at the same time in two different countries.

Anyway one could see some problems with the timetables and their affects this year and so the real time feedback was too often left aside. When the second opinion inside the group is missing there will be no cognitive learning either. The planning of the schedules should be done early enough and there should always be some room for changes to be able to synchronize to the schedule of the groups. Changes – in case there are any and usually there are – should be announced as soon as possible. And of course if the practical work is happening in two different time zones, the real time of the project should be agreed; one discussion hour is easily lost if there are mistakes on this.

### 5.2 First round: Defining the problem

The first round started in Finland on the 1<sup>st</sup> of March 2006 when the Dutch students arrived to Finland. First they worked on some local farms; this arrangement was noticed to be useful and a good way to introduce the Finnish way of agriculture to the Dutch students and on the other hand the condition for the financing of the journey of the Dutch students is that they stay in the country for three weeks. After one week (on the 8<sup>th</sup> of March) the Dutch started to work with the Finnish students for the project. On the same day the Norwegians flew to Austria and these two partners started working there.

The original plan was to get the students to define their problem before the first round started but because of the financing problems and the delay of the journey to Norway they did not have enough time to do that and so the first round started with defining the problem for each group. The groups were asked to find out one or two issues that they found interesting and would be suitable to be studied in the project this year. This was done by net meetings in Verkkosalkku discussions. (APPENDIX 12, 13 &14) In the beginning it seemed to be very difficult to find a solution that satisfied everyone and after the first meeting only one of the groups had some kind of solution for the problem and two other groups were also very close. After the first meeting the tutors were quite worried of the succeeding to find the solutions and some of them were even willing to give up and work with different problems. It was agreed that a second meeting would be started on the next morning after a good night sleep and some discussions. Surprisingly the second meeting was easier and the solutions were found quickly and the groups

even had time to go deeper into the subject (APPNDIX 15). Two of the groups had to make some compromises but both of them managed to set interesting goals for their work.

This first part, defining the problem and some discussions of it, took the first three working days; this delayed the original schedule for a while but was not something to worry about for the tutors. During the first part the tutoring In Finland was done by Jaap van der Zwan, Hannu Viitala, Tero Kanala and Inka Luhtala and in Austria mainly by Theresa Bauer, Renate Sommer and Brit Grönmyr.

#### Evaluation of the practical work

In the first round of NASEK in 2006 the students were missing more time together in Verkkosalkku with the web partners. More of that time was scheduled into the Finnish timetable but the frustration in cooperative learning process and one crisis situation changed the schedule several times. These matters had to be handled immediately; talking about feelings must not be delayed or it reflects on the process negatively.

No matter about the delays the students managed to work well and gathered information. After the first round it seemed that the process was going from theoretical information towards more practical content. This is what the tutors were hoping for. On the second round the communication via Verkkosalkku had to be improved; it was important because the tutors hoped that the web pages would have been ready after the second round and web masters would not have been needed afterwards. A big difficulty in this was that the partners in Norway had to stop working three days before the project work was supposed to be finished because the Norwegian school closes for Easter holiday.

### 5.3 Second round: Combined outcomes

The second round of NASEK 2006 started on March 28<sup>th</sup> in Holland when the Finnish students arrived to Barneveld. There was no financing available for the Finnish group and so the journey was planned the way that they only stayed in the country for the time needed. The actual working started on Wednesday March the 29<sup>th</sup> in the Netherlands and on Thursday March the 30<sup>th</sup> in Norway. There had been one week between the first and the second round and the work seemed to start almost immediately the way it had

been going on in the previous round; everything was still clear in memory and people were familiar to each other.

Once again every day was started with a group meeting for every group so that the group members discussed about the situation at the moment and knew what they should do next. Sometimes there seemed to be one person doing all the work in the group and the others were giving opinions but stepping side; the tutors were present and needed again. As the second round went on the tutors were surprised to see that the groups were having their meetings without asked to and things were going on very well. It was pleasant for the tutors to see that the students were so involved in the project and their work that they did not wait for the guidance anymore. In the Netherlands the tutoring was done by Harm Holleman, Hannu Viitala, Petri Kainulainen, Liisa Antikainen Tero Kanala and Inka Luhtala (Kainulainen and Antikainen were there for the first week) and in Norway the tutors were Erwin Gierzinger, Theresa Bauer, Britt Grönmyr and Renate Sommer.

The problems that the students needed the tutors for were the same as in the first round; there were some language issues and problems in different ways of communicating. In the second round the students still made excursions to farms and collected more information about their group topic but they also started to focus more on the web pages and their outlook. Once again it was seen that there should be time for communicating between the countries every day; it was new for most of the students and if they asked for comments of the rest of their group in Verkkosalkku it could take a day or two before they got answers. This waiting caused some frustrations and the waiting students got the impression that the others are working on their own and do not want to share their information with the entire group. As it was mentioned before, there had been a little crisis situation while the first round in Finland and the Austrian-Norwegian group heard about it in the second week of the second round. This made them feel more frustrated and outsiders and even the tutors were discussing if the matter should have been brought up earlier (APPENDIX 16). Anyway, because of many reasons, it was not though it had influences on the project work.

There were also some practical problems with the program that they used to make the web pages with; the texts that were added to the pages should have been written with normal font without any edition. If they used some strange font etc that the program did not recognize, it caused for example empty space before the text or some other problems that did not look good on the pages. Because of all this some of the students wrote their texts straight to the program and it was not saved anywhere else. This caused problems when the groups started to fix the pages to look similar to other pages; there were some texts lost and never found again which caused little conflicts, too.

After one and a half week the groups had lots of information to put to the web pages and most of it had already been added there. The Easter holiday in Norway was about to start and the Austrian-Norwegian group stopped working on Friday April the 7<sup>th</sup>. The groups were in the middle of work at the moment and the outlook of the web pages should have been decided together but the differences in the timetables did not give the chance and finally the groups had some discussions about their wishes about the outlook and the groups in the Netherlands finished the work in three days that they had left to work. On Wednesday April the 12<sup>th</sup> the groups in the Netherlands had their final presentations and the project work for the students was finished. The web pages were quite ready and there was no need for webmasters to finish them later.

#### Evaluation of the practical work

As it was already noticed after the first round, the students still needed more time together with the web partners in Verkkosalkku. The schedules seemed to have enough time for this but in practice it was not so. There should be one hour nearly every day for communication and it should be scheduled to the same time of the day so that there would be no waiting and frustrating because of it. In projects like this the need of communication should not be underestimated and the only way to good results is good communication.

On the second round the process led more into collecting practical information as the tutors had hoped for. The communication via Verkkosalkku did not improve much but the goal was achieved and the web pages were finished during the second round. The students learned a lot; some about agriculture and mineral circle, others about social skills etc. All of them improved their language skills and learned something about another country. Sometimes it seemed to be forgotten that the web pages were not the only goal for this project. They were an important by-product and the showing part of the outcomes but we must not forget about the goals that we already mentioned in the chapter "NASEK-project"; creating of permanent and working study network or creating cooperation and communication between students, teachers and farmers. All that has happened and it is still going on.

### 5.4 Cooperative learning and impact of personalities on it

Cooperative learning means mainly that bigger contents of knowledge are unloaded into smaller pieces and built again with opinions of others into new knowledge. Different levels of information, skills and knowledge and points of view in the group help in this kind of learning; to make their point clear the students have to explain their opinions in another way and by this the information is shared into smaller pieces. Then the pieces are put together again by making new connections with the information of others and during this process the original knowledge may change more or less.

This year (2006) the differences of knowledge and personalities in NASEK groups gave good basics for collaboration in the learning process. On the other hand bigger differences in knowledge can cause frustrations in the group when the basic information has to be explained too many times, but then again the frustrated people who feel that the complicated information is something that everyone in their group should already know can not often explain things in a simple way; there might be something to learn from the other members of the group. Frustration almost stopped the process for a moment and the tutor guidance was needed. Already the fact that the tutors have noticed the problem helps and fast reacting is important for the process. In this case getting through the basic information with the students' own language helped them to get a better hold of the topic and the process could continue. We are still guessing if the frustrations were caused by differences in knowledge and skills, culture or something else.

Personality differences have a role in collaboration, too. In NASEK it shows up perhaps most in the impact of different kind of educational culture and teaching methods; otherwise the cultures in the partner countries are quite similar. For example some students ask for more statistical prove and others rely on long time experiences and more practical information. Tutoring is also different in some countries and some students are expecting to get more specific support while some others may find it irritating. On excursions the collaboration is more limited because of the language skills of the farmers; some information is always lost when someone is doing the translation and the discussion is done more or less only with the own nationality.

### Affects of a crisis on the group

Different kinds of personalities deal crisis situations in many different ways; for example some get a panic reaction, some hide their feelings behind joking and some just say "It happens" and keep going. It is very important for everyone to get a chance to go through what has happened and to hear other people's feelings and thoughts about similar experiences. This is important especially for those who have been there before or perhaps lost someone close in a similar situation. Different cultural and religional backgrounds might play a role in the discussions that are had afterwards. Some people do not want to show their feelings or to talk about anything that they find hard to deal with when some others can go into a really deep and open talk about the present and past and show what they feel. A good discussion helps everyone to get over it and makes the people closer; even the silent ones open their heart in deep discussions and feel relieved after it. The most important thing is to get over what has happened so that nobody is bothered by it afterwards and it is not reflecting to the process.

#### 6 CONCLUSIONS

The main purpose of this thesis is not to try to make everything perfect; it is more like a developing process to solve some problems for the future for international projects. International cooperation itself is difficult and using the internet as communication channel makes it even more challenging. There have been two different processes going on in this project. One was for technical problems in communication in the internet; we developed methods to keep the students active and tried to get the best results from the cooperation. Another matter was dealing with nationalities and also adding those to that developing system. Even though these sound like two very distant things in practice we noticed that they "go hand in hand".

Everything started on the word eLearning. From the last year we noticed that it is not the best word for describing the method that we use in NASEK. NASEK was not about self orientated studies which were not depended on time and place. In NASEK we had a tight schedule and we need to be present, maybe not in the same place but present via the internet at same time. When we started to collect material for the work the words "virtual teamwork" came up and we found our red line there.

The starting point of our work was very hard to find; the internet is full of material about virtual teamwork. Totally different ways for working in the internet with several different methods have been created. In frustration Tero started to work with the back-ground information and from those sources the Problem Based Learning in the internet was found. In the further search there was also the word "cooperative learning". Both of these things were already in NASEK so it was easier to apply them to the eLearning platform that was already used in Savonia and familiar for us both: Verkkosalkku.

Tero was also studying the autumn semester in the Netherlands in HAS den Bosch and got to know several different learning processes. Many of the processes have similarities to the ones which have already been used in NASEK and were easy to adapt there. Also the learning processes from our own school were useful.

That time we found our components for PBL variations which helped us to transfer the learning process into the internet. Of these components schedule gives structure for intensive learning, net meetings and opponent groups in other countries force the students to keep contact and make more profound results and cooperative learning. All this helped us to understand the learning processes which were going on and to support them. Besides of that we were dealing with four different nationalities and 36 individual persons plus all our tutors from four different countries.

At first the plan was to travel to each country and to teach everyone how to use Verkkosalkku and then to try to keep the students in contact. This was also our supervisor's idea. Then we noticed that there was a need for development in the working methods and in reaching a deeper cooperation. In the end we had a big responsibility in the NASEK tutor team.

Like we said in the beginning this thesis might not have the ultimate solutions but we have developed the system which was already there and added there some elements which we have found the best. This year we did not get all the results that we expected but that is a part of the process and in the future when there is more time for planning the results are achievable.

This thesis is made for the NASEK project but it is useful for any other international project or for virtual cooperation with similar aims and atmosphere. This model is made for cooperation which is intensive and based on work in the internet considered as a student project and also for normal working life which is based on virtual teamwork. PBL it self is based on normal human behaviour and it is close to today's methods of working. Cooperative learning is also common behaviour and part of everyday life. Even if we do not notice it, it is the way how we develop our knowledge all the time. Cross cultural working is also nowadays a challenge and globalisation is effecting on our everyday life. Big companies are multicultural and trait business is developing more and more. A lot of people are working as a part of multicultural networks today. There are high hopes for this thesis and we hope that we can fulfil those expectations.

All work has not been done yet. As we said there still are things to improve and our work did not go perfectly from the beginning to the end; actually we did not even expect that it would considering the nature of the type of working but we got better results than there were in the previous year. In the future there is a lot of work with cultural awareness and preventing the issues which are caused by differences in personalities. This affects not only on the student but also on the tutor work; everyone who is involved in the project.

Another thing what we did not have enough time for was creating an environment which is more designed for this type of working into Verkkosalkku. Planning is also important and one year's rest for the NASEK project might bring new ideas for the team; after all "good planning is half of the work" as they say. These two issues – the social interactions and modifying the learning platform – could be expanded for example into theses in the future for students of social pedagogy in social services and business information system and communication students in business administration.

