CIEA 2002

Introductory reflections on the seminar 2002

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**23RD INTERNATIONAL COURSE ON VOCATIONAL EDUCATION
AND TEACHING IN AGRICULTURE**

Do you know the book "Novecento" written by the Italian Alessandro Baricco? It tells the story of the pianist Danny Goodmann T.D. Lemmon called Novecento who spent his entire life, from birth till death, on the ocean steamer Virginian. He never set foot on dry land, not even if the ship lay at anchor in the port of New York, Genoa or Hong Kong. What surprised however was, that Novecento's knowledge, his intellectual horizon, did not only extend from port to starboard and end at the gangway, but the young pianist had an extensive knowledge about the world. I would like to quote a short passage from the book...

The demolition of the ship, it was scraped and blasted, marks the end of Novecento's story.

Reading this book, I was fascinated by many things. The different moods reigning on the ship, the job done by the musicians, but above all, the knowledge, the competences and skills, acquired by the young Novecento during 37 years. He must have possessed exceptional competences in building up social networks with the passengers and the crew, and he must have absorbed, organised and made use of his knowledge purposefully and with a strong motivation. Today we would probably say that he was a gifted knowledge manager.

Unfortunately, I cannot introduce you to Novecento in person, but I would like to welcome you to a seminar, during which we will follow Novecento's competences.

In the coming days, I will speak to you and with you on several occasions. Today I would like to make some introductory remarks. During the next twenty minutes, I would like to outline three issues:

I would like to

a) raise some questions with which we are going to deal in the coming days and which we will try to answer
b) explain to you the ideas and reflections that accompanied the planning of our programme and the preparations for the seminar
c) transpose the idea of the so-called knowledge community to our seminar

This year's CIEA Seminar is entitled: "How to best obtain, use and communicate knowledge" and is subtitled: "Knowledge-management and networks: a current challenge to agricultural training". The more I read this title, the more I thought it was too long and too ponderous. Nevertheless, in my opinion, it shows very clearly the intentions of our seminar as regards content.

The general issue discussed in the coming days is how to handle knowledge in agricultural education. When we put the emphasis on the term "knowledge", important questions arise – questions concerning me as well as all of us:

- What is knowledge?
- Is it the same as information?
- How, when and where is knowledge created?
- How can **I** distinguish between useful and useless knowledge?
- Where do I get my knowledge?
- How do I handle the knowledge available to me?
- Do I make use of my knowledge correctly, efficiently and according to my needs?
- Do I make my knowledge available to others?
- How can I communicate knowledge in the best possible way?

During the preparations for this seminar, we looked into the above-mentioned questions as well as into many others.

Of course, academic literature gives many answers to and hints about the above-mentioned questions. Gilbert Probst (1999) writes for example " Knowledge encompasses the totality of what you know and what you are able to do, all that an individual uses in solving a problem". Knowledge-management is called "the deliberate and systematic use of the resource 'knowledge' and the purposeful use of knowledge for example in organisations." (Reinmann 2001). In reading these two definitions, we become aware that the ideas in them are expressed in a very general, even technocratic way. Knowledge as a tool like a screwdriver or a shovel; a tool we make use of to solve a problem in a clean and efficient way. Knowledge-management as a method with its machines and instruments. We turn the right buttons, issue some commands and the problem is solved.

I think that we all agree in saying that things are not that easy (and that is not what the quoted authors think). Therefore, in view of this seminar, I would like to explain how we are going to approach the issue. We based our reflections on you and your working conditions. We have already said that in institutions, schools, universities and ministries there are very different forms of knowledge: specialised knowledge for teaching, background knowledge about the times and the world we live in, but also knowledge about how schools work, about pedagogic findings, or knowledge about good, successful learning processes. When we talk about handling knowledge - more fashionably "knowledge-management" - in the course of the coming two weeks, then we should, in my opinion, keep these ideas in mind as well as think of other categories of knowledge. The seminar is about knowledge that we communicate and knowledge about us and our job as specialists in education and advising. I would like to summarise these ideas in the following illustrations:

Illustration 1: **Two "areas of knowledge" in institutions**

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Handling knowledge in institutions

