EARLI Invited Symposium

**DESIGN OF POWERFUL LEARNING ENVIRONMENTS TO PROMOTE INTENTIONAL LEARNING: MULTIPLE PERSPECTIVES**

Organiser: Monique Boekaerts, Leiden University, The Netherlands

Chair: Monique Boekaerts, Leiden University, The Netherlands

Discussant: Monique Boekaerts, Leiden University, The Netherlands

Unraveling mathematics-related beliefs and their impact on intentional learning
Erik De Corte, University of Leuven, Belgium

Learning environments for conceptual change: The role of intentional learning
Stella Vosniadou, University of Athens, Greece

The relationship between achievement goals and intentional learning: Individual differences and contextual effects
Julianne C. Turner, University of Notre Dame, USA

The motivational basis of powerful learning environments - Some conclusions from educational-psychological interest research
Andreas Krapp, University of the Bundeswehr, Munich, Germany
EARLI Invited Symposium

LEARNING AND UNDERSTANDING WITH MULTIPLE REPRESENTATIONS

Organiser: Susan R. Goldman, University of Illinois, Chicago, USA
Chair: Susan R. Goldman, University of Illinois, Chicago, USA
Discussant: Susan R. Goldman, University of Illinois, Chicago, USA

Can pictorial representations support sense-making in mathematics?
Kenneth R. Koedinger, Carnegie Mellon University, Pittsburgh, USA

In search of optimal pathways to diagrammatic reasoning
Elsbeth Stern, Max Planck Institute for Human Development, Berlin, Germany

Multiple perspectives on multiple representations
Wolfgang Schnotz, University of Koblenz-Landau, Germany
Georg Hauck, University of Koblenz-Landau, Germany
Christian Kürschner, University of Koblenz-Landau, Germany
Tina Seufert, University of Koblenz-Landau, Germany

Using representations to prepare students for learning
Daniel L. Schwartz, Stanford University, USA
SIG Invited Symposium

**COMPUTER-SUPPORTED COLLABORATION AS A CO-ORDINATED ACTIVITY: THEORETICAL AND METHODOLOGICAL PERSPECTIVES**

**Organisers:** Päivi Häkkinen, University of Jyväskylä, Finland
Richard Joiner, University of Bath, United Kingdom
Rupert Wegerif, Open University, United Kingdom

**Chair:** Järvelä Sanna, University of Oulu, Finland

**Discussant:** Michael Baker, University of Lyon, France

*Applying the ontological ambivalence of computers to resource and direct learning conversations*
Rupert Wegerif, Open University, United Kingdom

*Co-ordination and collaboration strategies employed in face-to-face and online discussions*
Richard Joiner, University of Bath, United Kingdom
Sarah Jones, University of Bath, United Kingdom

*Process of grounding in online conferences: A case study in teacher education*
Kati Mäkitalo, University of Jyväskylä, Finland
Päivi Häkkinen, University of Jyväskylä, Finland
Sanna Järvelä, University of Oulu, Finland

*Affording sociability for distributed teamwork*
Paul A. Kirschner, Open University, The Netherlands
Karel Kreijns, Open University, The Netherlands

*Cultivating collaboration in e-learning communities: Reconciling behaviourist and social constructionist approaches*
Andrew Ravenscroft, London Metropolitan University, United Kingdom
SIG Invited Symposium

THE PROFESSIONAL DEVELOPMENT OF TEACHER EDUCATORS

Organisers: Theo Bergen, University of Nijmegen, The Netherlands
Michal Zellermayer, Levinsky College of Education, Tel Aviv, Israel

Chair: Michal Zellermayer, Levinsky College of Education, Tel Aviv, Israel

Discussant: Christopher M. Clark, University of Delaware, USA

Professional dilemmas teacher educators face in their teaching
Harm Tillema, Leiden University, The Netherlands
Lya Kremer Hayon, Leiden University, The Netherlands

Professional development of teacher educators - Why, how? What do teacher educators have to say?
Kari Smith, Oranim Academic College of Teacher Education, Israel