As a self evaluation in total we managed better than we expected. Even though we did not get all the exact planned results for this year we have achieved significant progress and a good model for the future. As a part of the tutor team we were very innovative maybe even too innovative sometimes - but the process went well after all. Our thesis has changed a lot from the plan and there are more parts in it than we planned in the beginning. Then again in our practical work, even though we had a lot of time in the beginning, the timetable was the biggest issue and we did not have time to do all that was in the plan; the reason for that was the late starting point of the work. There were plenty of material and several working methods available but this is how we did it because of the reasons mentioned before.

The results of this thesis are based on verbal evaluation which has been asked from the tutors and the students during and after the student exchanges. Some feedback was also got in a written form via Verkkosalkku from the Austrians and the Norwegians. The received feedback has been constructive and useful for us but perhaps a numeric evaluation would make the results more significant.

One thing which might have given us a better result could have been editing Verkkosalkku to more suitable for students. Another problem was also the financing as we told earlier in the results. Never the less the work during the project has been very intensive and we had to react to everything quickly and so even if we had planned it more carefully it probably would not have worked since the schedules were alive all the time.

We have had certain roles while doing this thesis; Tero has been the idealist and innovator while Inka has been the practical one and kept our feet on the ground. We used Verkkosalkku a lot during our work especially when Tero was studying in the Netherlands and did the ground work there. While Tero was working on the ground work Inka gave feedback and comments and translated some texts into a better (but not perfect) form. As mentioned before we were both involved in student selection, Tero in Austria and Inka in Finland. With the Finnish students there was also the financing issue and Inka was helping them to get the work started and also took part in gathering money for the trip; this was important not only financially but also for creating the group spirit because the students were from two different schools.

For us this process has given more than we expected. Even though both of us have a lot of international experience we have not dealed with so many cultural issues than in this project before. In our opinion we have grown in a diplomatic way while solving issues with students, tutors and also outsiders. Professionally this has given a lot more than anyone can imagine. Virtual teamwork is not an agricultural issue but it is getting more and more common way to work. Maybe it did not give us much more professional knowledge but it gave us another dimension for working life in the future and also one and differing advantage compared to the other Bachelors of Agriculture: experiences of virtual teamwork and also in international affairs.

### BIBLIOGRAPHY

Häkkinen, P. & Arvaja, M. 1999. *Kollaboratiivinen oppiminen teknologiaympäristössä*. In book Etäpelto, A. & Tynjälä, P. Oppiminen ja asiantuntijuus. Työelämän ja koulutuksen näkökulma, p. 206-221. Juva: WSOY. Retrieved October 11<sup>th</sup> 2005 from <u>http://tievie.oulu.fi/koulutusresurssit/artikkelit/hakkinen\_arvaja.pdf</u>.

Hhan-Panni, P. & Swallow, D. 2003. *Communicating Across Cultures*. Oxford: How To Books Ltd.

Koskinen, K. 2002. Etälukion käsikirja. Government of education. Vantaa: Dark oy.

#### UNPRINTED BIBLIOGRAPHY

About NASEK. 2006. NASEK-project. Retrieved October 26<sup>th</sup> 2006, from http://nasek.net/cms/index.php?option=com\_content&task=section/id=6&Itemid=39.

Design for All (DfA). Avence Digital Oy. Retrieved October 12<sup>th</sup> 2005, from <u>http://www.avence.fi/index.php?id=9</u>.

Herno, H., Peltonen, M., Sirkka, K. & Väänänen, S. Verkko-oppimisopas. Jyväskylä University, Open University. Retrieved December 7<sup>th</sup> 2005, from <u>http://www.avoin.jyu.fi/verkko\_opiskeluopas/opiskeluopas.htm</u>.

Holleman, H. 2003. Official Project Contract and Financial Information. Barneveld. Interview.

Huusko, M. Jokinen, S. & Sarajärvi, T. 2001. Ongelmalähtöinen oppiminen. Oulu University. Retrieved November 4<sup>th</sup> 2005, from <a href="http://www.oulu.fi/opetkeh/kehtoimi/PBL/wspbl.html">http://www.oulu.fi/opetkeh/kehtoimi/PBL/wspbl.html</a>.

Juntunen, E. & Vuorela, U. 2005. Kansainvälisen opiskelijaprojektin käytännön suunnittelu. Savonia University of Applied Sciences, Savonia-ammattikorkeakoulu, Natural resources, Iisalmi. Thesis.

Kralicek, B. 2006. Teacher of English and Communication Skills. Interview October 12<sup>th</sup> 2006. Acrarpädagogische Akademie Wien, Austria.

NASEK education system. 2006. NASEK –project. Retrieved October 27<sup>th</sup> 2006, from http://nasek.net/cms/index.php?option=com\_content&task=view&id=119&Itemid=86.

NASEK –outcomes. 2006. NASEK –project. Retrieved October 27<sup>th</sup> 2006, from <u>www.nasekoutcomes.net</u>.

NASEK –virtual headquarter. 2006. NASEK –project. Retrieved October 27<sup>th</sup> 2006, from <u>www.nasek.net</u>.

Poikela S. 2003. Ongelmaperustainen pedagogiikka ja tutorin osaaminen. University of Tampere, Faculty of Pedagogic, Doctoral thesis. Retrieved November 4<sup>th</sup> 2005, from <u>http://acta.uta.fi/pdf/951-44-5661-0.pdf</u>.

Portimojärvi, T & Saarinen, R. 2001. WPBL, Ongelmaperustainen opiskelu werkossa. University of Tampere, Faculty of Computer Sciences. Term paper. Retrieved November 4<sup>th</sup> 2005, from <u>http://www.uta.fi/~hotipo/wpbl/raportti\_perusteet.htm</u>.

Salmela, H. Toimintatutkimus. Turku School of Econimics. Retrieved October 20<sup>th</sup> 2006, from <u>http://www.tukkk.fi/tjt/TUTKIMUS/seminaari/abstr-toimintatutkimus.htm</u>.

Tuotetiedot. Verkkosalkku. Mindcom Ltd. Retrieved October 11<sup>th</sup> 2005, from http://www.verkkosalkku.fi/index.php?id=3.

Verkkosalkku demo. Mindcom Ltd. Retrieved October 11<sup>th</sup> 2005, from <u>http://www.verkkosalkku.fi/demo/default.html</u>.

Verkkopalvelun sisällöntuotanto. Ohjeita opponointiin. Retrieved December 7<sup>th</sup> 2005, from <u>http://matwww.ee.tut.fi/hmopetus/sistuot/opponointi.html</u>.

Nasek. meeting of 5 till 9 june

start Monday. 8.33 uur(7.33 Greenwich time) agenda is put in order.

Harm mentioned

- the homepage must be in. after experiences of partners
- and the role of the vocational school must be put in. And probably it can be put in tomorrow Hilka is over to the vocational school
- product that must be written down for the realisation of this afternoon. by evaluation.
- By new thesis the subject of the exchange 2005-2006
- interim rapport and financial things Tuesday afternoon

8.45 - 9.15 Introduction of who is who.

 $\circ$  9.20 - 10.00

# Briefing of nasek concerning student exchanges at spring 2005

how do we plan the next exchanges 2 weeks and 2 weeks preparation and evaluation small or larger tasks logical structure in the weeks 1.

### summary

planning

- in austria subjects and dates were clear
- communicate
- list of aims
- time schedule
- worklist

## planning 2006

- planning of the project
  - o working in Verkkosalkku sometimes gives questions. where do you search
  - o email notification
  - o reply on the mails/messages
  - o structure of messages in Verkkosalkku
  - o where do you look and where is the information
- from feb to apr
  - o 2 times 2 weeks exchange
  - o 2 hours a week
  - o 24 hours and 160 hours exchange
  - o before Christmas exchange teaching 6 hours
  - $\circ$  course of 2 hours a week = 16 hours
  - o total 200 hours student hours
- dayplanning
  - o 30 minutes of discussion
  - o computer work
  - o farm visit
  - o evaluate (write down)
  - o free time(social time)
    - § Flintstone bowling
    - § farmers golf
    - § championships
    - § farm museum
    - § red bull museum
    - § horse fair
    - § hiking
    - § sports
    - § volleyball
      - (tournament)
    - § football
    - § horseback riding
    - § ice caves
    - § Utrecht city walk
    - § movie
    - § cooking
    - § party's

- costs
  - o transportation(school bus, places, costs)
  - o housing(costs, circumstances)
  - o total 1300 €p.p(nl-fi), 550 €pp(au- nl), 520 €pp(fi-nl)
- practical training period
  - o for mobility fund ( it is necessary. )
  - It cost (to) much time and efforts
  - it works very positive for students
  - o students find it valuable
  - o farmers find it also nice (afterwards)
  - o period and privacy(weekends) are important
- expectations
  - o what does
- •

# Realisation

student

- the webpage must be translated into Finnish, Dutch and German.
- Hannu ask it how doing it. is it possible that you make 3 mirror sites and also
- PBL
  - o how did you experience the pbl part of the nasek
  - o Preparation:(input roc Utrecht, examples, 4, 7 of 9 jump, video, examples
  - Work out: students didn't follow the structure, but they were working good, groups work, first step the problem is clear, sometimes students work to the fastest solution. are you satisfied with the outcome. Why do student choose the fastest way.
  - o Evaluation: use the book of hannu in which problems are described.
  - Make in Verkkosalkku a discussion in which you can write down the experiences.
  - Erwin makes the structure
  - Not all students are used to reflect on their own work or on the teachers
  - use the results in the second part of the project
  - Everybody has to know what the aims are
  - atmosphere is very important
  - all students must be involved
  - also when they are host
  - group is important how to make a good group
  - communication = expectation
  - feedback given and taken is important
  - different levels different tasks
  - start with group discussion in the morning
  - •

teachers

- they must learn their role
- make sure if they know their role
- divide tasks between the teachers

Action Hannu

Action Erwin • organisation of school must fit with international projects

•

### communication

- use of Verkkosalkku
- one lead group
- whose responsibility is to react

## Evaluation

- learn to give feedback
- ask it in the beginning
- 1.

## New thesis in Nasek

improving e-learning in international projects Tero and Inka

the problem is how to involve everybody everybody must know the programs before the exchange everybody must accept the changes that are made the group must be selected help with communication between students and teachers help with working Verkkosalkku help with selection procedure

## help Tero and Inka

- visiting partners
- be part of the group
- travelling by air

teach e-learning e-learning equipments web page making international e-learning differences from common learning

sources thesis experiences results of feedback

communication 2 persons who give leads

where do you want to use Verkkosalkku for you can't read everything portal students teachers

nasek network

financial matters

partners

members

leonardo

webpage

discussion

companies

farms

links

Virtual headquarter

# Tuesday

8.30-8.46 opening change Agenda's virtual headquarter needs more time add role of vocational add financial matters and interimrapport

8.46 The virtual headquarter

2 websites 1 outcomes of nasek www.nasekoutcomes.net 1 virtual headquarter www.nasek.net

## Portal virtual headquarter

language of the webpage is in English. later on in other languages made by a professional

## learning leaf

- pbl learning packages in international context •
  - pbl experiences in the subjects below (student, teacher school) • how did you experience the pbl part of the nasek
    - Preparation:(input roc Utrecht, examples, 4, 7 of 9 jump, video, examples 0

database with

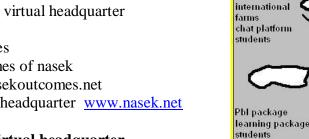
teachers

schools

- Work out: students didn't follow the structure, but they were working good, 0 groups work, first step the problem is clear, sometimes students work to the fastest solution. are you satisfied with the outcome. Why do student choose the fastest way.
- Evaluation: use the book of hannu in which problems are described. 0
- Make in Verkkosalkku a discussion in which you can write down the 0 experiences.

the forms for our experiences are ready 19 june we fill our experiences in before 25 august Erwin makes before end of September

- learning packages for
  - o students
    - § pbl things
    - § document that has to be filled in for practical trainees
    - § insurance links (also in other leaves of the virtual headquarter)
    - § prepare farmer on the questions they can expect?
    - example of some story's of students §
  - farmers(must it be in or not) 0
    - § what can you expect when a foreign students come?
    - §
    - §
  - teachers Ο
    - pbl things §
    - § set up of an exchange





erwin

Action

```
Action
every-
body
Erwin
```

Action erwin

- § examples (task, weeks)
- § how to communicate with the farmer about...?
- schools Ο
  - accommodation, food, facilities §
  - § teachers schedules
  - § information off staff
  - Ş organisation
- links •
  - making use of knowledge about pbl that already exist on internet 0
  - 0 results of the outcomes of the Leonardo project in which students can study abroad
  - foundation exchange of students (NL)Stichting uitwisseling. 0

## database leaf

- own Nasek database •
  - Erwin worked with students and create a database, because the hours were cut down and after Easter they started the database. give it a web design
  - Must the student makes this web design in access or do we make it by 0 professional,
  - dating webpage for farmers and trainees 0
    - § schools can fill this database
    - § farmers can fill this database
    - § student can search by filter
- links to other databases(only accessible and written in English) •
  - each country is responsible for their own databases
  - o only farms that interested in international trainees are in these databases
- links to farms
- chat platforms
  - e-mail function 0
  - discussion forum 0

Not an agreement about how it looks like

## webpage leaf

- Link to outcomes of nasek
- information of the enterprises •
- discussion student etc

# Nasek network leaf

- partners
  - o list of partners
  - how to become a partner 0
- financial matters
- leonardo(other projects) •
- links •

11.10 New partners. We make a list in Verkkosalkku.

Action erwin

Action adriaan

Action

hannu

Action

harm

- deadline: 1 oktober 2005
- Netherlands is looking in Denmark, Harm makes an appointment in september. If • that is not possible.
- Finland is looking at several partners Ireland, and Italy(forestry) and Greece.
- Austria is looking at Ireland, Ronde, near Aerhus, Slovenia, Hungary (finance • problems),
- Action
- students must be compatible and interested. equal groups, 8 people, or something like that Harm is checking the amount of students.
- Harm says there is probably money reserved for student exchanges, everybody is • checking

# Financial. How do you finance this

You can use money out of the project for work meetings( within your own budget In the dissemination meeting it is possible to exchange

- lingua money
- national agency (of leonardo) an open pot for

For students they must search for money. They can find money (projects, work, ...)