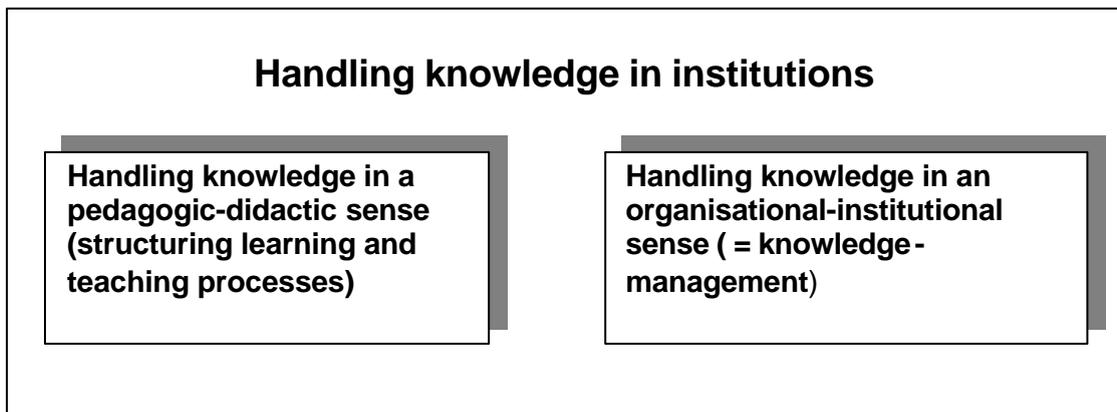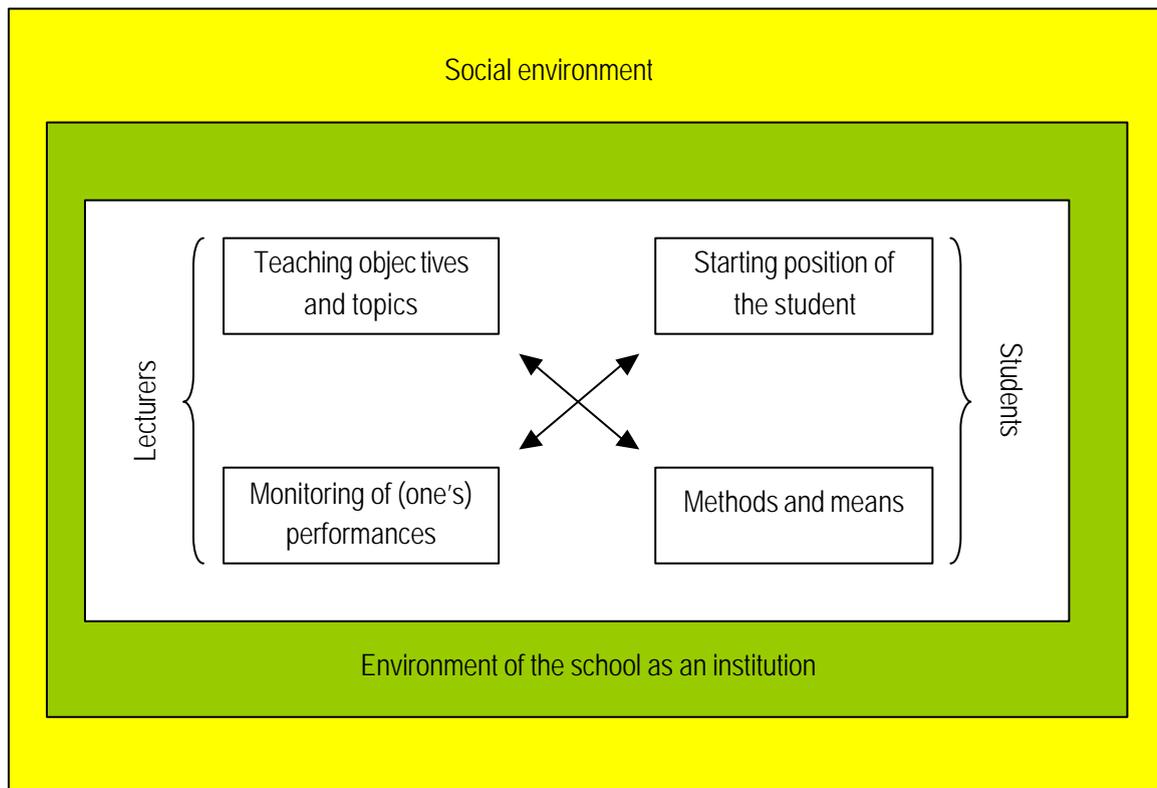| **Handling knowledge in a pedagogic-didactic sense (structuring learning and teaching processes)** | **Handling knowledge in an organisational-institutional sense (= knowledge-management)** |

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Illustration 2: **The "Hamburg Model" of teaching preparation (simplified illustration) as an example of handling knowledge in a didactic sense**

