

EARLI ASSOCIATION NEWS

Two times a year, the European Association for Research on Learning and Instruction reports about past activities and provides the most recent information about upcoming EARLI events. In this second issue of 2006 you will find reports on past SIG-conferences, an announcement of an upcoming SIG-event in winter 2006, a short report of the past JURE conference in Tartu, Estonia and a preview of the EARLI biennial conference and the JURE pre-conference in Budapest in August 2007. For those who are interested in active involvement in EARLI but feel that their domain of research is not represented in the current 20 Special Interest Groups of the association, we finish this newsletter with more information on the procedure of establishing a new Special Interest Group. All this information and more about the European Association for Research on Learning and Instruction can be found on the website: www.earli.org.

1. Reports of recent SIG-events

1.1. Social interaction in learning and instruction (SIG 10) and special educational needs (SIG 15), Leiden University, The Netherlands, May 22–23, 2006

The format of the SIG meeting was centred on a presentation followed by a workshop. Discussion was triggered by asking questions and responding to group members. In the final 15 min of the session the discussion leader tried to offer a short report of the main issues discussed. These were written down for the final report of the meeting. The text consists of a short report from the issues discussed within each presentation.

Monday May 22, 2006:

The symposium began by a welcoming address by Prof. Dr. Monique Boekaerts, the chair of the undergraduate (BAMA) program on The Psychology of Education and Instruction (Psych. Ed) as well as the program director of the research program Self-regulated learning. Prof. Dr. Nicholas Burbules named his presentation 'Equity considerations in the design of learning environments'. He intended his talk as the outlines for a group discussion. The report is a compilation of the presentation and discussion.

A first topic raised was '*digital divide*'. Internet gives access to learning opportunities; it is a learning device. Using the Internet can be addressed as an access issue:

- Who: boys other than girls; learning and links (movement in a space of meaning); mobility (navigating in cyberspace) and immobility.
- What: games, being initiated in technology; understanding technology.
- How: organization of learning and links.

The Internet provides e-learning; the design includes structure of subject matter (such as intrinsic logic of discipline), equity consideration (topics related to special educational needs; first language) and social interaction (on-line discussions, triggering motivation). These themes were discussed.

A second topic was *design*. There are several decisions related to design. These should be considered when designing a course offered on the web. The discussion revealed that there are many subjects that need rethinking related to Internet

and teaching and learning, such as, the value of making mistakes as a student, discussion between students and the position of teachers, ownership of learning results; the meaning of guidelines (pedagogic and content related) for users of the Internet, the use of recent materials or dynamic documents. Moreover, research with respect to Internet needs rethinking too: How to approach new models of interaction; When is it mastery learning? What is the meaning of gaming?

Prof. Dr. Marja Vauras was ill and she could not present. As a replacement, Dr. Diny van der Aalsvoort explained that Marja would have addressed the relationship between disadvantaged children and social and language impairments as these may have a negative effect upon interactions and may be related to ‘resistance to learning’. She then presented the results of a study entitled ‘Studying learning processes in special educational needs’. The longitudinal study aimed at revealing if children developing at-risk in regular and special primary schools in Grade 1 who are allowed time to play together profit from it with respect to collaboration and literacy and numeracy in Grade 2. She showed a clip from a play session to allow discussion on the features of play and collaboration. Main topics discussed were: unintended benefits from play may need more elaboration; addressing unintended learning outcomes and the topic of meaning-making during play could be enhanced by transcript analysis (in vivo atlas) or ethnographic study of the video data.

Tuesday May 23, 2006:

Prof. Dr. Neil Mercer addressed the issue of temporal analysis of classroom dialogue.

He described how a sociocultural analysis of the nature and functions of dialogue between teachers and students, and amongst students, can be used to enable more effective interactions and better educational outcomes. Temporal aspects of discourse are a main topic in his work. In the trajectory of teaching and learning school context, curriculum, shared history between students, between lessons and within lessons temporality is visible. Using data (videoclips) from recent research in schools in the UK, the application of the categories presented took place within the group and the findings were discussed. Neil Mercer and Judith Kleine Staarman (Ph.D. student) focused on three different, but related topics: The analysis of student talk in groups in the classroom; the analysis of teacher’s talk; analyzing teaching and learning as it develops over time.