# New subject:

How to improve the circle of nitrogen on a dairy farm Why is there such a loss of minerals on a dairy farm

- animal •
- input / output •
- soil •
- eu laws •

financial management = feeding related to costs not interested enough

12.45 dissemination of NASEK

Done

- Netherlands
  - o web pages
  - o article in magazine exchange LTO
  - article in magazine of webpage LTO 0
  - animal health and welfare seminar v Hall institute 0
  - o article in Agrarisch onderwijs (magazine of education)
  - o flyer and poster of nasek in
  - European convention of Leonardo project dec 2004 maastricht
  - excursions to 35 different farms 0
  - $\circ$  aequor: the farms and advisors(7)
  - article in their magazine 0
  - o school paper the bzz(students) and prikbord(teachers)
- Austria
  - 0 1 whole page newspaper(nationwide)250.000 ex

harm

- interview of austrian broadcasting coop. with Finnish, Austrian students and Erwin. (Verkkosalkku)
- September it is a subject in 1 hour for all Austrian school for Agricultural schools
- o agricultural magazine of ministry, article
- Finland
  - students tell about the project
  - in the international day, they spread all the different projects vocational school
  - o webpages <u>www.nasek.net</u>
  - o farms
  - o conferences (Verkkosalkku,
  - o farms
  - presentation from nasekstudents during lessons profitability of different kind of production
  - o Thesis result of Emmi and Ulla about Nasek
- .
- to do
  - Netherlands

0

- virtual headquarter( webpage)
- o students tell to school organisation
- o school paper
- Austria
  - September it is a subject in 1 hour for all austrian school for Agricultural schools
  - o agricultural magazine of ministerie, article
  - authentique learning in agricultural (ALIE) Wellant providing results from the europea meeting <u>www.alie-project.com</u>. They search for new methods of natural learning. Ton Stok
  - Students are asked to spread the news and the have presentations to other students
  - o schoolmagazine for all the persons related to schools
- Finland
  - newspaper article would have make by Hilkka but Emmi and Ulla would do it
  - o new Thesis of Tero and Inka

# Points of recommendation

- farmers must be involved, their names on the webpage So they show it to their people
- o give information to your relatives
- students must know, their names on the webpage, So they show it to their friends
- o dissemination to international conferences harm sends everybody flyers
- there is a national program(dissemination for Leonardo project in which is money available for dissemination. It is divides to the countries, so try to find if you can apply
- Hannu put some movies tot the website
- o boerderij has a page with internetpages

## Date for dissemination on 24-27 november

The interim report part one the story part two financial report. Questions Erwin asked When is the rating? Harm is calling Judith) next week asking things, In the contract within 45 days they have to approve you may ask for the second part as a submission Douwe keeps a certain amount back. He can pay it now. In the contract there is mentioned the an amount money is payed in the different steps When report is not good the second payment will be partly pay with delay for missing. by very bad projects even money can be taken back. Douwe would have to put in the information in access. so please put your bookkeeping in this program.

in Austria Erwin will try to do it and ask Harm for help

in Finland jana (bookkeeper)was sick for a while and that is the reason that Finland hat a delay. Hannu is not accredit for these payments.

Is there a feedback on the interim rapport?

We would like to see it including comments.

What can the school do with the money the get.

The school can declare 75% of the hours they made. It is a lump sum financing. So you don't have to keep an hour declaration. The money a school gets for labour can be put in minus to the task a teacher have to do.

## Interimrapport

Hannu did you have had any about the information given harm says actually not. it is good that people put in information now it was rather small. In the future there must be a

## **School changing**

vocational hylka goes to polytechnic polytechnic

how do we work with the project.

contract is with vocational and polytechnical school.

- from polytechnical school Hannu and Petri and from now on maybe also Hylka will participate.
- from vocational school someone else comes into the project.
- until now there are 5 different persons from vocational school and Harm is not happy with these changes and asks if it is wise to keep the vocational school in.
- For the effect of the project it is good to keep vocational students in the project.
- how involved is the vocational school.
- the interim rapport is made together with the vocational school.

Action harm • harm will discuss with djharmo from the vocational school how en who is coming in the project. He is very concerned about it..

## plan for wednesday

8.30 finishing webpage

we look at it and we give comment big lines structure hannu demonstrates the webpage

- start with stable and show problems by moving around.
- change languages good and try to make it good. use the same word during the story.
- Make a printable version oke but not first
- Use only your own foto's or foto's wich you have arranged the rights
- some links must be put out, check if there is a relation between the text and the subject health and welfare in relation to housing
- webmasters are finishing their work this week.
- Someone must read the text and change it in real english in finland there is a student who is translator he will be asked.
- webpage will be ready end of august
- feedback reactions will be answered by hannu V.
- •

we talk about the procedure

## 9.30 learning packages

define the structure of the learning package. We chose erwins structure and put the things in by webtool and add some learning packages as a pdf file after erwin's got our experiences

## 10.30 summary and conclusions

## interim rapport

Harms gives a summary of the interimrapport He gets compliments for his work

## verkkosalkku

hannu gives some lessons about the use of verkkosalkku

- o reading messages
- o hiding messages
- o making groups
- o get a plus by new.

Hannu makes new platform tomorrow

actions

# Action list

**Hannu** asks if it is possible to make a translation of the webpage in Finnish Dutch and German.

Erwin makes a form for our experiences with pbl before 19 june,

**Everybody** fill it in before 30 of August

Erwin makes the structure of learning packages

Erwin makes before end of September a summary of our experiences with pbl

**Tero and Inka** are helping with the project for their thesis **Harm** is looking if there is money for them

Hannu asks how much it cost to make a portal for the virtual headquarter by a professional

**Everybody** creates databases with farmers who want international student and linkes it to the nasek webpage

Adriaan makes a link to the website of aequor with the farmers who are interested in international students

Hannu is making the webpage leaf, link to outcomes of nasek

Harm is making the nasek network leaf

Everybody put new partners before 1 October in verkkosalkku

Harm is checking if the amount of students can be 8 instead of 10.

Harm is talking to Jarmo(director of vocational school) about their participation

Harm (and others) are going to look at the webpage before Friday

Marjatta ask a student to look to the english text of the webpage

Hannu makes a new platform in Verkkosalkku before Friday

Everybody asks for the national money for dissemination

## **Decisions:**

- exchange students in 2006 between feb and april
- the webpage must translated in Finnish, Dutch and German
- Erwin makes structure for the learning packages
- Tero and Inka may help in the project(very welcome)
- the forms for our experiences are ready 19 june

- we fill our experiences in before 25 august
- Erwin makes before end of September
- New partners must be known at 1 oktober New subject: has to do with circle of minerals and environment maybe:

How to improve the circle of nitrogen on a dairy farm Why is there such a loss of minerals on a dairy farm

- animal
- input / output
- soil
- eu laws
- proposition :Date of dissemination is on 24-27 november
- Structure of the learning packages as Erwin planned.

APPENDIX 1 13/(16) bijlage experiences

6 December started the project. on international day of independence. Hannu held the flag and so nasek started and the experiences of the partners are:

- planning
  - o learning by doing
  - o studying the books
  - o organising farms (3 weeks because of mobility)
- pbl

- o good topic structure
- o motivation to take part was difficult
- o the reason not to take part was that it cost extra time and nothing against it
- o selection process (Finland)
- o collection money cost a lot of time the hadn't a mobility fund
- hosting Austrian students have good skills in computer, knowledge of farms and English
- o they have a good feel of responsibility
- 0
- realisation
  - to accompany 1 teacher first week weekend no teachers and one teacher last weekend
  - o students really liked the exchange
  - o the program was good organised
  - o tight schedule
  - o first week students overwhelmed by experiences.
  - the had to work in 2-3 tasks, lots of farm visits
  - they don't want to reflect on how they worked.
  - they want to work and to learn
  - o structure 9-jump 7-jump
  - o students use it but not in the right order
  - o students of Holland were not always there
  - o method is tool of teachers
  - how far do you let them go alone
  - reflections are needed because they have to know when they are going wrong
  - how do you steer. it depends on the group and on subject and on the teacher.
  - o the most easy way to the result
  - o what kind of skills do you need
  - o in Holland all Austrians students were motivated
  - o in Austria Austrians couldn't fill their role as host(time, other things)
  - Holland host role was more like the expectations.
  - o do you have to learn the host role
  - o project work is not planned in the year. so the organisation is not
  - o role of student as a host is important
  - in Finland they are planning a international project with points so students can easily work, they don't have to follow lessons
  - raising money for students. students didn't have to pay in Austria the school took care for the money. parents pay. no word of thank from students.
  - o money raising

- Austrians were very involved a full schedule computer work is more important and must be
- harm was the only guide in the week that the Austrians where in the Netherlands
- You have to involve more teachers, you cannot do that alone
- o But pbl is not a good system by following the jumps the students
- o focus on you task, the students already make more jumps
- cooking dinner for each other. Actually the student mixed very easily and they could work with each other.
- you could give them a problem out of the agricultural site(to learn the structure)
- o it's hard to work together with verkkosalkku
- o write down what the farmer said, and not you interpretation.
- o one group equal group member, when someone is of lower level.
- o the role a student can take, can be different within a group
- o soile like it but doesn't know much about feels helpless.
- the teachers must split the work, we also need to discuss how are the roles. programs was flexible
- Austrians students were busy else and Hannu couldn't contact in the beginning
- Good presentations 80 people were watching in austria.
- o nice trip, students worked very good.
- trip, free time, work time, work, excursions, structure, culture, habits, practical training period, computer work, timetable, working over groups,
- o discussion without computer is necessary, also in austria.
- also students of lower level learned many skills about live. also the practical training.
- everybody has to know what the aims are within the project
- three people are rebuilding the webpage and some are mad about the changes.
- o positive feedback is more difficult and negative feedback is to late
- o a time schedule is needed
- a building is build without a good architectural plan. the workers had lots of freedom by the way we are building.
- what is the role of the webpage the subject is animal welfare and the discussion must go about animal welfare
- o in the last week the time was limited
- o communication to the teachers must be good about nasek
- o vocational level is to low to cope with the other groups
- o guide group in dividing tasks to cope with the different levels
- o boys johanna kaisha
- Tero and other persons was sick and could not participate as he would have
- Tero was questionnaire for other groups
- Tero was so much involved in other groups that het couln't steer anymore in the topic.
- Inka hard worked but is not satisfied about the result they had to be the center and linked it to the other groups
- To finance their exchange they have done lots of activities like santa claus and packing and so on.
- evaluation

- o positive look back
- o feedback within qmp system.
- they had fun, were involved, they gain knowledge,
- they didn't give feedback but giving feedback is very difficult
- the boerderij has a internet page in wich things are clear
- o communication is more important and
- students give the best reclame to the other students

within students there is lot of contacts between students it works positive

Tero Kanala Inka Luhtala NASEK –project HANDBOOK

23rd September 2005

#### NASEK outcomes handbook

Results of the NASEK-project is coming on web sites. You can find them in address <u>www.nasekoutcomes.net</u>. Those are made by Avence Digital company's Design for All –programme (DfA). It is a programme witch is working on that web sites. With that programme it is really easy to work and you don't need write the text again.

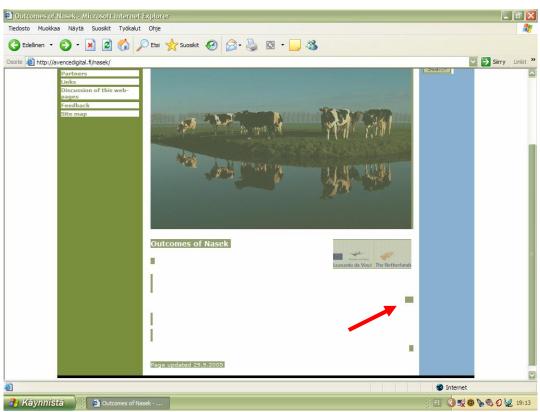
The out look of the pages has been design already. Then you can not effect on any place of the pictures or type of the text but in other hand it is very easy to work with. Only thing that you need to think about is order of your main and sub pages.

For using this programme you need username and password. Hannu Viitala is manager of these sites and you can have those codes to log in you can get from him.

To log in

First you need to go internet and pages <u>www.nasekoutcomes.net</u>. First you need to find key which lead you to place to log in. Easiest you can find it by activating the whole page by using keys *control* and *A*. Then you can find two activated spot right side of the page under the pasture picture. Push the larger one which is closer the picture also.

