

ATEE Conference KEYNOTES

KEYNOTE 1

Chair: Marco Snoek, Lector Leren & Innoveren, Hogeschool van Amsterdam, Amsterdam, The Netherlands

Prof. Dr. Marlene Scardamalia, University of Toronto, Canada

Prof. Dr. Carl Bereiter, University of Toronto, Canada

Knowledge Building Creation in Teacher Education

Knowledge creation cannot be an orderly step-by-step process. Knowledge-creators must go where the ideas lead them. The same is true for classroom knowledge creation/knowledge building. But how is this to be reconciled with the classroom routines and activity structures that many educators feel to be essential both for the teachers and for the students? The tension between principles and procedures has been a serious one throughout the past century, with teacher educators tending to emphasize principles while the student teachers cry out for procedures—for answers to “What do I do on Monday?” In this presentation we examine different kinds of principles and the different roles they may play. Some principles set ideal goals, others serve to identify a teaching approach with a larger philosophy or tradition. Often principles merely serve to justify procedures, thus ceasing to be of value once the procedures have been adopted. However, there is a large class of principles that can have a more practical function; these are known as “design principles.” Millions of Web documents cite them. They are very common in technology development. Google, for instance, has a set of 10 design principles that guide all their technology development. The Design Principles Database < <http://www.edu-design-principles.org/dp/viewPrincipleSummary.php> > has amassed 34 “pedagogical design principles” mainly applicable to the design of e-learning. To be useful in education for knowledge creation, however, we need principles that can help shape the entire school experience. What are such principles, and how effective can they be in face of the tendency of education to downslide to activities and routines? Those are questions addressed in this presentation.

KEYNOTE 2

Keynote 2 + Discussion Plenary Session

Chair: Dr. Geraldine Smyth, Reader, Department of Childhood and Primary Studies University of Strathclyde Faculty of Education, Glasgow, Scotland

Prof. Dr. Jaap van Lakerveld, PLATform Opleiding, Onderwijs en Organisatie BV (PLATO), Universiteit Leiden, Netherlands

Prof. Dr. Nadine Engels, Vrije Universiteit Brussel, Belgium

Knowledge Productivity in Education and Teaching:

About Teachers as Learners

Rapid societal changes, shifting positions of nations and continents in international competition, demographic changes, technological changes are just a few of the developments that led the European Commission and other policy making bodies to emphasise the necessity of life long learning of professionals in a wide variety of fields of work. Teachers always had learning as their core business, however, they focused predominantly on the learning processes of their pupils, or students. The awareness of the necessity of their own learning only came later. In our contribution to the ATEE conference our focus will be on these learning processes of teachers. Jaap van Lakerveld will outline some trends in the ways these learning processes have been conceptualised throughout the last decades. He will lead the audience through the various approaches he was part of during his professional life as a researcher, as an educator and more in particular in the series of projects he was involved in as a member of the RDC on in-service education and learning. The consecutive projects of this RDC serve as an example of how differently similar challenges were perceived and approached in different periods of time over the last thirty years.

The second part of the presentation will include the results of a large scale research project on knowledge productivity and the organisational conditions that promote life long learning among knowledge workers. This study was carried out in a wide variety of organisations including health care, social well fare and educational organisations. First of all the basic theoretical concepts will be explained. One of them is “knowledge productivity” referring to the ability of organisations and staff to signal knowledge, to absorb it, to enrich it, to make it applicable and spread it, The other basic concept is that of a “corporate curriculum”, that is the context that motivates people to learn, that offers them the rich environment need for learning and that provides them with the feedback to their performance that allows them to reflect upon their own work processes and performances. The results of the study will be outlined. The relevance for educational settings will be explained and made specific. Furthermore some issues for debate will be raised.

The study presented in the second part of the presentation will be made part of a wider reflection in the third part of it. Here we will show how learning has developed in recent years. The setting in which people work, or the setting they perceive as their work environment, has profoundly changed. These changes will be described as well as their impact on day to day practice of professionals in general and teachers and trainers in particular.

In the fourth part of the contribution Nadine Engels will focus on the specific contextual and other conditions that are present in teacher training colleges. The ideas as presented and discussed in the first three parts of the address will be placed in the context of teacher education. She will focus on the particular requirements to be met by colleges of teacher

education, or of inservice education, in order to allow the professionals at work there to learn and develop in order to update and up grade their knowledge and competences. The four parts of the presentation will eventually lead to a re-definition of the challenges, the roles and the competences needed in (in-service) teacher education and learning in future. In relation to that some thoughts will be presented and shared on the organisational structures and facilities needed to enable educators and trainers to assume these new roles with energy and a sense of productivity and professional well being.