A profile of teacher educator competences as a guideline for professional development
Bob Koster, Utrecht University, The Netherlands
Cor Koetsier, Utrecht University, The Netherlands
Fred Korthagen, Utrecht University, The Netherlands
Theo Wubbels, Utrecht University, The Netherlands
Symposium

LEARNING AND TEACHING THE LITERATURE CURRICULUM. HOW READERS APPROACH LITERARY TEXTS, AND HOW INSTRUCTION MAY ENHANCE LITERARY COMPETENCE
Part 3: How education may improve literary reading and interpretation

Organisers: Tanja Janssen, University of Amsterdam, The Netherlands
Gert Rijlaarsdam, University of Amsterdam, The Netherlands

Chair: Tanja Janssen, University of Amsterdam, The Netherlands

Discussant: Mary Kooy, University of Toronto, Canada

“Horizons of expectations” – Students, teacher and the literary character
Yael Poyas, University of Haifa and Oranim College, Israel

Learning to write argumentative texts about literature
Marleen Kieft, University of Amsterdam, The Netherlands
Gert Rijlaarsdam, University of Amsterdam, The Netherlands

The influence of student and teacher conceptions of learning and reading performance
Gitte Ingerslev, Danish University of Education, Denmark

Thinking and feeling poetry: Using emotions to unlock meanings in the literature classroom
Amy Eva-Wood, University of Washington, USA

Who makes the meaning? Teachers’ pedagogical approaches and students’ responses to text in secondary literature classes
Sieta Van der Hoeven, University of South Australia, Australia
Symposium

**DISCOURSE AND LEARNING**

Organiser: Clotilde Pontecorvo, University of Rome “La Sapienza”, Italy
Chair: Clotilde Pontecorvo, University of Rome “La Sapienza”, Italy
Discussant: Michèle Grossen, University of Lausanne, Switzerland

*Reflexive activities and learning in multilingual classrooms*
Anna Ciliberti, University for Foreigners, Perugia, Italy
Rosa Pugliese, University of Siena-Arezzo, Italy
Laurie Anderson, University of Siena-Arezzo, Italy

*The conversational construction of identity of children with learning impairment*
Marilena Fatigante, University of Rome “La Sapienza”, Italy
Franca Orletti, University of Rome 3, Italy

*Learning routines: How to tell rituals from deeds and explorations?*
Anna Sfard, University of Haifa, Israel

*Teachers strategies in assessing text comprehension and in detecting errors*
Ottavia Albanese, University of Milan “Bicocca”, Italy
Cristina Maronato, University of Rome “La Sapienza”, Italy
Caterina Fiorilli, LUMSA, Rome, Italy

*Community of learners and technology*
Donatella Cesareni, University of Rome “La Sapienza”, Italy
Maria Beatrice Ligorio, University of Bari, Italy
Antonio Iannaccone, University of Salerno, Italy
Symposium

**COGNITIVE LOAD THEORY: INSTRUCTIONAL IMPLICATIONS OF THE INTERACTION BETWEEN INFORMATION STRUCTURES AND COGNITIVE ARCHITECTURE (Part 1)**

Organisers:  
Fred Paas, Open University, The Netherlands  
John Sweller, University of New South Wales, Sydney, Australia  
Alexander Renkl, University of Freiburg, Germany

Chairs:  
Fred Paas, Open University, The Netherlands  
John Sweller, University of New South Wales, Sydney, Australia  
Alexander Renkl, University of Freiburg, Germany

Discussant:  
Remy Rikers, Erasmus University, Rotterdam, The Netherlands

*Why understanding instructional design principles requires an understanding of the evolution of human cognitive architecture*

John Sweller, University of New South Wales, Sydney, Australia

*The role of software agents in multimedia learning environments: When do they help students reduce cognitive load?*

Roxana Moreno, University of New Mexico, USA

*Assessment of cognitive load in multimedia learning with dual-task methodology: Auditory load and modality effects*

Roland Brünken, University of Erfurt, Germany  
Jan L. Plass, New York University, USA  
Detlev Leutner, Essen University, Germany