The you get to page where they ask your username and password. When you have get your rights use these pages your username will be same that in Verkkosalkku. Password will be same than your username. Don't give those codes to anyone. If some one else use your codes to get in and change the sites, it will be seen in management that you have make those changes.

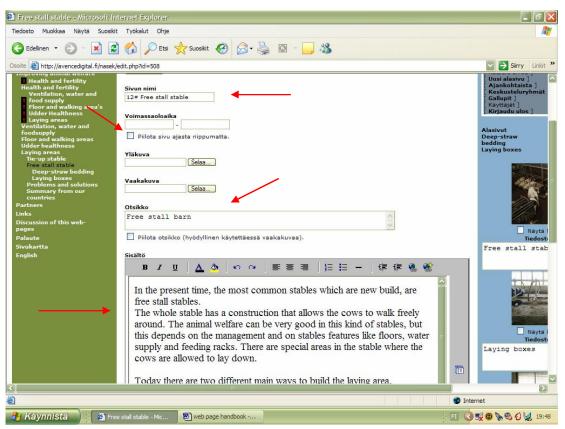


# Change the password

First thing that you need to do is change your password. First select **users** from right side of the page. Then select your own name. Then you need add there **old password** and **new password** and confirm also the new password. Then log out and try that your new password is working.

# Edit the page

When you have logged in first you are going to see side map of that part that you have rights to edit. Go in that part of the site that you want to paste your text and click in. If you want to **edit that page** select it or if you want to make a new page select **new sub page**.



In first square you need to name the page. That name will be also in site map in left side of the page. You need to give also consecutive number. That number will tell to programme in which order you want to you want to see the pages. After the number push also # before you name the page. Remember that this name must be short so it will fit better on site.

If you can not make the page ready on one time push x to square **hide this page**. Then that page won't see on pages until someone log in the pages editor. Then your page is not publish.

Give the full **headline** of the page in square which is top of the text square. When you use this square all headlines in this sites will look same. Save after this so everyone can see that you are already making that page.

# Copy the text

When you start the make the page I hope that you have made your material ready. Then it is very easy to just copy and paste your text in. Make sure that you don't have any editing on your text because it can make problems when you try to edit the page with programme. Type of the text might be different or there might not be any readable text at all.

Easiest way to do it is to do not any editing on text when you are writing it. Other way to do it is by activating to all text in Word and the select normal type from the upper beam. Then look that the size and type of the text are all same and also take of the boldness and underlines etc. In newest versions of Word there is also command remove all the editions.

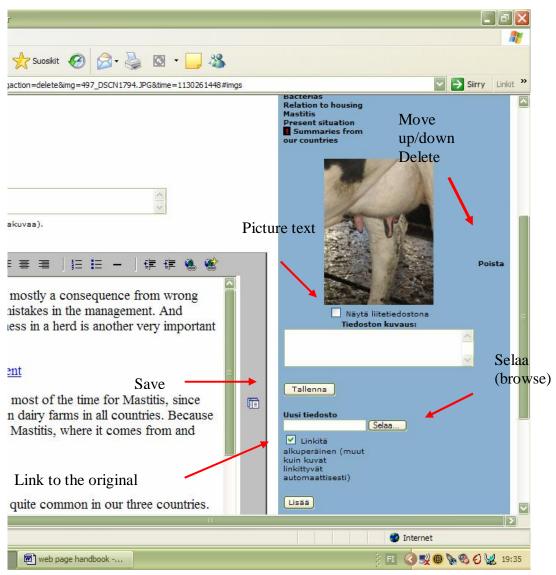
Then you can copy the text that you want to make on that page. Paste that to square which is made for the text. You don't need to copy the biggest headline of the page because it is coming from another square which you filled before. Then headlines for every page is coming similar.

When you have paste the text you can edit the text as you want with the tools which are already in programme. Try to edit it that every page has same kind of outlook. Pages look that way more professional. When you are ready **save** the text and select **view of the page** from right side of the page. Take a look if it's ok and fix it by using **edit the page** from right side of the page and **save** it in end.

# Add pictures

When you are editing pages you can also add pictures on page also. In right side you can select **selaa** (browse) then you can select the picture. Add it and select **link to original**. When you are selecting that you can click the picture on page and see it in real size. Remember always save picture.

You can change order of the picture if you have several pictures. Right side of picture there is place to select it **move up or down** or **delete** if you want to remove the picture. Pictures are coming in same order on the page. You can also give short explanation about the picture that will come under the picture in real page. Don't forget to **save** it.



In this way you can also add file in there. If you have some calculations which are made by Exel or some files it is working at same way. Link to those files will come in end of the real page. Those are linked to original automatically.

When you have add the pictures and save them you can take a look at **view of the page** and you can see those pictures at right side of the page. It is impossible to make

those pictures in another place.



### Log out

<u>Remember always to log out from the pages</u>. It is simple by just pushing **log out** from right side of the page. That way you can prevent that anyone who don't have rights to edit pages have access to pages. In worst case they can destroy all the work that you have made.

# Remember

When you are making these pages you have to have copyright in every material that you are using. At least in Finland the copyright laws are very strict. If you are using material from internet you need always promising from sites administration and if you use printed material but always source. Best way to do it is use only your own text and pictures that you have take from excursions.

milk/meat

# Title of this year How to improve the circle of minerals on a dairy farm

# Way of working

First giving an image of the different things picture of

To increase beter use of minerals is very important. So you have to choose a problem that is related to the circle of minerals on a dairy farm. You have to make the problem common between the country whith whom you cooperate. Picture of circle of minerals

feeding

- 1. Soil (2 norway, 2austria, 2 finn, 2 dutch)
- 2. Cow(etc)
- 3. Manure(etc)
- 4. feeding(etc)

Working order

Before exchange

- 1. Let groups choose a practical position it on the circle, give it a name)
  - Divide the problem in small subproblems
  - Other 3 groups (other two groups) makes comments and ask questions.
  - Define the problem more clearly

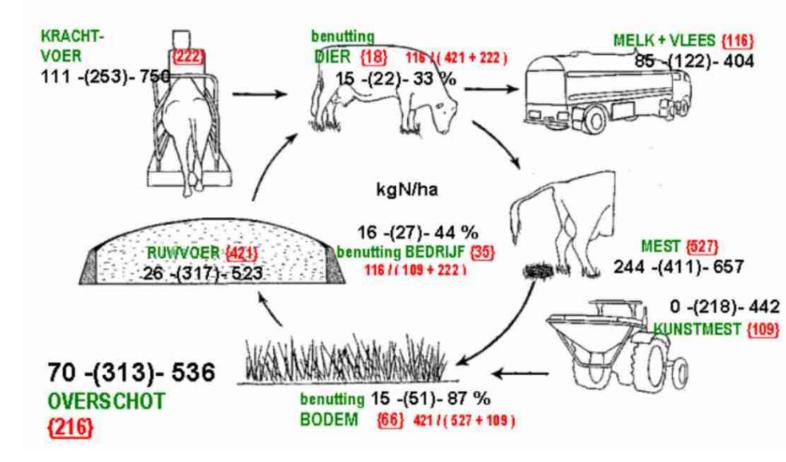
# During exchange round 1

- 2. Working on the problem by
  - Visiting farms
  - Exchange knowledge
  - Etc see pbl dia Tero
- 3. Discussing in the group(collaboration)
  - Meeting by verkkosalkku
  - Putting results of your group
  - Giving feedback to other group
  - Accepting feedback
- 4. Working on the project
  - working out results and feedback
  - making appointments for second meeting
- 5. Making product

roughage roughage fertilizer Points of attention

- Timetable. When is something ready. When excursions When to react
  - Meeting moments and divide into groups so there is not to much(30 people together in one discussion doesn't work
- Trust. Do you accept comments from the other group.
- How to use time between exchange

Second round again redefine the problem and then 2 - 5 final product.



Name 4 topics

HANDBOOK

23rd September 2005

# VERKKOSALKKU HANDBOOK

Welcome to NASEK-project and to use Verkkosalkku. Verkkosalkku is a Finnish made web tool that is used for example in Savonia polytechnic school. Savonia has also been taking part to developing Verkkosalkku to be better web tool to use.

Verkkosalkku is Finnish and it means "web file". It has been made to move, storage and share files. There are parts where groups can work together and give feedback to each member. There is also mail so you can keep contact to all the persons that are using this tool and also a place for general discussions and chat.

# Signing in

Verkkosalkku is working via internet so it is really easy to work in it everywhere. You can find it from <u>verkkosalkku.savonia-amk.fi</u>. The first thing you need to do is to change it **into English**. Then you have to get a **username** and a **password**. User name is nasek and then your first name, for example for Tero it is "nasektero". At start your password is the same as your user name. First thing that you need to do then is to change you password.

How o do it: go to **management** from upper left side of the main page (blue bottom). Then choose **personal information** and write your new password in places **new password** and **password again**. Then **save** it. Then it asks your **old password** again and then except by clicking **yes**. Then take **quit** from left side and sing in again.

# Personal information

Personal information is important if someone wants to contact you by email or phone. It is also easier to control Verkkosalkku when you get information from it to your email. Verkkosalkku is going to automatically send a message to your email if you have something new in Verkkosalkku. Go again to **management** and **personal information** and give the information that is asked from you. Most useful are your phone number, email address and your photo; photo is important when you work with people who you have met maybe only once and can't remember the name or perhaps the only visual contact with someone is the photo. Before adding the photo that you have chosen make it smaller and save it in jpeg –form that the web tool can read it. Do not name it "my picture" or anything else; use more likely your own name. Then click **selaa** (browse), select your picture and **open** it. Then click **send** and you'll see your picture. **Save** all the information and confirm that with selecting **yes**. Go back by selecting **main page**.

#### Mail

If you want to send mail to someone first select the **mail** from upper left of the main page and then **new message**. Firs select who you want to send your mail to. If you want it in public sent it to **all users**. If you want to send it to just one person select him/her from the list. If you want to select several people push *control* down and then select persons.

**Title** is usually very important. By reading the title you can select what you want to reed. On the note that Verkkosalkku sends to your email the title is also the same than on the mail. When you open your mail in Verkkosalkku you see the title and the first few sentence. Then write you **message** and select **send**.

If you have got mail you can see on the right side of the main page a small **envelope**. You can click that or select **mail** from left. Then you see the list of your mails, titles and those first sentences. Then you can select what you want to read. To delete messages just choose them by clicking the little marking square (a mark appears onto the square) and then select **delete marked messages**. Try to keep your mails clean the way that there are no old mails that you haven't read; every non-read mail (also the older ones) shows as the small envelope on the main page and nothing else in Verkkosalkku tells you if you've got new mail. Keeping the mail read and clean makes it easier for you to keep an eye on your mails. After you have send or read your mail you can go back to the main page by selecting **main page**.

les

Via Verkkosalkku you can also send files like text, pictures, exel –files, short videos etc. First go to **files** from the upper left side of the page. Then select **new file** and then the **file** you need to add. Select **selaa** (browse) and then select the file that you want to send. Then **open** it. After opening you need to **name** your file and if you have some comments that you want the readers to se write those in the **description**. Then select who you want to sent it to (all users, one person or several persons using *control* key). If you want that Verkkosalkku sends a email note for the receivers choose the marking square under the comments for that. Then you can **send** it.

Think always about the size of your files you are going to send. For some (older/smaller) computers it might be hard to open too big files. A big file can also overload Verkkosalkku or your computer when you are opening the file. When your files start to be over few mega bytes, think if you can make them smaller.

If you have received a new file you can see it also on the upper right side of the main page: there is a small "**paper**" in the corner. You can click it or go to **files** from left side of main page. You can open the new file by clicking the title. The file is opening in a new window.

iscussion

Discussion is a nice place to have some kind of a chat or planning or just discuss of interesting topics. First go to **discussion** from upper left of the main page. Then select the topic from the next page. If you want to start a new title in the topic select **new message** then first give a title to your message and then write a message and **send** it. If you want to answer an old message, open that message by clicking it and then click **reply** and write you feedback and **send** it.

If there is a new messages in some discussion you can see a "**smiling face**" on the upper right side of main page. To read the message you can click the smiley or go to **discussions** from upper left side of the page and then select the title and so on. All new message titles are coloured red and you can read it by clicking the title/headline. If

those are not interesting select **mark group as read**. Then you always see if there are new messages. This also means, that it is easier to follow the conversation and afterwards maybe find one specific message by its title if you remember to write a new title that tells the main thing to every message.

Discussion is the best place to have meetings if you don't see the others face to face; there will be a memo written at the same time. After discussion you can select **list all messages** and you can print a memo out. While active "chatting" in the discussion part you need to update the page from time to time to see the new messages that the other members have written. You can do that by selecting **refresh** from the top of the page.

### Publications

Publications is the real working environment in verkkosalkku. In publications every part of Verkkosalkku is connected together. There you can add files, make discussions and give feedback etc. Other parts of Verkkosalkku are made to support products that you do there.