Prof. Dr. Paul Vedder’s presentation was entitled ‘Students’ peer networks, school adjustment, and learning. He stated that children’s social networks are important for their well being as well as for their socialization. What network is chosen by children depends on children’s characteristics and on the activities they deem important. These characteristics and activities may vary with respect to the extent to which they are conducive to children’s learning in schools. A way to measure how peers influence social development and learning is the use of network analysis to explore whether social networks can support children’s learning and their well being and the way in which social networks affect individual members (socialization, selection or something else). The concept of a network can be sociometric (with whom do you like to play); friendship (who are your friends?); social networks (who do you spend time with?).

The first data from one high school were presented in a workshop by **Janna Fortuin** (Ph.D. student). She described how drawing social maps and scoring procedures allow identification of social networks and interaction patterns.

1.2. Computer supported inquiry learning (SIG 20), University of Twente, The Netherlands, May 29–31, 2006

At the end of May approximately 70 people, representing 14 different nationalities, gathered at the Campus of the University of Twente for the 2nd European workshop on computer supported inquiry learning. The workshop was organized by the Kaleidoscope/EARLI SIG computer supported inquiry learning in cooperation with the ReCoil e-learning project and the Kaleidoscope Advanced Training Institute.

The theme of the second Inquiry Learning Workshop was “Inquiry learning, building bridges to practice”. This theme highlights the importance of bridging the gap between research on inquiry learning, the development of new and exciting inquiry learning environments, and everyday classroom practice. Inquiry learning provides students with the opportunity to develop understanding through proposing questions and ideas, and experimentation. This approach allows students to improve their domain understanding as well as their inquiry skills. Despite these promising prospects, inquiry learning has not found its way to the everyday practice in classrooms. During the workshop researchers, instructional designers, policymakers, people from educational support centers as well as active teachers explored a wide variety of inquiry learning materials and discussed ways to bring experimental learning environments to the actual classroom.

The workshop consisted of diverse activities spanning many topics relevant to the important theme of building bridges to practice. Participants attended key note lectures, interactive sessions, a demo market, and a panel discussion.

All these activities linked inquiry learning through and within: (a) various disciplines, i.e. the natural and computer sciences and history; (b) various educational levels (primary, secondary and higher education), and (c) various kinds of technology, i.e. mobile technology, systems allowing smooth transition between every day life objects and technology, typical laboratory experiments with technological devices, etc.

The three keynote speakers presented the success stories of three different computer based inquiry learning environments. Doris Jorde from the University of Oslo presented the Viten project, Jim Slotta from the University of Toronto presented the Web-based Inquiry Science Environment, and Paul Horwitz from the Concord Consortium demonstrated how teachers and pupils worked with the Modelling Across the Curriculum materials. The speakers focused on the core ideas of the environments and the current use of the presented inquiry learning environment in the classroom.

A number of 21 participants shared their own experiences with bringing inquiry learning to the classroom in an interactive session. The interactive sessions turned out to be a fruitful format that allowed the audience to join the discussion after a short presentation or hands-on experience. More hands-on experiences were provided in the demo-market and the workshops. Participants were invited to actually use the learning environments and engage in (collaborative) learning activities. Participants could, amongst many other activities, try to build a model using the CoolModes software, explore the life of flamingos in salt lakes with the help of scaffolds in the Stochasmos environment, play Mendel and breed different types of dragons with Genscope, explore the life of sea mammals and see how they adapt to underwater life or make a virtual tour in the Estonian forests with the Hiking across Estonia software. Two projects used mobile devices to bring real data into the inquiry software. Carlos Celorrio and Marta Millán of the ENLACE project invited participants to take measurements of shadows around the campus, using a datalogger. This collected information was later used for knowledge construction activities like trigonometric calculations. Alex Verkade from De Praktijk, had participants design biological experiments with sound, humidity, and temperature measurements they could collect with a datalogger at the workshop venue. The collected data was later presented in graphs and analyzed by the participants.