*A multidimensional approach to the mental efficiency of instructional conditions*

Fred Paas, Open University, The Netherlands  
Juhani Tuovinen, Charles Sturt University, Australia

*Mental efficiency as a determinant for the dynamic selection of learning tasks in aviation training*

Ron J. C. M. Salden, Open University, The Netherlands  
Fred Paas, Open University, The Netherlands  
Jeroen van Merriënboer, Open University, The Netherlands
Symposium

**LEARNING TO WRITE IN CLASSROOM COMMUNITIES**

Organisers: Linda Allal, University of Geneva, Switzerland  
Triantafillia Kostouli, Aristotle University of Thessaloniki, Greece

Chair: Madelon Saada-Robert, University of Geneva, Switzerland

Discussant: Geerdina Van der Aalsvoort, Leiden University, The Netherlands

*The impact of prior knowledge on the socio-cultural (re)production of written genres*  
Debra Myhill, University of Exeter, United Kingdom

*Co-Constructing classroom writing contexts: Dialogism, collaboration, and asymmetries of knowledge*  
Triantafillia Kostouli, Aristotle University of Thessaloniki, Greece

*Peer interactions in a situation of joint text revision*  
Linda Allal, University of Geneva, Switzerland  
Lucie Mottier Lopez, University of Geneva, Switzerland  
Katia Lehraus, University of Geneva, Switzerland

*Children’s revision of written texts: Is together better?*  
Alina Galvão Spinillo, Federal University of Pernambuco, Brasil  
Elizandra Ferreira Lima, Federal University of Pernambuco, Brasil
Symposium

ACTIVE LEARNING IN EFFECTIVE VIRTUAL ENVIRONMENTS

Organiser: Maria Beatrice Ligorio, University of Bari, Italy
Chair: Alessandro Antonietti, University of Milan, Italy
Discussant: Alessandro Antonietti, University of Milan, Italy

Cross-fertilizing educational ideas in avatar inhabited cyberspace
Bonnie DeVarco, University of California, Santa Cruz, USA

Collaborating in a 3D virtual world for history, culture, and arts
Jeroen Janssen, University of Nijmegen, The Netherlands
Henny Van der Meijden, University of Nijmegen, The Netherlands
Maria Beatrice Ligorio, University of Bari, Italy

Effects of building in virtual: New communities and new roles
Maria Beatrice Ligorio, University of Bari, Italy

Only connect: James Burke's knowledge Web project
Patrick McKercher, University of California, Santa Cruz, USA

Being competent and familiar with CVEs: University students working in small groups
Alessandra Talamo, University of Rome “La Sapienza”, Italy
Cristina Zuccheramaglio, University of Rome “La Sapienza”, Italy
Eleonora Piccioni, University of Rome “La Sapienza”, Italy
Symposium

WHEN DOES E-LEARNING WORK AND WHEN DOES IT FAIL?
SEARCHING FOR CRITICAL FACTORS

Organiser: Rob Martens, Open University, The Netherlands
Chair: Rob Martens, Open University, The Netherlands
Discussant: Martin Valcke, University of Gent, Belgium

Study 1: Study 2000 – Creating and evaluating innovative Web-based learning environments
Antje Proske, Technical University Dresden, Germany
Susanne Narciss, Technical University Dresden, Germany
Hermann Kördle, Technical University Dresden, Germany

Study 2: Computer supported collaboration in higher education: Use of functional roles to support coordination in collaboration
Jan-Willem Strijbos, Open University, The Netherlands
Rob Martens, Open University, The Netherlands
Wim M. G. Jochems, Open University, The Netherlands

Study 3: Prior knowledge and hypertext learning in higher education
Jean Retschitzki, University of Fribourg, Switzerland
Veronique Zbinden Sapin, University of Fribourg, Switzerland
Martine Tercier, University of Fribourg, Switzerland

Study 4: Constructing the “good” e-learner
Peter Goodyear, Christopher Jones, Mireia Asensio, Vivien Hodgson and Christine Steeples, Lancaster University, United Kingdom
Symposium