First you can select publications from the upper left side of the main page and select your title, **or** there is your group's publications mentioned on the main page and there is a link to your page. In the first page of publication you can make a structure of your work; main titles and subtitles and there is always a link to that part of those pages. In those pages you can add files and under page there is a place for discussions and feedback which is working like normal discussion.

### Create your own publications

Verkkosalkku administer will create your group's publication. He will also give different kinds of rights to use the page (reader, editor, owner). Reader is capable to read the page and make some comments there. Editor can add files and work in there and owner can fix also pages structure.

In the front page you can start to create your own pages. On the first page might be the members of your group and a short description of your work. To start select **edit** on top of the page. First you can give a **name** for the page and then give some **description**. Then click **replace**.

You can make a new page by selecting **new chapter**. Then **name** it and write the **description**. You can/must select the place for it (before, after, master-chapter, subchapter). Then **save new**. If everything went well you can see that there is a new title in the right side of the page. A new one you can create by **clearing** the page and doing this all from start. When you are ready you can look at you results by selecting **preview**.

# Files in publications

First select **edit** an then the right chapter. Click **attachment**. First you can select the place for a icon of your file. Clearest might be the left side of the text and a icon with name. Then you can **upload the file**. First selaa (browse) and you can select the file, then **open** it and **add**. When you want to take a look at the file just click the icon on that chapter.

# New in publications

New publications you can see when you open your group's front pages: if there is something new there is red "**dp**" after that title. Then you can click that title and read what it is.

A good way to operate there is to leave a short note in the discussions on the bottom of the page every time when you visit the publications. A little difference in these page's discussions is that there you can send a note in Verkkosalkku mail and trough that to the contacted person's email to tell that there is something new. When the person is coming to that page he/she can read what you have done in the discussions.

### Meeting 9th Nov 2005 4pm (5pm ft)

#### austrian situation - Erwin Gierzinger (9.11. 13:12)

first of all: sorry that I cant be in the meeting at 4pm. like I expected, something urgent has come across that, but in this week my schedule is really, really tight, so I had to use that hour. I will try to join, but Im not sure.

Partners: We will do an exchange with Valle School from Norway. There are some dtails still to discuss, but they will be the best partner for us. If they join the Barneveld meeting, is not sure yet.

Ursprung tasks: PBL summary has to be finished (include videos,..) and will be ready presented in Barneveld. Database with farms includes 15 farms at the moment and will include the 20 farms we decided on at the end of november.

There is a new teacher in the project: Renate Sommer is joining the team. You will get to know her in Barneveld. Leo is still in but with lower input.

Dissemination: we have published NASEK quite heavily (newspaper and radio in Austria, presentation for other austrian schools and at one european meeting in Poland, report in a dutch pedagogical magazine (together with harm) about PBL,..)

We have enough students for the exchange. Teresa Bauer will be some kind of link between teachers and students in the coming exchange.

Financing for the students exchange is working well. Financing NASEK I have still some uncertainties (Maybe we make this a task in Holland with Douwe)

So far the austrian situation.

erwin

# 1§ Present - Tero Kanala (9.11. 17:03)

Welcome to this meeting about our final project and plans about it. I have to that Erwin that he send all the information to us so we can make plans more to the future. He said as you see that he might not be present but I hope that he have time to say his opinion also.

Meeting started 16.02

I want to know who is present.

Tero Kanala

1§ Present - Teresa Bauer (9.11. 17:04)

me

#### 1§ Present - Harm Holleman (9.11. 17:05)

And I am too!

Harm

#### 1§ Present - Harm Holleman (9.11. 17:24)

Hello Teresa,

Nice to see that you are still in the project!

Heard that you were in Poland too!

We will write again in the future, now I am getting total freaked out by all these messages!

1§ Present - Teresa Bauer (9.11. 17:27)

of course i am still in the project...

I had to make a presentation about nasek and our school in poland, that's why i have been there too...

hard to keep controll, i know... but you just need enough practice ;o)

"..need enaugh practise?" - Inka Luhtala (9.11. 17:31) 😉

Where on earth have you been practising? :)

"..need enaugh practise?" - Teresa Bauer (9.11. 17:32)

did you forget our discussions in spring?? 300 messages and more in one evening?

"..need enaugh practise?" - Inka Luhtala (9.11. 17:34) 😉

Yes, and I still think that you have it the hard way (on the screen)! But back to business now...

#### 1§ Present - Petri Kainulainen (9.11. 17:05)

Petri is here.

Me too - Hannu Viitala (9.11. 17:05)

represent Finland

#### 1§ Present - Inka Luhtala (9.11. 17:05)

I made it! And I'm using Johanna's pc, so perhaps I manage to keep the connection for more than 2 minutes...

#### 1§ Present - Teresa Bauer (9.11. 17:06)

good job, inka ;o)

#### 1§ Present - Renate Sommer (9.11. 17:08)

Hi Tero, my name is Renate. I am new. Im going to work with Theresa and Erwin.

#### Welcome to Nasek, Renate - Hannu Viitala (9.11. 17:10)

I hope you will enjoy to work with us!

#### Welcome to Nasek, Renate - Renate Sommer (9.11. 17:11)

I am sure, i will.

#### Welcome aboard! - Inka Luhtala (9.11. 17:12)

Nice to meet you here!

#### 1§ Present - Harm Holleman (9.11. 17:23)

Welcome Renate,

Nice to see new people are coming in!~

I am looking forward to meet you in end of november!

You notice in this board that there are still a lot of questions!

Good luck and maybe we can meet in Verkkosalkku at a more quiet time?!

# 2§ Where are we now. - Tero Kanala (9.11. 17:06) 😯

I can say that in our part I have sent the chapter yesterday. Hope that you have had time to read it. With theory part that is where we are now. Inka is busy with the Finnish students to collect money.

# Project going quite well - Hannu Viitala (9.11. 17:08) 😏

1)New students have selected and they already earn money to finance they trip. This work is organized by Inka.

2)The plan of how to use web (verkkosalkku and web-tool) is quite far now. This work is organized by Tero.

3)It is now possible to do different language versions to Nasekoutcomes.net. Also Virtual Headquarter have own site (nasek.net) ready to use. This work is organized by Hannu.

4) Dissemination plan is made by Kirsi and Mirva (our students). They were already start to actualize it.

5)New partner: We still try to get answer from Italy. It seems quite good so far (but maybe next round 2007). We gave up with Creech, because it wasn't right type of school to our project.

maybe I forget somethung?

#### Project going quite well - Teresa Bauer (9.11. 17:10)

Norway seems to be quite sure... good news for us

#### Great job Austria! - Hannu Viitala (9.11. 17:12) 😏

To get a new member is very valuable for Nasek

### 2§ Where are we now. - Inka Luhtala (9.11. 17:17)

I still didn't have too much time to look at it, but so far looks very good. (Busy with a lot of other things, too :))

We are planning the student financing here; so far they want to arrange a children's disco, wrap packages and play mr. and mrs. Santa in shops before Christmas. I'm a little afraid that the disco thing won't be a big success, but the students are really inthusiastic, so we'll see. Maybe I'm wrong and it's a good thing.

Our (Tero and me) own trip financing is still frozen... Brainstorm going on all the time.

#### 2§ Where are we now. - Teresa Bauer (9.11. 17:19)

I think you will manage to come with Tero ;o)

#### 2§ Where are we now. - Tero Kanala (9.11. 17:20)

I think it will be ok.

3§ Plans for the final project. Schedule. - Tero Kanala (9.11. 17:09)

Main think that I want to know what is situation with the partners. So we can make plan for future with Inka. Trip schedule and so on. I heard that Erwin has already certain partner and I have to say congratulations.

I hope that there will be good news from other also.

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:11)

We had a small meeting today and worked out the shedule for next week (selection of the students) I will tell you (tero) more about it later on...

#### 3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:13)

So I am still busy with Ireland! In the first place they are very enthousiastic, but it is a lot of work and organisation to put this project in this running year! After they told me to have interest in 2007, I was disappointed! So I wrote them that! Now they are reconsidering! And we are wiating again!

Nevertheless, if we do not succeed, We will do the exchange with Finland, of course only in that case that they also did not find a partner!

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:14)

I hope you will have luck... Ireland sounds interesting...

# 3§ Plans for the final project. Schedule. - Petri Kainulainen (9.11. 17:15) 💙

And what if there is only one how can't get a partner?

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:16)

good question

#### 3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:16)

That will be a problem! Don't forget Finland is in with 2 organisations? Maybe there are possibilities? If that is not possible, we have to continue searching! And we have to help each other!

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:18)

What about this second school in the netherlands we "discovered" in Polen?

# new partner - Hannu Viitala (9.11. 17:19) 😌

I think it is better enlage with one new partner then zero

#### Only one without a partner... - Inka Luhtala (9.11. 17:20)

That's what I was thinking about, too.

#### We will happily do exchange with you - Hannu Viitala (9.11. 17:16)

We still try to get answer from Italy. It seems quite good so far (but maybe next round 2007). We gave up with Creech, because it wasn't right type of school to our project.

#### 3§ Plans for the final project. Schedule. - Tero Kanala (9.11. 17:23)

If there is only one sure partner it is hard to make plans for our teaching trip. Those plans should be ready in that meeting here in Holland so we would have time to do that before christmas.

I start to be on Hannus side on that we do that on January. Then there is more time to find financing for us.

#### 3§ Plans for the final project. Schedule. - Inka Luhtala (9.11. 17:25)

Just mentioning, but it would be even a little easier to find the financing, if we knew where we should be going to... :)

#### 3§ Plans for the final project. Schedule. - Petri Kainulainen (9.11. 17:26)

So, should we agree a deadline for parnter search? Or has that been agreed already?

#### 3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:29)

Yes we have to agree a partner deadline! In my mind 15 november is popping up? Do you agree?

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:31)

quite soon in my opinion, but also necassery...

no idea about erwins opinion...

# 3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:35) 😮

I think Erwin has a partner!? So no problems about the deadline partner search?!

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:37)

still not for 100%

i thought it would be better to have the same deadline for all, that's all

# 3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:41) 😵

Allright! Now I know exactly your status quo! So inform Erwin about this Deadline, if he does not agree, I will hear it!

We can change anyway!

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:42)

changing a deadline?? why is it a deadline then?? ;o)

#### 3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:49)

This deadline! It is a changing deadline, because a lot of energy is put in the new contacts! So if we are too strict with it some of us can get nervous! That is not the wy to work. So to keep everybody happy, we have be flexibel!

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:51)

sure... but there has to be an end someday... a real end. Otherwise it is too difficult to discuss and organise things (for tero and inka and also for everyone else)... I think it should be clear at least at your meeting in the netherlands

#### 3§ Plans for the final project. Schedule. - Tero Kanala (9.11. 17:32) 🧼

That will be latist for us to schedule our trip.

# 15 november - Hannu Viitala (9.11. 17:32) 🧼

agree, but Italy get time to answer until 18 november (my fault)

# 15 november - Petri Kainulainen (9.11. 17:33) 词

ok, I got the answer from you at the same time.

#### 15 november - Teresa Bauer (9.11. 17:34)

then it should be 18th in general...

### 18 november? - Inka Luhtala (9.11. 17:38) 🧼

Is it? Ok with me either way.

#### 15 november - Harm Holleman (9.11. 17:36) 🧼

No problem,

We make it 18th of november! I still not offered a deadline! to Ireland!

#### 3§ Plans for the final project. Schedule. - Petri Kainulainen (9.11. 17:32)

Hannu, when we are expecting the Italians to answer?

### 18 november - Hannu Viitala (9.11. 17:34) 😏

I hope they will say yes!

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:25)

as i said, you will have the chance to try it next week... and if there are problems you will have enough time to solve them until january

#### 3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:27)

So as it seems Norway is in! Maybe you start focussing on that!

If Holland will be the partner of Finland, then Tero can take a bigger part for that work (he is already here?)

If Ireland is coming in it is very cheap to fly to Ireland with easy jet! about 100 euro's! So we will find out what to do then!

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:29)

i think Erwin is planning to visit norway and also sign a "treaty" with them..

#### 3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:29)

What is a treaty?

#### 3§ Plans for the final project. Schedule. - Teresa Bauer (9.11. 17:30)

a contract

3§ Plans for the final project. Schedule. - Harm Holleman (9.11. 17:37) 😵

OK Thanks!



Meeting with Inka we last time spoke about task for student before second round is starting.

- PBL task. We want to students know other culture so we were planning something like this. You have fried in X country. You are taking trip to that country and you want to take your friend to dinner. You want to know also hapits of that contry what should you do?

- Learn to use discussion forum. Some kind of presentation to discussions of own countries agriculture. Then other countries will opponent it and hopefully we have discussion where students are asking more details.

- Publications. Inroduce each other. Add pictures and make subpages for hobbies and so on.

#### 4§ PBL and other task for students - Harm Holleman (9.11. 17:18)

Shit, I am getting nervous! So many new messages popping up!

PBL task will be discussed in the meeting of 24th of november! The agricutural part will be discussed! The cultural part is not described yet! But it is a good idea!

# 4§ PBL and other task for students - Tero Kanala (9.11. 17:20) 😒

These are an examples. I wanted to take them us that we can work more on them. I will give you better examples in meeting.