KEYNOTE 3

Keynote 3+Panel discussion Plenary session

Chair: Jordi Vivancos, Head Unit, Technologies, Department of Education, Catalonia, Spain

Prof. Paul Resta, "Ruth KnightMillikan Centennial" professorship. Director, Learning technology Center. The University of Texas at Austin, USA

Technology for Social Inclusion and Knowledge Creation: A Key Issue in Elementary and Secondary Teacher Education

The World Summit on the Information Society (UNESCO, 2003) declared, "[the] common desire and commitment to build a people-centered, inclusive and development-oriented Information Society where everyone can create, access, utilize and share information and knowledge." Although there has been significant growth in access to computers and the Internet, the digital divide continues to be a major form of social and economic exclusion for many peoples across the globe. This divide contributes to an even more alarming divide, the knowledge divide, in which individuals lack the resources to access, create and share knowledge. Technology for social inclusion represents an emerging research area concerned with the use of information technology to facilitate the construction of collective self-representation among people who have been historically excluded and disenfranchised. Indigenous populations and other groups of people have been systematically deprived of social capital, equal opportunities and resources based on factors such as race, ethnicity, nationality, geographic location, religion, gender and educational status. Unlike discussions of the digital divide that are focused on physical access to hardware, software and connectivity, technology for social inclusion concerns the ability of historically disenfranchised populations to use those technologies to engage in culturally appropriate practices that advance their collective interests.

The presentation will describe the ways Web 2.0 tools such as social-networking sites, video-sharing sites, wikis, blogs, mashups, folksonomies, collaboration and knowledge-building tools may be used to empower and give voice to socially, racially, politically and economically marginalized individuals, communities, and institutions. Examples will be provided from teacher education institutions working with indigenous elementary and secondary schools in North America. The implications for elementary and secondary teacher education and the opportunity for teacher education institutions to play a national, regional and global

leadership role in technology for social inclusion and knowledge creation will be discussed.

Panel discussion

Marlene Scardamalia, University of Toronto, Canada

Carl Bereiter, University of Toronto, Canada

*Jaap van Lakerveld, PALTform Opleiding, Onderwijs en Organisatie BV (PLATO),
Universiteit Leiden, Netherlands*

Nadine Engels, Vrije Universiteit Brussel, Belgium

Thérèse Laferriere, Université Laval, Quebec

Nancy Law, Hong Kong University

KEYNOTE 4

Keynote 4 + Discussion Plenary session

Prof. Dr. Thérèse Laferriere, Université Laval, Quebec

Prof. Dr. Nancy Law, Hong Kong University

Teacher Education for Knowledge Creation: The Knowledge Building International Project (KBIP)

Knowledge building as a pedagogical approach focuses on developing classrooms as communities for progressive problem solving and knowledge creation (Scardamalia & Bereiter, 2006). Unlike learning organized in traditional classrooms, the knowledge building process is necessarily an intentional community effort, and is simply not possible as an individual enterprise. Learning takes place as a “byproduct” of the knowledge creation process as learners tackle significant problems of understanding. Designing curriculum units for implementation as knowledge building experiences for school age children that can, at the same time, satisfy mandatory curriculum requirements is a challenge that has to be tackled to realize the vision of Education for Knowledge Creation in schools.

The Knowledge Building International Project (KBIP 2007-2009) operated on the basis of locally based networks of innovation distributed around the globe: Quebec, Catalunya and Hong Kong are the three main sites. The project was developed through pedagogical and research activities conducted within local university-school-government partnerships connected to one another. The core activity for KBIP at each of these three sites was centered on the understanding of the knowledge building principles for engaging students in knowledge building. Agents (students, teachers, school principals, school district personnel, ministry personnel, university teacher educators and researchers) used Knowledge Forum as a “collaborative space” (asynchronous online discourse) with school learners, and among themselves. For synchronous discourse, a multi-user web-based videoconferencing system was used. The focus of the students’ learning activities in the 2008-2009 school year was on understanding and tackling climate change. Students wrote hundreds of notes on Knowledge Forum. Over twenty videoconferences were held among collaborating classrooms. School personnel and ministry officers provided guidance and encouragement regarding curricular requirements, university teacher educators and researchers conducted onsite and online professional development workshops.

KBIP has met with great support from learners and their parents. As part of the ATEE program, a group of more than 60 school children (primary and secondary) and about 30 teachers from the three KBIP sites will be participating in the workshop *Tomorrow's Innovators: a workshop to experience knowledge creativity*. During the workshop, the children will work on the theme of environmental problems and sustainable development, while teachers will be working on curriculum and activity design as well as facilitation and transformative assessment.