Source: Jank, W und Meier, H.:1994

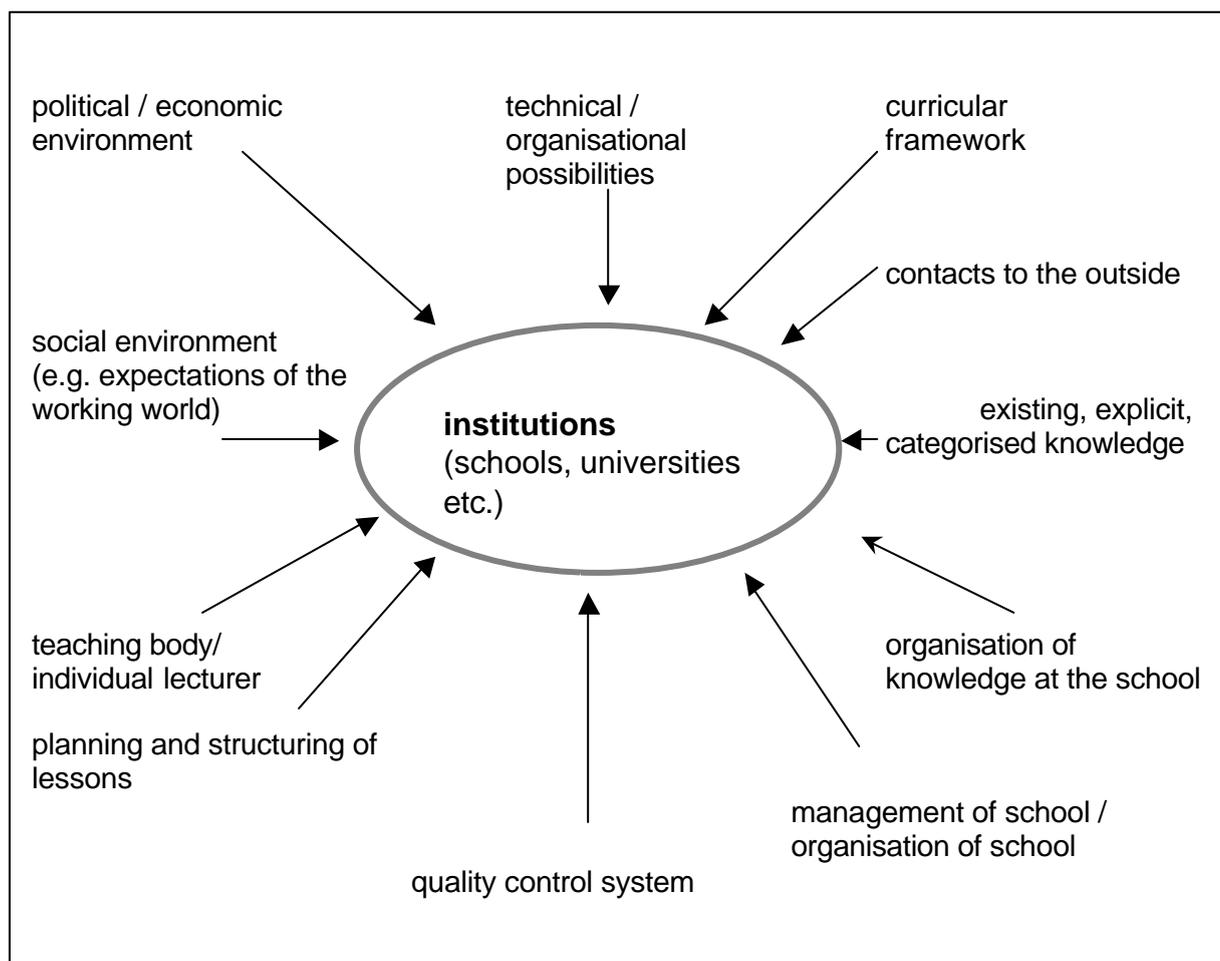Illustration 3: **Areas where processes of knowledge-management occur**
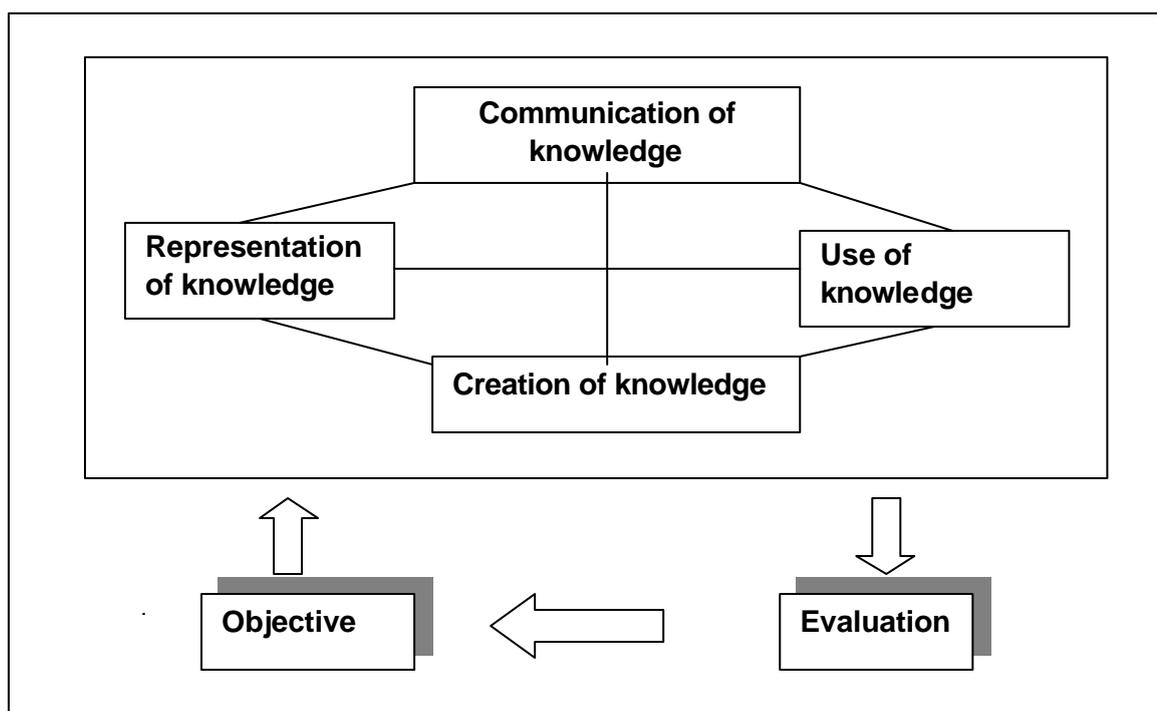
Comments on illustration 3:

- ❖ The representation of knowledge includes processes such as identifying knowledge as well as different forms of encoding, documenting and storing knowledge.

- ❖ The communication of knowledge encompasses processes such as distributing information and knowledge, sharing and building up knowledge as well as knowledge-based cooperation.

- ❖ The creation of knowledge includes processes of external knowledge acquisition, the development of special knowledge resources as well as the creation of personnel and technical knowledge-networks.

- ❖ The use of knowledge, finally, encompasses processes such as translating knowledge into decisions and actions as well as the transformation of knowledge into products and services.

Source: Reinmann – Rothmeier et al 2002

Illustration 4: **Factors that influence pedagogic/ didactic processes and knowledge-management in institutions**

political / economic environment

technical / organisational possibilities

curricular framework

contacts to the outside

social environment (e.g. expectations of the working world)

institutions (schools, universities etc.)

existing, explicit, categorised knowledge

teaching body/ individual lecturer

planning and structuring of lessons

quality control system

management of school / organisation of school

organisation of knowledge at the school

These are the processes and connections we want to work on with you in the following two weeks:

The overriding aim within the seminar should therefore not primarily be to criticise what does not work, but to come up with ideas and possibilities about how schools, universities and other institutions can make the best use of their own as well as someone else's knowledge resources.

In order to achieve a constructive aim, I would like to point out some assertions concerning knowledge-management that are often mentioned, and which have been analysed and demystified by Roehl and Romhard (2000) on various occasions:

Assertion 1: Knowledge can be directly influenced

> ➢ Wrong, it is not possible to influence knowledge directly, knowledge can not be forced

Illustration 5: **"Knowledge-management by books"**
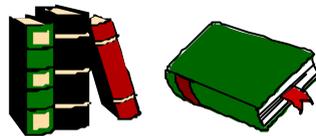
I give someone a book	⌈	But they can not read it
I give someone a book	⌈	But they do not read it
I give someone a book	⌈	But they do not understand it
I give someone a book	⌈	But they understand it differently from me
I give someone a book	⌈	They understand it and then hand in their notice

Exerting direct influence on the knowledge of others is not possible

Source: Romhard, 2002

Assertion 2: A lot of knowledge is always good

> ➢ Wrong, in times where people are inundated with information, deliberate restrictions and intelligent choices are needed

Assertion 3: Lack of knowledge is bad

> ➢ Wrong, if one can admit one's lack of knowledge, then it is a good starting point for the search for solutions and therefore a prere-quisite for creative processes.