The panel discussion with educational policy makers, a representative of the Dutch educational inspectorate, and representatives of teachers' education centers, discussed how to integrate inquiry learning activities in the current educational systems. The panel discussed a variety of constraining conditions like official curricula, dominant assessment methods, school infrastructure, lack of appropriate teachers' education, lack of enough robust teaching material and methods, and expressed a few ideas on how to overcome some of the listed constraints.

Issues that were addressed during the large number of discussions that took place throughout the 3 days of the workshop included; how to facilitate collaborative inquiry learning, ways to assess inquiry and modelling skills, the role of assessment, tools to support students, tools to support teachers, teachers strategies, the role of teacher training institutes and curriculum issues. All issues were related to the way in which they affect the implementation of inquiry learning. One particularly important theme crosscutting many of the discussions, activities, and sessions was if and how to support teachers and school units through pedagogical or technical services in their use and implementation of inquiry learning environments. The participants also discussed the promising idea to integrate existing approaches toward computer supported (collaborative) inquiry learning.

Information on the program as well as interesting material and presentations can be found at the workshop web site: <http://kaleidoscope.gw.utwente.nl/WS-IL>.

1.3. *Conceptual Change (SIG 3), Stockholm, Sweden, June 14–17, 2006*

The 5th European symposium on Conceptual Change was hosted by the Department of Education, Stockholm University and took place at a conference site in Stockholm archipelago. Chair of the symposium was Professor Ola Halldén.

Eighty-seven researches, coming from Europe, North- and South America, Australia, and Asia participated in the symposium.

The title of the symposium was, '*Bridging the gap between mental models and situated cognition? Theoretical and methodological considerations*' and the aim was to elaborate on theoretical and methodological issues concerning the relationship between constructivist and sociocultural perspectives to learning. This issue has been brought to the fore by two issues of the *Educational Researcher*, one from 1994 and the other from 1995, where there was an intense discussion about the possibility and the worth of combining the two perspectives. The discussion

continued in a symposium at the EARLI conference in Padua (2003), as well as in the invited EARLI SIG Symposium in AERA in Montreal (2005). The 5th SIG symposium in Stockholm aimed at further contributing to this discussion.

The key note addresses by Paul Cobb, USA, Sandra Jovchelovitch, UK, John Leach, UK, Erno Lehtinen, Finland, Jean Francoise Rouet, France, Roger Säljö, Sweden, Russell Tytler, Australia and Stella Vosniadou, Greece, as well as the papers presented in the paper and poster sessions triggered intensive and fruitful discussions.

In a symposium in honour of Giyoo Hatano, the speakers highlighted his ability to successfully combine individual constructivist and sociocultural perspectives to Conceptual Change.

The conference ended up in an agreement that the debate between the constructivist and the sociocultural approaches enriches our perspectives on learning and gives new insights for the design of instruction aiming at Conceptual Change.

The next (6th) European Symposium of the Conceptual Change SIG will be held 2008 in Buenos Aires, Argentina. The Symposia will be hosted by University of Buenos Aires and Autonomous university of Madrid, Spain.

1.4. Instructional design (SIG 6) & learning and instruction with computers (SIG 7), Leuven, Belgium, June 21–23, 2006

After a successful meeting in Tübingen in 2004, the SIGs on instructional design and learning and instruction with computers once more joined forces to organise a joint meeting. The meeting was organised in Leuven on the occasion of the retirement of Joost Lowyck one of the co-founders of the SIG on instructional design. More than 100 scholars from around the globe (Europe, Africa, North- and South-America, and Asia) discussed the need to consider complexity with respect to the design and development of education, educational environments and the use of ICT therein in about 50 papers and posters. As invited speakers Richard Clark addressed the issue of automated knowledge, Joost Lowyck the spiral nature of research on instructional design and educational technology, Danae Stanton-Fraser the richness and diversity of computer applications invented in practice and Mike Spector the need for and possibility of modelling complexity. All papers and posters are bundled in the book “Clarebout, G., & Elen, J. (Eds.) (2006). *Avoiding simplicity, confronting complexity. Advances in studying and designing (computer-based) powerful learning environments*. Rotterdam/Taipei: Sense Publishers.” A selection of papers will be published in a forthcoming special issue of *Computers and Human Behaviour*.