During this plenary session, we will provide an overview of the KBIP project, what we have learnt over the past several years on knowledge creation in schools and in teacher education. The teachers and children participating in the *Tomorrow's Innovators Workshop* will also be giving a summary of their experience as part of the KBIP program.

CLOSING SESSION

Closing session Plenary Session

Chair: Prof. Dr. Anne-Lise Hostmark Tarrou, ATEE past-President, Akershus University College, Oslo, Norway

Yves Bernaert, ATEE past- Secretary General, Brussels, Belgium, Educonsult.

Initial teacher education and the European dimension: The Cluster on Teachers and trainers and a new initiative: Spring Day for Europe for initial teacher education

Information will be given on the one hand on the activities and the outputs of the Teachers and Trainers Peer learning Cluster of DG EAC. On the other hand information will be given about a possible new Spring Day for Europe initiative for initial teacher education institutions of DG Communication.

The Teachers and Trainers Peer learning Cluster adopted a peer learning approach to policy cooperation. This PLAs have so far produced policy conclusions on these themes:

- Teachers' continuous professional development;
- Schools as communities in which teachers as well as pupils are learning;
- Preparing teachers to teach in culturally diverse classroom settings;
- Effective relationships between schools and teacher education institutions;
- The induction of beginning teachers.

The policy conclusions and recommendations of the Cluster 'Teachers and Trainers', relating to the PLAs held from 2005 to 2009, will be briefly expanded upon. They are now on-line at http://ec.europa.eu/education/policies/2010/doc/reportpeer5_en.pdf.

Furthermore information will be given about **Spring Day for Europe, an initiative of DG Communication**. Spring Day for Europe (SD) was set up to stimulate interest and debate about the principles, achievements and future of the EU. Spring Day for Europe is a unique opportunity for pupils to meet, exchange ideas and share their hopes and concerns with EU experts and political leaders. Through Spring Day, the pupils and teachers are given the opportunity to have their say on European issues. It enhances communication, listening and connecting with young citizens in the European Union. Pupils are furthermore given the opportunity to share their questions and concerns about the future of Europe directly with EU

decision makers who are eager to listen to their opinion. Spring Day for Europe was launched in 2002 on the impulsion of the Members of the European Convention.

It is the intention of DG Communication to possibly launch a **Spring Day for Europe Initiative for Initial teacher education institutions in the fall of 2009.**

There general objective is to involve initial teacher training institutions across Europe in the Spring Day for Europe activities so as to contribute to the implementation of its objectives. Particular focus will be given to the active involvement of the student-teachers themselves.

Another general objective is to make students in initial teacher education more aware of the role and the importance of the European Union so that they can contribute to promote active European citizenship with pupils.

The specific objective is to have student-teachers develop concrete pedagogical materials / activities about the European Union that can be used in lessons or in extracurricular activities in pre-primary, primary or secondary schools across Europe at the occasion of Spring Day for Europe activities in the spring of 2010. Full details will be given about this possible initiative during the presentation.

Yves Beernaert was the secretary-general of ATEE from 1998 till 1992. He worked in external services of the Commission such as Eurydice (European dimension unit) and the Socrates TAO as the head of Comenius between 1992 and 2001. He is now an independent consultant to the Commission and several ministries of education & training.

Jordi Vivancos, Head Unit, Learning and Knowledge Technologies, Department of Education, Catalonia, Spain

Framework Policy for learning technologies

Framework Policy for learning technologies in Catalonia

Since 1983 the Autonomous Government of Catalonia is developing policies and actions to integrate ICT in compulsory Education. The initial ICT deployments have been evaluated on a large scale through two recent longitudinal studies: PIC 2004 and SITES 2007.

The results and conclusions of both studies are consistent: The impact of ICT in education is low, if compared to other sectors. Teachers tend to use ICT for traditional teaching methodologies, rather than using them to innovate. Organization of school time, the typology of subjects and little time devoted to the preparation of lessons, does not favour the introduction of the ICT in the classroom. Integration of ICT is not a priority for most school managers.

As a result of these conclusions, the present Government has established ICT in Education as one of the main priorities. This commitment has led to the creation of a new ICT unit devoted to promote new policies for innovative educational uses of ICT in compulsory education, knowledge management for teachers and e-maturity actions for primary and secondary schools.

The presentation will offer an overview of the general policy framework for ICT in education for Catalonia, and provide a snapshot of the most relevant project under this vision: Model 1:1 and digital educational content.

Jordi Vivancos

Head of Unit "Tecnologies per a l'Aprenentatge i el Coneixement"

