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ECOLOGICAL INTELLIGENCE – OR HOW TO INFLUENCE YOURSELF

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Mrs. De Beus, agriculture is quite developed in the Netherlands. But Stoas is the only Dutch university, teaching agriculture specialists how to become teachers and trainers. Is one university enough?

- Dutch land-based education is followed by about 50.000 youngsters in pre-vocational and vocational education in 80 schools. These schools provide in curricula for general subject (languages, mathematics etc) and agricultural and horticultural subjects. Like animal breeding, animal care, of small animals plant production, floristry and floral design, landscaping, environmental issues, outdoor activities and recreation, design, food technology, use of agricultural products, megatronics and agricultural technics, horse keeping and sports, and so on.

Stoas provides yearly around 80 new teachers with a bachelor degree and certification for education for these agricultural and horticultural subjects.

How is Stoas able to meet the demands for such type of specialists?

- The curriculum of the teacher education for second degree teachers has been build around the concept of learning in the authentic context: during the course the student is partly working and learning in the context of their subject (for example enterprises in plant breeding) and partly in an educational context (school or another educational setting). With their experiences and questions they

come to Stoas, where teachers offer lessons and working group activities and talk with the students about their experiences in the school or enterprise. They do this in a structured way in the curriculum and create knowledge together. Studying based on these experiences in real professional life is more meaningful than just being at school: theory, practice and attitude are formed parallel and more and more integrated. Students leave the course therefore competent, and they enter the labour market fluently.

Stoas is not only an institution, but also a different way of thinking. What is the philosophy, staying behind?

– Some years ago we wanted to make our identity more explicit. But what was our identity? What do we do in another way, are we and can we be distinctive from others? Together with students and with the help of an identity expert we did our own research. People in our external network noticed that our students and staff know themselves and reflect on themselves, always are aware of their social and physical environment; know how to influence this, and how it influences themselves. They combine different intelligences as described by Howard Gardner, and also with nature as their example to learn from or as their aim to learn about and for. Finally we choose the words to describe our identity: 'ecological intelligence'. The basis tunes for this are elements as connectedness, collectivity, multiperspective, nature, wisdom, self knowledge, circularity.

What changed in the years – as a vision and perception, to the Stoas idea?

– Developing this philosophy and making it more operational is not easy. How can we say that our alumni are ecologically intelligent? How to learn this, how to integrate this in the curriculum, what are the operational elements?

In advance we expected to work this out easily for the whole organization. But we changed the further implementation and do this along different parts of Stoas. For our research we develop so called 'ETI-research'. We add to the research, we do elements of the philosophy. In our Master course Learning and Innovation the elements are used when building the curriculum. In the program for our Bachelor course we are still working on the development of the 'ecointell curriculum'.

You have a unique building in Wageningen. Who decided on its unusual vision, were there many discussions?

– The vision on the building was worked out in a Stoas working group with teachers, supporting staff, students, a building expert of the Aeres group and me – as the Stoas director. The board of the Aeres group (to which Stoas belongs), responsible for all schools in the group, accepted the vision and took the definitive decision about the building after the design and costs were clear.

What stays behind the concept?

– The way of thinking as described above together with our educational concept led to a briefing to the architect about our wishes for the new building for education. Key elements: connection, meeting, light, feeling and connecting with the seasons, nature integrated, connecting in-out, diversity in spaces and rooms, possibility to choose rooms and furniture fitting the didactics in class of purposes, and last but not least - sustainability. The architect, Wilco Scheffer from BDG-architects, made a concept design for the ground plan inspired by nature, with nests and grotto's. A nest is made, with walls and entrance. This is what birds do. The nests became the classrooms and staff offices. But he did not only design nests, he also designed the grotto's: open spaces on the floors in between. These grotto's have different atmospheres because of the geographic orientation, and the light, but also the equipment. In the floor for example is the pattern of mycorrizha to be seen.

Besides these design elements a lot of attention is paid to the sustainability. The building is heated by means of thermal energy storage 80 meters deep in the ground.

How many students study in Stoas today? Which are the most popular subjects?

– The Bachelor 'Education and Knowledge Management' the 2nd degree teacher education (level VI in the European framework), has 357 fulltime and 231 part time students. This is the original course Stoas offers since 1980. The last five years new course has been added: short cycle courses (Associate Degree, level V) for Education and for Floral Design: 42 students; a bachelor course for Teachers in Consumptive Techniques: 54 students and the Master Learning and Innovation for Vocational Education and Enterprise course: 68 students.

Tell us more about the Associate degree. Who benefits from it?

– A full bachelor study lasts four years, not all the students want to study that long. The Associate Degree courses last two years, and consist of half of the whole bachelor course. So although the students don't do everything, they do develop their competences on the Bachelor level. They find a job in middle and small business, or, those with the educational Ad, to help teachers in class. So students as well as schools as well as small businesses benefit from this degree.

– Yes, surely there is an interest as you can conclude from the growing student numbers: in four years from 12 to 68. The Master Learning and Innovating at Stoas trains students to become innovators in the education and / or business. The Master leads teachers and knowledge managers to become professionals who aspire to an innovative and active role in the education and business. Learning, knowledge creation and implementation of innovation are characteristic components of the

program. During the two-year Master Learning and Innovation participants focus on continuous development of the education and professional development within companies. The professionals specialize in designing and implementing learning innovations. In learning communities all participants work individually and collectively to their development. The research, innovation and assignment form the center of the learning process that takes place largely in professional practice. During the summer and winter Course Training looks literally over the edge of their known and own educational landscape: experiences abroad teach participants to push their limits.

Stoas is a member of ENTER. Why? What are the benefits of being part of such organization?

– Stoas is one of the founders of the International Network of Teacher Education in Agriculture and is convinced of the added value of this international network. Learning and working together in projects with staff and students from different countries is constructive and informative for all participants. The contacts help creating possibilities for students abroad and staff development. Studying experiences abroad in the diversity of countries and cultures is enriching for all.

You are going to host the next ENTER Study Days in 2014. What are you going to show and to share with the participants?

- Together with the ENTER-board we have created an umbrella theme for the study days, called 'How to Achieve the Environment to Develop Innovative Competences'. The idea is to get in touch with the participants and have dialogues and workshops about innovations in didactical approaches in the classroom, innovations in land based school organizations and probably most important - in the authentic field of companies, labour market, etc. Connecting different worlds is becoming more and more important and demands for specific competences. We would like to show examples of different learning environments, both on classroom-level on the field and in interactive sessions. We want to connect innovations, educational approaches and experiences by the participants in different countries.

Since June 2002, Madelon de Beus acts as Director of Stoas University of Applied Sciences and Land Based Teacher Education. Previously she has worked as a Director of Stoas Hogeschool and as a Senior Policy Education Officer at the Ministry of Agriculture.

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