1.5. Moral and democratic education (SIG 13), Fribourg, Switzerland, July 5–7, 2006

The biennial meeting of EARLI's SIG 13 moral and democratic education was held in Fribourg, Switzerland, July 5–7, 2006, in the context of the 32nd Annual Meeting of the Association for Moral Education.

Unfortunately, the original plan of organizing the meeting in Israel could not be carried out, and AME agreed to host us. We would like to send our deepest thanks for this interesting and enriching opportunity, to Prof. John Snary, the president of AME, and to Prof. Fritz Oser, the chair of the conference and his staff, for their hospitality. It was a great opportunity and an interesting experience to actively take part in an intensive conference on moral education. We are sure that this meeting will have scientific and personally important results.

Twelve members of SIG 13 moral and democratic education participated in the conference. They participated in invited symposia, session papers and posters. The participants created new relationships, and renewed contacts with scholars all over the world.

The coordinators of SIG 13 held a meeting at which they discussed and decided on several guidelines for the 12th Biennial EARLI Conference in 2007, in Budapest, Hungary:

1. Formulating the main topics for symposia suggested, initially among SIG members. A letter with the topics proposed was sent to members and potential members on 20 June 2006.
2. Inviting members of the “Network of research on citizenship and moral education” to present at the invited symposium of the SIG at the next EARLI conference, entitled ‘Getting Involved: Developing Potentials for Learning Citizenship’. The organizers of the symposium will be Fritz Oser and Wiel Veugelers.
3. Expanding the number of SIG 13 members by inviting European scholars, who are not yet members to take part in the SIG's activities.

1.6. *Metacognition (SIG 16), Cambridge, UK, July 19–21, 2006*

After a successful first meeting in Amsterdam two years ago, David Whitebread and his team from the School of Education, University of Cambridge, did a great effort in making this second meeting even more memorable. Indeed, we experienced a heat wave much like the rest of Europe, but the temperature broke all Cambridgeshire's records. Anyway, David and his team put together a very interesting program, representing many aspects of metacognition in various domains. The program included two keynotes (one by Wolfgang Schneider and another by David Whitebread), five symposia, 15 paper sessions, and three structured poster sessions. Plenty to choose from, but sometimes hard to choose between. Also, the number of participants had increased from 75 in Amsterdam to over 130 in Cambridge. During the conference it was suggested that a next SIG meeting should be extended with another day in order to have less conflicting parallel sessions. This means that the homogeneity of interests amongst participants was quite remarkable, despite differences in primary orientations. Key issues concerned the relation between Theory-of-Mind and metacognition, unification in the definitions of metacognition, assessment issues, and the training of metacognition in various domains. Also, the new international journal "Metacognition and Learning" was presented there. For those who want to have a free electronic sample copy, please go to <http://meta.edmgr.com> and click on 'journal overview'.

On Thursday the conference delegates went punting on the river Cam, enjoying the marvellous view on the colleges and, even better, enjoying a slight breeze over the river. Moreover, an excellent conference dinner was organized that evening in the traditional dining room of Jesus College, one of the oldest colleges. This opportunity of informal meetings with colleagues was highly valued.

The next biennial meeting of SIG 16 on Metacognition in 2008 will be hosted by the University of Ioannina in the northwest of Greece. Plousia Misailidi will be organizing this conference in cooperation with Anastasia Efklides.