#### 4§ PBL and other task for students - Teresa Bauer (9.11. 17:20)

And you can start to try out your ideas next week

# good idea - Hannu Viitala (9.11. 17:23) 🔍

This is very good idea how to start communicate using Verkkosalkku

#### 5§ Anything else - Tero Kanala (9.11. 17:21)

Is there something that you need the opinion.

#### 5§ Anything else - Teresa Bauer (9.11. 17:22)

seems like you are in a hurry

#### 5§ Anything else - Harm Holleman (9.11. 17:31)

Yeah maybe because it is about me! I have to leave 16.30. I have done a little rescheduling! So have 15 minutes more!

#### 5§ Anything else - Teresa Bauer (9.11. 17:33)

sorry, it was just a joke ...

# 5§ Anything else - Harm Holleman (9.11. 17:34) 😉

I understood!

#### 5§ Anything else - Teresa Bauer (9.11. 17:36)

;0)

# The task for Tero and Inka! - Harm Holleman (9.11. 17:21) 🕐

I have read your report so far!

What I noticed is that you focus on the Nasek project as a total! I hope that Inka and Tero will focus on the e-learning part! With a lot of new members it will be a hard job to discuss, publish things and to be in contact all the time!

So if you focus on that part, you can be a great help, and the new Leonardo da Vinci! Because it is complicated!

In the meeting of 24 th of november I will invite Tero to talk about this problem!

# The task for Tero and Inka! - Petri Kainulainen (9.11. 17:23) 😒

Good point. e-learning is every day life for us. This might not be the case for others.

#### ...invite Tero to talk about this problem - Hannu Viitala (9.11. 17:28)

good

I hope you can organize time enough to this question.

#### The task for Tero and Inka! - Inka Luhtala (9.11. 17:29)

We made a decision that we focus on "improving group work in international project", which actually means that we try to focus on the virtual working by using verkkosalkku and to get the members working together.

Then there also has to be the dull part written, about collaboral learning etc...

# The task for Tero and Inka! - Tero Kanala (9.11. 17:31) 🕑

I will prepare my self for that. I hope that I am not going to take too big part on my work. Somehow I wanted to find solutions near thats why I try to use methods that it is already there and dent need to chance everything.

### The task for Tero and Inka! - Harm Holleman (9.11. 17:34) 😉

I understand that!

But PBL is our part, we as teachers have to describe an define those problems! E-learning is abigger problem, due to our experiences with these systems! Inka and You and Teresa are really good with that! So don't do too much work but focus on that what is really necessary!! We can provide all site information for you Thesis! (The use of e-learning with PBL tasks, with exchanges etc. etc.)

# The task for Tero and Inka! - Inka Luhtala (9.11. 17:36) 😉

Ok, we start again.

The task for Tero and Inka! - Harm Holleman (9.11. 17:38)

How do you mean?

I discussed with Tero for more then an hour about what do focus on in you thesis!

It is only to save you some "double" work

#### The task for Tero and Inka! - Inka Luhtala (9.11. 17:39)

Just kidding, I got it. And I remember the meeting you had with him.

# Thesis focusing - Hannu Viitala (9.11. 17:42)

Harm's adwise will be help your work!

#### Thesis focusing - Inka Luhtala (9.11. 17:43)

I know. And we will use it.

#### The task for Tero and Inka! - Tero Kanala (9.11. 17:42)

This PBL thing came up when I look for information to background information. There was good results of that kind of working trough internet. So it was an Idea.

#### The task for Tero and Inka! - Petri Kainulainen (9.11. 17:44)

And it's a good idea. Don't hesitate to give those ideas although they are not the main focus of your thesis.

#### The task for Tero and Inka! - Teresa Bauer (9.11. 17:45)

but maybe they can help in the process of teaching e-learning...

#### § 5 anything else - Teresa Bauer (9.11. 17:35)

Just a little question for Harm and i hope you are not too busy...

Do you think you can write the introduction of the netherlands? i think it would be important for the new partners and it is also a bad reputation if there is nothing from your country

i hope you don't mind

#### § 5 anything else - Harm Holleman (9.11. 17:40)

You are right! I had to do it anyway! As a matter of fact I did!

I think it is files already!

I will check it tomorrow! I know I have been busy on that!

But it is sometime ago, so getting older!!! You know what I mean, or is it the alcohol

#### § 5 anything else - Teresa Bauer (9.11. 17:41)

i never saw anything in files... but if i find it i will put it in the webpage tonight, otherwise when i get it

# § 5 anything else - Harm Holleman (9.11. 17:42) 🕐

Can be that I send it only to web-master!

#### § 5 anything else - Teresa Bauer (9.11. 17:43)

Hannu?? do you have it?

# No files - Hannu Viitala (9.11. 17:46) 🕑

I just check.

Harm, could you send it again!

No files - Harm Holleman (9.11. 17:47) 🔫

I will, I am sure I have been busy with that! So end of this week it will be in files!

No files - Teresa Bauer (9.11. 17:47)

thanks

If you put it that way... - Inka Luhtala (9.11. 17:42) 😂

...which do you think?

Summary - Tero Kanala (9.11. 17:36) 😏

Partner search end 15 th Nov. Exept Italia have tiime until 18th.

Erwin has a partner in Norway.

More discussions about our final project in meeting end of November.

Summary - Tero Kanala (9.11. 17:38)

Time for partner search until 18th.

# Summary - Harm Holleman (9.11. 17:44) 😉

Thanks Tero,

This meeting seems to be necessary! It is good to see everbody is involved! Tomorrow afternoon I will open discussion forum again. So then the hotest questions we can discuss again!

Everybody thanks! And we will meet again

Harm

Thank you! - Inka Luhtala (9.11. 17:45)

We'll see again.

Summary - Tero Kanala (9.11. 17:45) 😏

Thanks. I will print ou the memo and sent it to you also you can read from hear.

Summary - Petri Kainulainen (9.11. 17:46) 🧼

Thanks. It was a good meeting.

# Than you all - Hannu Viitala (9.11. 17:47) 🧼

This was something!

### Summary - Teresa Bauer (9.11. 17:47)

bye, bye... i hope you will get a partner soon

I think we start to be done. - Tero Kanala (9.11. 17:47) 📀

Is there something that you want to discuss?

# I think we start to be done. - Teresa Bauer (9.11. 17:48)

only about next week, but this can also wait ...

### I think we start to be done. - Tero Kanala (9.11. 17:48)

I think we can discus detail after this?

### I think we start to be done. - Teresa Bauer (9.11. 17:49)

if you have time, no problem...

#### Yes... - Inka Luhtala (9.11. 17:48)

I think so. What about the others?

# Thanks for everyone... - Tero Kanala (9.11. 17:53) 🍊

I end up the meeting 16.51

Verkkosalkku / 3. SAVONIA-AMK:N PROJEKTIT JA HANKKEET / Iisalmen yksikkö / Tulosalueen Kv-toiminta / KV-projektit / NASEK 2006

[Saamani viestit] [Näytä muut vastaanottajat]

Feedback

Bauer, Theresa - 24.4. 15:03

All in all I think that it has been a nice project again. Students learned a lot about their topic and about the other country. They also met new people and had a lot of fun with each other. The topic was much more complicated compared to the last one and the students were from lower grades, so it was quite hard for them to get work started. Thereby it was quite interesting to watch the different ways of the group members to get in touch with the topic. Some people discussed a lot and asked the teachers, others were searching for information in books or in the internet. In the end all of them managed pretty well.

Communication in the groups has been very good. In the beginning we had some difficulties in some groups ("shy" people), but we managed quite fast. Another problem was the couple in one group, because they spent most of the time otherwise than supposed and the other group members were quite annoyed and that also had an affect on the communication.

In my opinion the biggest problem during the exchange was the communication between the groups. Especially in the first two weeks, because our students didn't hear much from the finish/ dutch group at all. Later we discovered that a car accident was the issue, but then it was already too late because our students where quite annoyed and disappointed. And this mood was noticeable until the end of the project and even longer and I think the final results have suffered because of this too.

Especially the last few days of the project were very hard for some of our students. In most groups our students (Austrian + Norwegian) did most of the work on the webpage. They were waiting all the time for the promised parts of the opponent group but there was nearly nothing coming. And since we stopped working on Friday instead of Wednesday, they were afraid, that their webpage won't get finished and that their texts get changed. It would have been better if all had sticked to the agreement that those who work until Wednesday tell the others exactly what their plans are and ask if they are ok for them and also deliver the promised texts, information,. in time.

In our final meeting last week students told us that they liked the project and many of them want to do such an exchange again. But most of them are not very happy about the webpage, because there are some changes of the structure and of their texts without their agreement and they also miss some of their parts.

So communication between the groups is the point which has to be improved most. The English-skills of the students is another point. There is not much that could be done about that, except maybe providing dictionaries (agricultural!) and the needed vocabulary. But teachers or students with better English should correct the texts before showing them to other groups. Also the content and information should have been checked before publishing the texts. Quite a lot of misunderstandings could have been avoided by that.

Still I think that the results are satisfying and that we all had a good time. For me it has been very interesting to see the same kind of project from different points of view and so I also learned a lot about group dynamics, organisation and also about myself.

Thanks a lot for everything and regards from Austria,

Theresa













# APPENDIX 7 2/(3)













APPENDIX 7 3/(3)





















# Comments.

- All pares make their notes to Verkkosalkku in discussion forum
- I expect some questions from each notes
- You will get feedback from them



# Work in NASEK-project

Tero Kanala & Inka Luhtala Savonia university



- Define the problem
- Un build it to small things
  - Make connections
  - Collect exist information
  - Leave out unimportant things
  - Analyse information
  - Search more connections
- Build new information



- Read the new information

   Analyse it
  - Other point of view
     International/Another group
  - Make questions
- More interest on topic
- Worker get questions
- Analyse them
- Rebuild the answer
- Make changes
- Define the problem again
- Gives time to analyse things again



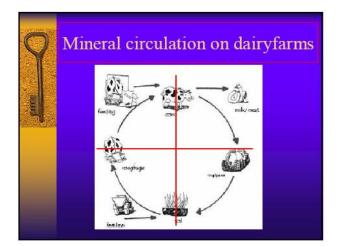
# Collaboration

- Define problem
- Share it to small peaces
- Rebuild it again
  - Use new information
  - Make connections
- New information
- ♦ NASEK
  - Excursions
  - Via internet
    international



# Verkkosalkku

- Place to share information
- ♦ Tools to solve problems
  - Discussions
  - Meetings
- Storage information





#### ♦ First step

 Clarifying the concept. In that time students need to make clear what the topic is about. Then usually needed to clear up the strange words and concepts. That time students make them own picture about the scenario and their opinions also.

# PBL

#### ♦ Second step

 Define the problem. In this period students start to thinking what are the problems on this scenario. This period should not be too long that problems are too complicated at the beguining. This also shows the level of knowledge that group has.

### PBL

#### Third step

- Analyse the problem/brainstorming. In this period students are collecting together things what is includet the scenarios. Usually it is list of words and small sentences which are called concrete's. In this time every little thing is useful that students can think. This is about what students know about and in shord period there will be only their thoughts. In this moment it is nessessary to make new information.

# PBL

#### ♦ Fourth step

Problem analysis/systematic classification. In this period students need to collect information together that they define in the second step. When students are analysing things they need to put together context and create the ways to look for new information and make questions to solve. In this period is also useful to make questions if someone doesn't understand something. Result of this is usually mind map or that is easiest way to but all thoughts together

# PBL

### ♦ Fifth step

Formulating the learning objectives. In this step students need dignified what they already know and what they need to search. They need to make questions or topics that they need to work on. It is sometimes hard and sometimes it is useful for outsider/tutor to help them. He/she shouldn't make the questions but help them to find those. Questions and topics should be clear and all the terms had to be understandable.



### ♦ Sixth step

- Self study. During this time students are working by them self or with the group. Best way is to find their own sources but tutors can give them tips also. It is important that student can evaluate the trustable of their sources. **PBL** 

### ♦ Seventh and last step

 Reporting. Reporting might be presentation or report. Most important is that group has find solution for questions that they have made by them self also there have to be connection to the scenario that they have made. It is important that there is also evaluation of the group work. Reporting can be the final product or just assessment for second round to go deeper in subject. Problem Based Learning exercise

# Background story

Raimo is a farmer from North-Savo. He owns a dairy cattle farm, where he also breeds his own bulls. Raimo's wife Pirkko, has a small scale horse stable. They have two children a boy Taisto and a girl Tuulikki. Taisto has done his practical training in the Netherlands. Tuulikki is interested in horses. Raimo's hobbies are hunting and fishing.

# Exercises

1. Raimo is willing to buy a breeding animal to his farm/ for his hobby. He would like to have it from Holland and he is going pick it up by himself...

2. Raimo's son is in love with a Dutch girl, Daphne. Daphne's parents have a farm and they are retiring. Taisto wants to move to Holland and start farming with Daphne...