LEARNING AND TEACHING OF RESEARCH METHODOLOGY

Organiser: Mari Murtonen, University of Turku, Finland
Chair: Sirpa Lehti, University of Turku, Finland
Discussant: Angela Brew, University of Sydney, Australia

How conceptions of science and research develop during three academic years?
Gunilla Petersson, Stockholm University and Karolinska Institute, Sweden

Equal or non-equal small groups in methods learning?
Thomas Lerche, University of Regensburg, Germany

Does computer-supported collaborative learning promote research methodology learning?
Tomi Jaakkola, University of Turku, Finland

Conceptions, experiences and motivational orientation patterns in research learning
Mari Murtonen, University of Turku, Finland
Symposium

STUDENT INTEREST WITHIN AND ACROSS DOMAINS

Organiser: Susan Bobbitt Nolen, University of Washington, USA

Chair: Suzanne Hidi, OISE, University of Toronto, Canada

Discussant: Suzanne Hidi, OISE, University of Toronto, Canada

Individual interest and its impact on students' work with expository text and mathematical word problems
K. Ann Renninger, Swarthmore College, USA
A. Kristina Lasher, The Math Forum, USA
Liza Ewen, Friends’ Central School, USA

Interest and learning history: Effects of instructional context
Pietro Boscolo, University of Padova, Italy
Laura Del Favero, University of Padova, Italy

Student interest for physics generally, and for topics specific to physics
Tina Seidel, University of Kiel, Germany
Manfred Prenzel, University of Kiel, Germany
Lena Meyer, University of Kiel, Germany
Inger Marie Dalehette, University of Kiel, Germany

The development of interest and motivation to read and write
Susan Bobbitt Nolen, University of Washington, USA
Symposium

WRITING TO LEARN AND LEARNING TO WRITE IN HIGHER EDUCATION

Organiser: Olga Dysthe, University of Bergen, Norway
Chair: Olga Dysthe, University of Bergen, Norway
Discussant: Leena Laurinen, University of Jyväskylä, Finland

Reading, writing and learning in higher education: Domain, level and role differences
Isabel Sole, University of Barcelona, Spain
Marta Gracia, University of Barcelona, Spain
Sandra Espino, University of Barcelona, Spain

Affective and social changes perceived by students in EFL academic writing courses: Sources and links
Bella Rubin, Tel Aviv University, Israel
Hadara Perpignan, Bar-Ilan University, Israel
Helen Katznelson, Tel Aviv University and Beit Berl College, Israel

Reflective writing in teacher training. Design, implementation and evaluation
Jacqueline Beckers, University of Liege, Belgium
Caroline Scheepers, University of Liege, Belgium

Communicative conditions for learning in e-mail discussions in teacher education
Torlaug L. Hoel, Norwegian Technical University, Trondheim, Norway

The power of the group in graduate student supervision. An empirical study of group based mentoring and writing groups combined with individual supervision
Kariane Westrheim, University of Bergen, Norway
Olga Dysthe, University of Bergen, Norway
Symposium

FOSTERING THE WILL TO LEARN: NORDIC EXPERIENCES OF DEVELOPING CRAFTS AND HOME ECONOMICS EDUCATION AT COMPREHENSIVE SCHOOLS

Organiser: Päivi Palojoki, University of Helsinki, Finland
Chair: Sari Kivilehto, University of Helsinki, Finland
Discussant: Päivi Palojoki, University of Helsinki, Finland

Connections between the new role of the subject “slöjd” [craft and design] and the teacher training in the Swedish comprehensive schools
Peter Hasselskog, Göteborg University, Sweden
Marlene Johansson, Göteborg University, Sweden

Home economics teacher students’ ICT-supported collaborative learning
Silpa Maria Pöntinen, University of Helsinki, Finland

Good practices in multicultural and domiciling work, implications for home economics education
Hille Janhonen-Abruquah, University of Helsinki, Finland