Assertion 4: Knowledge is always true

> ➢ Wrong, knowledge is artificial and has to prove its usefulness in application again and again.

Assertion 5: Knowledge can be entered into computer memories

> ➢ Wrong, information can be entered into computer memories, knowledge is tied to context and persons.

These were some fundamental questions, reflections and ideas concerning knowledge. (The ocean pianist would have expressed different thoughts; thoughts about the expanse of the sea, about the journeys from one end to the other and about the people involved.)

The term network has not yet been mentioned at all, and I would like to say the following about it:

Angier (1999) wrote in an article that nowadays knowledge often is a critical factor for many organisations. As no entrepreneur, no institution is capable of acquiring or creating all knowledge on its own, they are dependent on contacts and networks. The article states explicitly by quoting Powell "When uncertainty is high, organisations interact more, not less, with external parties in order to access both knowledge and resources."

In literature, different kinds of networks and the way they work are described. Very often three different forms are mentioned:

a. loose, informal contacts
b. clearly organised networks
c. cooperations bound by contract

The fact that a large number of networks belong to the first category is an interesting factor. And again the question arises:

- How do good networks function?
- What are the different roles within the network?
- What aids are necessary to render networks effective?
  etc.

These and other questions, however, will only be addressed in the coming days.

For the time being, I would like to go back to you and to our seminar. At the schools, universities, institutions and ministries in which we work, we are each day confronted in various ways with knowledge, knowledge-management and networks. This confrontation invites us to find new ways in order to obtain, use and communicate knowledge in the best possible way. Theoretical findings are of great use to us if we want to succeed. However, we also have to be able to adapt and transpose these findings to our daily life. How can we manage to do that? For example, if we not only think of technical information systems and organisational solutions when we talk about knowledge-management, but if we put the possibility of self-organisation in the focus of our doing, the way Romhard (2002) proposes it. Many authors refer to this idea when they talk about the creation of so-called knowledge communities. This communities are composed of persons who share a common interest in certain topics and want to build up and share knowledge about these topics. The participation in such a knowledge community is personal and voluntary. Romhard (2002) describes the idea of the knowledge community very graphically. He wrote: " Knowledge communities follow the model of ecology. They are like a garden whose plants need to be tended and looked after. If the conditions are favourable, new knowledge and insight grow by themselves. The (knowledge) gardener is economical and unassuming in his interventions and trusts in the force of nature, in life, or in the case of knowledge, in the curiosity and the creativity of the members. Each garden is different, has different flowers and a different soil. Simple solutions are not suited for knowledge communities."

My vision is that in the coming days we can form such a knowledge community. A group of people who

- Work intensively on a topic
- Bring their experiences and opinions up for discussion
- See themselves as teachers as well as students
- Are ready to consider new ideas
- Listen to each other and try to understand each other

I would like to invite you to this knowledge community, and I am looking forward to working with you. The aim of all the people involved in the organisation is to create the best possible conditions in order to make this knowledge community a place of dynamic knowledge-management and the focal point for a network of specialists.

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B I O G R A P H I C A L   N O T E

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Having finished compulsory schooling, Roland Stähli studied at the Swiss Federal Institute of Technology (ETH) in Zurich and graduated in 1988 with a degree in agronomy specialised in 'Agricultural Economics'. He then worked as an assistant lecturer for the Institute of Agricultural Economics (ETH Zurich) in the centre for rural development in Château-d'Oex (VD, Switzerland). In the summer of 1989 he changed the job and worked as a teacher and adviser in the department of 'Farm Management' at the *Landwirtschaftilches Bildungs- und Beratungszentrum LBBZ Rütti*, Zollikofen (a centre where farmers are trained and advised). In 1996, he changed again and began to work for the Swiss College of Agriculture (SHL). Roland Stähli works as a lecturer in didactics and methodology in agricultural teaching and advising at the SHL. Apart from his main task as a lecturer, he is the director of the CIEA (International Centre for Agricultural Education). Furthermore, he teaches in the department of Agricultural Economics. In connection with his work, Roland Stähli enrolled in 1996/97 for different subjects in education and educational psychology at the university of Freiburg, Switzerland.

At the moment, Roland Stähli's activities are focussed on the methodical-didactic area and the area of further education/ adult education. One of his most important aims is to achieve a varied teaching/ learning culture both in classes and in different courses. A regular, critical reconsidering and reviewing of the role's played by the teacher are part of this culture. Additionally, his job at the CIEA allows him to get to know and to compare the different teaching and education models in an international context.