3. Raimo's daughter Tuulikki wants to go to ERASMUS-exchange next winter...

# Timetable

Tuesday 24.1. 14.30-17.00 Start and instruction

\_\_\_\_\_ Presentations of product

Other meetings group will decide themselves

# **Instruction**

First choose the role in group (chairman, secretary and observer)

Then star to work in this order

- 1. Clarifying concepts
- 2. Defining the problem
- 3. Analysing the problem / brainstorming
- 4. Problem analysis / systematic classification
- 5. Formulating learning objectives

(If it's necessary tutor give you instruction how to work and tutor will explain meaning of terms)

After this decide in group how work will continue (where and when)

# MEETING IN VERKKOSALKKU ABOUT WEBPAGE (content and structure)

Date: 31<sup>st</sup> of March 2006 3.00PM Place: vs.savonia-amk.fi > NASEK 2006 > discussions Invited: Group **x**, tutors Chairman: Tero Kanala Inka Luhtala

# Agenda:

- 1. Opening of the meeting
  - ü Presence
- 2. Where are we now?
  - Ü What is done, what is missing?
- 3. Structure of the page
  - ü Subtopics
  - ü Content of the subtopics
  - Ü Links to the other groups
- 4. Any other business
- 5. Ending of the meeting

Tero Kanala ja Inka Luhtala

# INSTRUCTIONS FOR THE STUDENTS

This meeting is similar to the previous one (the one we had about defining the problem in the beginning); the idea is to combine the whole group's (half in Norway and another half in the Netherlands) work to achieve one total outcome that is easy to read and understand and that the students find interesting and useful.

Once again in the both countries one of the group is taking part to the meeting and the other members follow the discussion. This means that one of the group is sitting at a computer and typing the whole group's comments into Verkkosalkku. When you discuss about the links to the other groups' it must happen face to face by going to ask from them. Don't interrupt other groups' meetings or write comments into them!

The tutors are present to see how you're doing and to guide if it is needed. They are not there to give you any answers, but to help you to solve misunderstandings and to give another opinion if you need it. Tero and Inka are going to be the chairmen and they will open the meeting and keep it in schedule. Every group will have at least one tutor, either in Norway or the Netherlands or in both countries.

# INSTRUCTIONS FOR THE TUTORS

The tutor's role is mainly to follow the meeting and be there to give some guidance if it is needed. The biggest issue is to prevent misunderstandings (for example with language and culture) and keep the conversation "focused on the task". In case of arguments the tutor or the chairman may ask the group to change their "secretary" if he/she is causing arguments and not listening to the other group members (via Verkkosalkku and in the classroom). Tutor's job is to guide with questions and by cheering feedback. When the meeting is making progress the tutor can help the group (and the chairman) to collect the basic issues together into one total content. A good tutor guides with positive feedback (and questions) and doesn't destroy the creativeness with negative issues.

# Web page meetin Group 4

# hello there - Group from Finland and Holland (FINL) (31.3. 15:58)

hello there are you all again?

we know we are..... xxxxxxx us

start??? - FINL (31.3. 15:58) 😉

hello

## 1- presence – Group from Norway and Austria (NOA) (31.3. 16:00)

we are here too!

welcome - FINL (31.3. 16:01)

ok very nice that you are here too. lets discuss

### welcome - FINL (31.3. 16:01)

ok very nice that you are here too. lets discuss

### 2. where are we now? - NOA (31.3. 16:03)

so what about: -What is done, what is missing?

# 2. where are we now? - TUTOR (31.3. 16:03) 😉

Could you wait for the chairman ...?

# 2. where are we now? - FINL (31.3. 16:04)

no

### 2. where are we now? - FINL (31.3. 16:04)

from our sigt: the finnish part is done, the dutch part is missing.

## 2. where are we now? - NOA (31.3. 16:07)

we have to finish the countries, there is also worke left on the food rations, and maybe if there is some time left some other diseases...

### where are we now? - FINL (31.3. 16:09)

the rations is not ready, we agree, but we think that the stuff you put on cancentrates is not neccecary, to many figures!!! I go crazy only looking at it

where are we now? - FINL (31.3. 16:10)

I mean that farmers can get that information out of books

### where are we now? - FINL (31.3. 16:12)

if you really want to show that information, link it to others sites, but please don't publish it on our site

### where are we now? - NOA (31.3. 16:12)

Ok it's true that a farmer can get informations out of books... but we think it's only a subpage...

where are we now? - FINL (31.3. 16:13)

the name subpage doesn't make it any less important

### where are we now? - NOA (31.3. 16:13)

Ok but it's our page too... and we think it's an important information

### where are we now? - FINL (31.3. 16:14)

than link it to an other page

```
where are we now? - NOA (31.3. 16:16)
```

if you can tell me a page that contains that in english I'll...

### where are we now? - NOA (31.3. 16:15)

we tried to write only the most important feeds...

#### where are we now? - FINL (31.3. 16:16)

yes you did a good job with the grass and maize, but nowone wants to take a look at al those figures that you put on under concentrate

# where are we now? - Tutor (31.3. 16:16) 🕐

Is the title's question clear for both of the groups now? The content is coming up next and we can go to that if it's clear already.

## where are we now? - NOA (31.3. 16:17)

no we don't know what should be in productions...

where are we now? - Tutor (31.3. 16:19)

The next issue is the planning, but have you updated the group of your work for now?

## where are we now? - FINL (31.3. 16:22)

lets first end the one discusion, than continue the next discussion

### where are we now? - FINL (31.3. 16:19)

we think that in productions should be the average production from the countries and the percentages fat and protein, so people can easily compare it

# 1. Starting the meeting - Tutor(31.3. 16:00)

Hello everyone and welcome to the web meeting about the web pages.

Who is present?

1. presence - NOA (31.3. 16:01)

the austrians and norwegians are here!

Tutor - Tutor (31.3. 16:04) 😎

Hannu is here as a role of tutor

# Who is here fron the Dutch? - Tutor (31.3. 16:04)

Who is typing? Just one, please ...

Who is here fron the Dutch? - FINL (31.3. 16:05)

only I am typing

Who is here fron the Dutch? - FINL (31.3. 16:06)

oke

Who is here fron the Dutch? - Tutor (31.3. 16:09)

Thank you

## 2. Where are we now? - Tutor(31.3. 16:06)

Ok, let's hear it :)

# 3. The structure of the page - Tutor (31.3. 16:18)

the subtopics, content etc...

I see you already talk about this, so please continue

## 3. The structure of the page - NOA(31.3. 16:19)

of course... we don't know what to do in production... maybe we can skip that point and write about it in "comparing countries"

# 3. The structure of the page - FINL (31.3. 16:21)

no we think that we must put it in it, and than put the biggest comparences in comparing countries

### The structure of the page - NOA (31.3. 16:22)

to write about productions in comparing countries is ok... but it contains many numbers... i hope you don't go cracy ;o)

## The structure of the page - FINL (31.3. 16:24)

we have to make the amount of numbers as less of numbers, and for example concentrates is science

## The structure of the page - NOA (31.3. 16:27)

contents of concentrates are no science... it's important to know what is in the food to make right feeding...

but what would you have on the webpage? (practical information)

### The structure of the page - FINL (31.3. 16:31)

there, you said it yourself, practical information. we are only trying to say that the information has to be practical, use only numbers as proof or to make something clear. in the end it all goes about comparisation

### The structure of the page - NOA (31.3. 16:32)

but why is a comparison practical information?

### The structure of the page - NOA (31.3. 16:34)

We don't really know what you want to put on the page...

can you please send us some texts you wrote... so that we can see what practical information means?

### The structure of the page - FINL(31.3. 16:37)

than we have translate the information, because we only have it in dutch and you don't understand dutch so well, I think

### The structure of the page - NOA (31.3. 16:38)

ok but you'll have to translate it if you want to put it on the webpage too ...

### The structure of the page - FINL (31.3. 16:43)

duh..... we have this information received this day, so we didn't have a lot of time for some good translation

### The structure of the page - NOA (31.3. 16:46)

it's ok but is all you want to do comparing countries?

#### The structure of the page - FINL (31.3. 16:48)

koos is making a explanation in files right now

### The structure of the page - FINL (31.3. 16:51)

its there

## The structure of the page - NOA (31.3. 16:56)

...you want to write a text about each farm?

### The structure of the page - FINL (31.3. 16:58)

no, only the most interesting habbits of farmers in the different countries, so it sets farmers who visit the site to think

# The structure of the page - NOA (31.3. 17:02)

so you want to find out the most interesting habbits from farmers of a whole country?

how?

### The structure of the page - FINL (31.3. 16:35)

no you don't understand, we have to compare the information, we don't have to make the comparisation practical. the consumer has to make the comparisation by itself, it has to go naturel

## The structure of the page - NOA (31.3. 16:37)

We are not sure why a user want's to make a comparisation ??

## The structure of the page - FINL (31.3. 16:42)

maybe he doesn't want to, it goes by itself

if he looks at different way of working, than he also can see the different results and than we have to explain or find out why does a farmer get by "this" kind of working these results and why does a other farmer it a completely different way and almost gets the same results

understand what I mean?

## The structure of the page - NOA (31.3. 16:45)

but why ist that practical information?

## The structure of the page - FINL (31.3. 16:47)

please wait one minute, koos will put some of it in files

### 4. Skipping this issue - Tutor (31.3. 17:02)

Running out of time

### 4. Skipping this issue - FINL (31.3. 17:02)

so we have to stop, we will contineu later seeya!!!

### 4. Skipping this issue - NOA (31.3. 17:03)

we won't continue

## 4. Skipping this issue - FINL (31.3. 17:04)

than I wish you a nice weekend

# 5. Ending of the meeting - Tutor (31.3. 17:05) 🥌

We have to end this for now. Let's think about this for a while and find the compromizes another time.

You are still making progress, even if it doesn't feel like it.

Thank you everyone and for your patiense.

# 5. Ending of the meeting - FINL (31.3. 17:06)

Ok so have a nice weekend, don't too much beer, and when you go to sleep, keep your hands above the sheets

# 6. After thinking about it. - FINLel (3.4. 12:28) 😂

Hello our frends

How was your weekend? Saterday the finnich studends have work on the dutch farms. it was very nice and intresting for them. in the evening we have been to a party it was a lot of fun there.

Sunday I was reading the discusion again and I discoffert that we are still not on the same line. The gaols are not the same yet. We have to compromizes them. Atherwize we can't make a good web-page.

I hope you understand my explainasian in files :-)

maybe we have to talk it over again. But I don't know when. But place when you read this. respond

When we have new information we will put them in files.

Tomorrow we go to research farm so we'll get a lot of information from there.

today we try to work on the web-page and stuff like that. And prepare questions for tomorrow.

so speak to you soon.

bye bye whit gredings

Structure of webpages - FINL (3.4. 12:29) 😉

We were also thinking that is it possible to do own page for every disease? Then we would have subtitles under the health too?

Greetings from Holland!

# Structure of webpages - FINL (3.4. 12:31) 😉

We were also thinking that is it possible to do own page for every disease? Then we would have subtitles under the health too?

Greetings from Holland!

????:??? - FINL (3.4. 15:27)

what do you mean on the web-page whit 6541 kg milk per year is tis in 365 days???

ore in 305???

# Structure of webpages - NOA (4.4. 10:41)

we think we don't need a subpage for the diseases... we are not sure what would be better if we use subpages...

Structure of webpages - NOA (4.4. 13:29)

We think that in production we should write about the lactation duration.. and what a cow needs to produce 1I milk and so on.... and than set links to comparing the countries...

ist that ok?

# Structure of webpages - FINL (5.4. 10:30) 😑

Sounds nice! Today we have a phonemeeting and then we can speak more about structure of webpages.

Greetings from Holland, sun is shining :>

# Structure of webpages - FINL (5.4. 10:35)

yeah i already put in some links Maybe you seen them but you can put in some more if you think its handy

# Finland page - FINL (5.4. 11:52) 🔒

We made some changes to the Finland page (because there was wrong information) and we are also going to write something about "quality of roughage" to the Finland page, after that we hope that it's ready :)

The phonemeeting starts one o'clock and after that we will be smarter :)

Greetings!

Tero Kanala Inka Luhtala NASEK-project INSTRUCTIONS 3<sup>rd</sup> of March 2006

# Choosing the topic

Since groups don't have the clear topic they need to decide it on first day of the project. Meeting in Holland was agreement that students will choose their on topic from the part of the circle that they have choose earlier. Since delay of the Norwegians "coming on board", choice haven't bee done so Harm, Hannu and Tero were thinking to make that choice on first or second day of the project. (Wednesday 8<sup>th</sup> of March or Thursday 9<sup>th</sup> of March).

Best way to do it is meeting in Verkkosalkku. First groups have to choose one or two topics in both countries and prepare for them short preview for the meeting. Meeting will be on that time that each country leader have select for suitable time on their schedule.

Tero will open discussion forum for each group in Verkkosalkku and make the agenda. He will also start the meeting for each group and after that tutors who are in Finland will continue to lead the meeting. Also tutor from Austria are going to take part. In both countries group use one computer. Purpose for this meeting will be to make choice for the topic and explain that to their group and give feedback.

Chairman will open each part of the agenda after that question is open. Meeting will end after everybody agree that. Chat is usefull if something need to be explained or there is other business outside of the meeting.

Next days students can work on their topic tested that on farm visits. In Finland groups will make short presentation about their topic, subtopics, questions for the farmers, regulation... They will keep short presentation about that for other groups and they will evaluate that with the tutors. In special role on that has groups own tutor and selected opponent group who are going to read their preparation before presentation. They can

make successions to improve the work. Groups need to analyze the feedback before week end.