Developing practices in multicultural education: From teacher’s culture-shock to joint learning experiences
Salla Simola, University of Helsinki, Finland
Symposium

USING NOTATIONS IN PROBLEM SOLVING. A DEVELOPMENTAL PERSPECTIVE

Organisers: Eduardo Martí, University of Barcelona, Spain
Annick Weil-Barais, Angers University, France

Chair: Eduardo Martí, University of Barcelona, Spain

Discussant: Merce Garcia-Mila, University of Barcelona, Spain

Using notation in different problem solving contexts: Relation between the spontaneous notations and explicit knowledge related to the cognitive functions of the notations
Mathieu Charrier, Angers University, France
Sophie Ferret, Angers University, France
Annick Weil-Barais, Angers University, France

Using notation as cognitive tool to memorise or communicate a shape: Developmental trend in 6- to 9-year old children
Christine Gaux, Angers University, France

How to use a cell phone? Children's and adult's written instructions
Eduardo Martí, University of Barcelona, Spain
Raquel Mayordomo, University of Barcelona, Spain

Notational practices within activities of preschoolers’ constructions of scientific knowledge
Spyridon Tantaros, University of Patras, Greece
Dimitris Koliopoulos, University of Patras, Greece
Maria Papandreou, University of Patras, Greece
Konstantinos Ravanis, University of Patras, Greece

Note-taking, report writing and scientific thinking
Merce Garcia-Mila, University of Barcelona, Spain
Nubia Rojo, University of Barcelona, Spain
Christopher Andersen, Ohio State University, USA
Symposium

EUROPEAN WORLD VIEWS, MORALITY AND RELIGION

Organiser: Kirsi Tirri, University of Helsinki, Finland
Chair: Kirsi Tirri, University of Helsinki, Finland
Discussants: Fritz Oser, University of Fribourg, Switzerland
Hannele Niemi, University of Helsinki, Finland

Students’ views on social values, religion and moral education
Cees A. Klaassen, University of Nijmegen, The Netherlands
Han A. Leeferink, University of Nijmegen, The Netherlands

How do world views predict attitudes toward information society among Finnish adolescents?
Olli Poutiainen, University of Helsinki, Finland
Kirsi Tirri, University of Helsinki, Finland
Petri Nokelainen, University of Helsinki, Finland

Secondary students’ conceptions of Lutheran religion
Elina Hella, University of Helsinki, Finland

The Oser’s dilemma in Italian culture: A preliminary adaptation study
Anna Laura Comunian, University of Padova, Italy
Symposium

TEACHER THINKING IN HIGHER EDUCATION: DIALOGUE ACROSS EPISTEMOLOGIES AND METHODOLOGIES

Organiser: Malcom Eley, Monash University, Australia
Chair: Cynthia Weston, McGill University, Canada
Discussant: Noel Entwistle, University of Edinburgh, United Kingdom

How do professors explain their decisions when planning and teaching?
Lynn McAlpine, McGill University, Canada
Cynthia Weston, McGill University, Canada

Teachers’ experience of change in their understanding of the subject matter they have just taught
Keith Trigwell, University of Oxford, United Kingdom
Michael Prosser, University of Sydney, Australia
Elaine Martin, Victoria University, Australia
Paul Ramsden, University of Sydney, Australia

Teacher thinking during detailed planning, and a possible need to re-define the role of higher level constructs like conceptions of teaching
Malcolm G. Eley, Monash University, Australia

A factor analysis of the approaches to teaching inventory
Jan H. F. Meyer, University of Durham, United Kingdom
Malcolm G. Eley, Monash University, Australia
EARLI Invited Symposium

CULTURAL INVESTIGATIONS OF EPISTEMOLOGICAL UNDERSTANDING: EXPLORING CONCEPTIONS OF KNOWLEDGE AND KNOWING IN DIVERSE CULTURES

Organiser: Barbara Hofer, Middlebury College, USA
Chair: Paul R. Pintrich, University of Michigan, USA
Discussant: Angela O’Donnell, Rutgers University, USA