2. Report of the recent JURE conference in Tartu, Estonia

EARLI JURE 9th conference took place from 30th June to 4th July 2006 in the Science Didactics Department of the University of Tartu in Estonia. The theme of the conference was "Models and Learning: Theory, Design and Application". One hundred and four junior researchers from 21 European countries, Israel, Japan and Canada participated. JURE conference was an excellent opportunity for learning from invited guests (Roger Säljö, Filip Dochy, Wolfgang Schnotz, Shaaron Ainsworth, Wouter van Joolingen, Katrin Niglas, Goele Nickmans, Ulla Runesson, Leo Vöhandu, Silvia Caravita) and other young researchers during discussions in five keynote sessions, seven workshops, 19 paper sessions with 72 presentations, poster session with 19 posters, and interactive demo session with three presenters. All participants were asked to evaluate presentations on peer-review basis. The best paper presentation award in JURE 2006 was given to Zarina Charlesworth from Switzerland. Persson Petter Bivall with Tibell Lena and Cooper Matthew from Sweden and Endedijk Maaïke with Jan Vermunt, Mieke Brekelmans, and Perry den Brok from the Netherlands were awarded for the best poster presentation. The international organizing committee of the conference (Margus Pedaste (chair) and Kai Pata, Boris Jokic, Goknur Kaplan Akilli, Anna Wernberg, and Marina Michael) and the local organising committee give a special thanks to all participants and invited speakers who made the conference a high standard scientific event.

3. Upcoming EARLI SIG meeting

3.1. *Phenomenography and variation theory (SIG 9)*

The biennial workshop of SIG 9, coordinated by Ming Fai Pang and Mona Holmqvist, takes places from the 7th until the 9th of December 2006 at the University of Hong Kong, Hong Kong SAR, China. More information can be obtained from the conference website: <http://www.edu.hku.hk/earli/>.

4. 12th EARLI biennial conference, Budapest, August 28–September 1, 2007

The University of Szeged, the Eotvos Lorand University, Budapest, and the Hungarian Academy of Sciences will host the 12th biennial EARLI conference in 2007. EARLI 2007 will provide an opportunity not only to present the results of your recent work, but also to discuss research findings with other scholars. The theme of the conference,

Developing Potentials for Learning, has at least two levels of meaning: the growing importance of enriching the potentials of learning and the unidirectional trend of increasing possibilities in educational systems both play an important role in educational research.

We hope the conference will be an enjoyable and unique experience for all of you. Hungary, and her beautiful capital Budapest, have a rich history that is over 1000 years old. Hungary is known for its cultural heritage, many Nobel Prize winners, great sportsmen, and tasty wines. Budapest lies on the river-sides of the Danube, boasts of beautiful buildings, bridges, restaurants, and a lively cultural life, which we hope you will take the time to enjoy.

Please visit the conference website: www.edu.u-szeged.hu/earli2007/ for detailed information about on-line submission of papers as well as registration.

5. 10th JURE pre-conference, Budapest, August 27–28, 2007

Prior to the 12th biennial EARLI conference, the Junior Researchers of EARLI (JURE) will organise a pre-conference. The theme of this conference is ‘Learning as a focus’, process and outcome and it will take place on August 27 and 28 in Budapest, Hungary.

Please visit the JURE 2007 website: <http://www.edu.u-szeged.hu/jure2007/> where you can find detailed information about the JURE 2007 pre-conference.

6. The foundation of a special interest group within EARLI

EARLI hosts 20 special interest groups (SIG) which represent a group of researchers who study one or more parts and/or aspects in the field of learning and instruction. More information about the SIGs can be found on the EARLI website: <http://www.earli.org>. The SIG’s support activities such as seminars, newsletters and publications and they give substance to the conference themes of the biennial conferences. If you are interested in joining EARLI and you want to establish a new SIG, the following procedure needs to be followed:

Send a proposal for the new SIG by E-mail to the EARLI office at info@earli.org. This proposal should include the following information:

- * A mission statement with a clear profile description of the new SIG;
- * A plan of activities;
- * A list of at least 20 EARLI members who intend to join the SIG, including the names of the two coordinators. The proposed SIG coordinators have to be from different countries.

The EARLI office presents the new SIG proposal during the meeting of the Executive Committee of EARLI, which is held two times a year. The EC evaluates the proposal and takes the final decision. The EARLI office informs the applicants of the decision of the Executive Committee.

The upcoming issue of Association News will be published in:

Issue (17)3 of Learning and Instruction.

Issue (2)1 of Educational Research Review.

SIG Coordinators are invited to send information on their SIG activities by 10 January 2007 by E-mail to goele.nickmans@ped.kuleuven.be.