Group X NASEK-project AGENDA 3<sup>rd</sup> of March 2006

Subject: Select the topic Time: 8<sup>th</sup> of March 2006 Place: vs.savonia-amk.fi/discussions/Topic meeting group X Invited: Group X, tutors Chairman: Tero Kanala

# AGENDA

- 1§ Open the meeting
- 2§ Give place of chairman to groups tutor
- 3§ Topic suggestion for the project
  - -Short preview about the topic/why this?
- 4§ New chairman for the group
- 5§ Other business
- 6§ End of the meeting

Tero Kanala Chairman

# Topic meeting, Group2 (Manure-Soil)

# 1§ Opening of the meeting - Tutor(9.3. 10:00)

Hello Austria and Finland... Now the action will start. Who we have present here...

Your chair man Tero Kanala

# Meeting in Verkkosalkku start now! - Tutor (9.3. 10:59)

Time is in Austria 10 o'clock and in Finland 11 o'clock

# ok – Group from Norway and Austria (NOA) (9.3. 11:00) 🥯

okay...let's go!!!

Welcome to meeting. Who are present here? - Tutor (9.3. 11:02) 😲

Welcome to meeting. Who are present here?

### Welcome to meeting. Who are present here? - NOA (9.3. 11:04)

Norwegians in Austria: Harald Björnstad, Sveinung Andreas Elde Austrians: Katja Bachler, Lukas Eberharter, Sebastian Herzog

### Welcome to meeting. Who are present here? - Group from Finland and Holland (FINL)(9.3. 11:05)

Hello,

We are Kaisa Finnilä, Rutger Roseboom and Floor Zijderveld We stay now in Finland. Katja isn't now here, she is at home. She live 350 km away. Next week she will come to school and will help us.

At the first we have (Rutger and Floor) visit a farm for one week. it's a beefcows farm with 24 cows and 13 calves. Now it's holyday for the finish students. Only they are so good, she will come special for nasek to school.

Ok. It's the first time that we have a meeting in nasek-site. And we hope that will give no problems.

### Topic - FINL (9.3. 11:10)

We have two good topics,

How we storage manure and manuring in different countries. That we don't lost minerals?

second one

How much you use manure or fertilizer per hectare and how many times you manuring and fertilizing?

What they thing from this topic??

Gr Finland

# Topic - Tutor (9.3. 11:11)

CAn you tell little bit more what you want under those headlines...

## 3§ Topic suggestions for the project - Tutor (9.3. 11:06)

-A short preview about the topic/why this?

# 3§ Topic suggestions for the project - NOA (9.3. 11:11)

The topic is about manure and soil and everything between that. Important here are the looses of nutrients you have. Also the possibilities to bring the manure on the field are important for this topic.

we are all interested in this topic and we hope to have a lot of fun!!

## a few ideas for the topic - NOA (9.3. 11:12)

So...I think it's important to look at the looses of nutrients and the influence microorganism for the manure and the soil have!!! How can gaseous emissions be minimized? How can you avoid run off during storage and after spreading? How can nutrients get into the soil?? What kind of fertilizers are there? What are the positive and what are the negative effects of the fertilizers?? How can you improve the quality of slurry?

What possibilities are there to bring the manure on the field?? How can we avoid leaching of nutrients??

Think of different systems... for instance injectors (you loose far less as when you are spreading the manure)



Also outside of the agriculture...Importand in all areas...

What are the positive and what are the negative effects of the fertilizers??

Hot topic... - NOA (9.3. 11:15) 🕐

you mean topics like ground water pollution and so on??

Hot topic... - Tutor (9.3. 11:17)

Yes ground and open water water pollutions...

Hot topic... - FINL (9.3. 11:19)

We have two big topics

How we storage manure and manuring in different countries. That we don't lost minerals?

How much you use manure or fertilizer per hectare and how many times you manuring and fertilizing?

We keep in those topics all what you say.

keep short and keep it simple. We can't keep to much!!!!!!! We 4 weeks and all the countries are so different. We need a topic that we use and what is easy for us and for the farmer!

### Hot topic... - FINL (9.3. 11:23)

We can keep ground water in the first topic. were we compare different countries systems. Because ground water is not a problem into the Netherlands

Gr Finland

Hot topic... - Tutor (9.3. 11:26)

Open waters are also important rivers and lakes... sea...

Hot topic... - FINL (9.3. 11:27)

What is now our topic for the first 4 weeks?

Do you disagree?

Hot topic... - NOA(9.3. 11:31)

I think your topics are very interesting but also a bit specific...i'm sure we can find a compromise!!

### Hot topic... - FINL (9.3. 11:37)

Ok. what we do????

What is the comprimise? Can we take ground water in subtopic.

We think that easy and interesting topic is for us and the farmer How we storage manure and manuring in different countries, that we don't lost minerals in the ground water.

we can Compare systems.

gr Finland

Hot topic... - NOA (9.3. 11:28) 🍊

one of us was actually in the netherlands and he says that there is a big problem with groundwater pollution!!

Hot topic... - FINL(9.3. 11:30)

It's no a problem,

We drink it, we clean the milkingparlour and clean also with this water the milking tank. I think that is than no a problem!!

### Hot topic... - Tutor (9.3. 11:31)

concentrate on the topic... problems with the environment (e.g water) is just one (important) subtitle

Hot topic... - Tutor (9.3. 11:33)

Theresa is right... Compromise can be also that you make some topic under bigger topic...

### Hot topic... - FINL (9.3. 11:53)

Hello, Katja is here!

The positive effects of the fertilizers are for example that when you use fertilizers, the soil gets almost all what it needs in right measurement.

The negative effect is that fertilizers are made in factories. And you can't use fertilizers in organic cultivation.

Are the fertilizers beneficial to the environment, what do you think?

compromise - NOA (9.3. 11:34)

you want the topic about how to storage manure...i think we can combine that with our topic about the looses of nutrients

# Now you need to collect your ideas together.... - Tutor (9.3. 11:37) 🤐

We have only 15 min anymore and we need to come conclusion...

# Now you need to collect your ideas together.... - Tutor (9.3. 11:37) 🥮

We have only 15 min anymore and we need to come conclusion...

# 4§ Other business - Tutor (9.3. 11:40) 😮

Is there something you want to share with the other group???

# For summary, do you have agreement about topic (problem) of your group? - Tutor (9.3. 11:41) 😲

If the answer is YES - write it down below. For example: We are agreeing that our topic is.

If the answer is NO - write it down below. For example: We are still disagreeing about our topic and we are going to continue with this matter tomorrow morning!

### For summary, do you have agreement about topic (problem) of your group? - FINL (9.3. 11:43)

We are still disagreeing about our topic and we are going to continue with this matter tomorrow morning!

# For summary, do you have agreement about topic (problem) of your group? - NOA (9.3. 11:43) 😒

we do not completely agree with the topic yet so we say NO now... we are in verkkosalkku tomorrow from 8:30 am Austrian time

greets Austria

For summary, do you have agreement about topic (problem) of your group? - Tutor (9.3. 11:44) 🥌

I think you are talking about same things.... Only thing is that you need to be clear what is the head topic...

For summary, do you have agreement about topic (problem) of your group? - NOA (9.3. 11:53) 🤩

I agree, but I think the dutch are a little bit selfish!

# For summary, do you have agreement about topic (problem) of your group? - NOA (9.3. 11:53) 🥌

I agree, but I think the dutch are a little bit selfish!

# For summary, do you have agreement about topic (problem) of your group? - FINL (9.3. 11:46) 🔫

Ok.... say you tomorrow morning in verkkosalkku.

Maybe we all think about this and make our agreement tomorrow.

Gr Finland

# For summary, do you have agreement about topic (problem) of your group? - NOA (9.3. 11:48)

bye

# 5§ End of the meeting - Tutor (9.3. 11:49) 🧼

Thanks... I think you are on right tracks...

# compromise – NOA (9.3. 12:48) 🕐

How about this...

First topic: How can you store manure and where do you have looses of nutrients?? How can you avoid them? Second Topic: How can you bring out the manure on the field and what dangers are there for the environment?

Greets Austria and Norway

# Topic meeting, Group1 (Cow-Manure) part 2

# start - Group from Norway and Austria (NOA) (10.3. 9:30)

hello to the second part of our discussion!

# start – Group from Finland and Holland (FINL) (10.3. 9:31)

Good morning everyone! We're all here now.

## start - NOA (10.3. 9:31)

so did you read my last message about our topics?

## start - NOA (10.3. 9:35)

hello??

start - Tutor (10.3. 9:38) 🔶

We are here... Wellcome... You are close to agreement also so good luck...

# Topic suggestions - FINL (10.3. 9:37)

We agree on "What goes in, what comes out?"

We have thought of the following subtopics:

1) Structure of roughage and how it affects the mineral loss in cow's digestion

2) How the feeding affects the quality of manure and milk

Also, it would be interesting to compare different breed and how the efficiency of their digestions differ from each other, but maybe that is too much and too difficult. In Finland we have noticed that Ayrshire and Holstein react differently on the same feeding.

We would include nitrogen in other subtopics because it's part of manure and milk.

# Topic suggestions - NOA (10.3. 9:39)

we think your topics are super!! but forget about the breeds, because it is pretty much the same.

Topic suggestions - FINL (10.3. 9:39) 😉

Agreed!

Topic suggestions - NOA (10.3. 9:43)

so maintopic: "what comes in what comes out" subtopics: 1.Nitrogen

Structure of roughage and how it affects the mineral loss in cow's digestion

3. how the feeding affects the quality of the manure and milk

Topic suggestions - FINL (10.3. 9:47)

Yes, sounds good!

# Congratulations.... - Tutor (10.3. 9:40) 🔶

First one... Good luck on your work... I am so broud of you!!!!!

# Congratulations.... - FINL (10.3. 9:41)

Awww! Where is the party???

# Getting information - FINL (10.3. 9:42)

What kind of things will you ask from the farmers?

### Getting information - NOA (10.3. 9:44)

how many manure do you have? Do you have problems with manure?

# Getting information - NOA (10.3. 9:46)

how was the excursion yesterday?

# Getting information - FINL (10.3. 9:47)

We did get a load of papers that we are going through today, I think.

# Getting information NOA (10.3. 9:48)

from teachers or from the farmer?

## Getting information - FINL (10.3. 9:48)

From the farm. All kinds of analysis results.

## Getting information NOA (10.3. 9:49)

very good! could you scan it in and send it to us??

### Getting information - FINL (10.3. 9:50)

We will. We'll try to translate the results.

# Getting information - NOA (10.3. 9:51) 😉

yes please because we can't speak finnish very good ...

# Getting information - Tutor (10.3. 9:51) 😉

You can start to learn...;o)

## Getting information - NOA (10.3. 9:52)

jaja...

Getting information - Tutor (10.3. 9:53) 😜

Ei... Joo joo... or Jep Jep....

Getting information - NOA (10.3. 9:54) 😉

so this is also finnish...

Getting information - FINL (10.3. 9:55) 😉

Kyllä, it's suomi.

# Getting information - NOA (10.3. 9:56)

und in Englisch?? aaa sorry in English??

Getting information - FINL (10.3. 9:56) 😉

Yes, it's Finnish.

Getting information - FINL (10.3. 9:46)

We are also asking the urea levels in milk, the roughage analysis, manure analysis...

# Getting information - NOA (10.3. 9:47)

yes good questions!

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Bye for today! - FINL (10.3. 9:56)
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I think that was it for today. It was great to get the topic before next week. See you then!

Bye for today! - NOA (10.3. 9:57)

yes great !! bye

Hello Norway!

Here's a little something from the first round in Finland. In files you can find a part of out thesis and compare your feelings and opinions; we would like to hear your impressions about groups' work, collaboration, other issues that have caused problems and everything else you find worth mentioning. It doesn't have to be too much, perhaps one page or something like that.

This is a part of out thesis text and we're not supposed to mention anything personally etc, as you know. And here's some more information to clear things out:

The timetable in Finland wasn't exactly as it should have been and the time that was meant for web work was suffering for it. There are two big reasons for it: first the Dutch students seemed to be a little frustrated because their knowledge is higher than the Finnish students'; they are already graduating this year and the Finns have just started this autumn (and only three of them have an agricultural background). We used one afternoon for prepping the Finnish group with basic things (about fertilising, feeding, some terms etc that were odd for them) and after that the work was going better. We should have done this earlier, but it didn't come to anyone's mind before this.

Then there was this car accident; on Tuesday (17.3.?) on the way to an excursion the minibus was in an accident (slippery road etc...) and it ended up to side of the road on its roof and landed on its side. There were five Dutch and three Finnish people in the bus. Luckily nobody got injured physically. We had a good discussion about it afterwards and the students seemed to get closer after it. It was a huge shock for everyone and we decided that it's the students' own choice to tell you if they want. For some it was a very personal thing. But because none of them mentioned this to you earlier we decided to tell you about it now because it has affected on the project.

NASEK seems to be a dangerous sports (in Finland we have had one injured ankle and another knee this year, last year's result was five injured ankles...); we hope everyone survives!

Greetings from Holland!

Tero and Inka