Epistemological beliefs and strategy use: Cross-cultural explorations in Japan and the U.S.
Barbara Hofer, Middlebury College, USA

Beliefs about knowledge in the Moslem world: Challenges and opportunities
Stuart Karabenick, Eastern Michigan University, USA
Samira Moosa, Sultan Qaboos University, Sultanate of Oman

Unresolved questions in the current models of epistemic development
Anna-Maija Pirttilä-Backman, University of Helsinki, Finland

Cognition, culture, and epistemic commitments: Why cross-cultural studies are not enough
Eli Gottlieb, Israel and University of Washington, USA

Epistemological beliefs and self-regulated learning among Norwegian post-secondary students
Helge I. Stømsø, University of Oslo, Norway
Ivar Bråten, University of Oslo, Norway
Symposium

MOTIVATION, EMOTION, COGNITION AND ACHIEVEMENT IN SCHOOL: RELATIONS AND DEVELOPMENTS

Organiser: Thea Peetsma, University of Amsterdam, The Netherlands
Chair: Thea Peetsma, University of Amsterdam, The Netherlands
Discussant: Willy Lens, University of Leuven, Belgium

Societal values and school motivation
Manfred Hofer, Stefan Fries, Heinz Reinders, Marten Clausen, Franziska Dietz and Sebastian Schmid, University of Mannheim, Germany

Learning in social context: Motivation, self-concept and identification with peers, families and school
Pam Maras, University of Greenwich, United Kingdom

Personal and school-based determinants of stability and change in motivation and emotion over adolescence
Jean-Luc Gurtner, University of Fribourg, Switzerland
Isabelle Monnard, University of Fribourg, Switzerland

Self-concept, social integration, well being and achievement in primary education: A longitudinal study
Jaap Roeleveld, University of Amsterdam, The Netherlands
Thea Peetsma, University of Amsterdam, The Netherlands
Reinoud Stoel, University of Amsterdam, The Netherlands

Relations between pupils’ investment in school, self-confidence, well-being and school achievement at different ages in primary education
Thea Peetsma, University of Amsterdam, The Netherlands
Jaap Roeleveld, University of Amsterdam, The Netherlands
Reinoud Stoel, University of Amsterdam, The Netherlands
Symposium

THE QUALITY OF STUDENTS’ PEDAGOGICAL KNOWLEDGE: WHAT THEY KNOW ABOUT LEARNING AND TEACHING

Organiser: Michael J. Lawson, Flinders University, Adelaide, Australia
Chair: Michael J. Lawson, Flinders University, Adelaide, Australia
Discussant: John R. Kirby, Queens University, Ontario, Canada

Identifying dimensions of quality in learners’ knowledge about teaching and learning
Helen Askell-Williams, Flinders University, Adelaide, Australia
Michael J. Lawson, Flinders University, Adelaide, Australia
Rosalind Murray-Harvey, Flinders University, Adelaide, Australia

Comparing regular strand and problem-based learning (PBL) strand teacher education students’ perceptions about what helps them to learn in class
Rosalind Murray-Harvey, Flinders University, Adelaide, Australia
Michael J. Lawson, Flinders University, Adelaide, Australia
Helen Askell-Williams, Flinders University, Adelaide, Australia

Teacher education students’ knowledge about how class discussions help them to learn
Michael J. Lawson, Flinders University, Adelaide, Australia
Rosalind Murray-Harvey, Flinders University, Adelaide, Australia
Helen Askell-Williams, Flinders University, Adelaide, Australia

University students’ pedagogical knowledge of teacher questioning
Tu Anh Thi Tran, Hue University, Vietnam
Michael J. Lawson, Flinders University, Adelaide, Australia
Symposium

**LANGUAGE AND LEARNING IN MULTICULTURAL/MULTILINGUAL EDUCATIONAL SETTINGS**

Organiser: Ed Elbers, Utrecht University, The Netherlands
Chair: Ed Elbers, Utrecht University, The Netherlands
Discussant: Guida de Abreu, University of Luton, United Kingdom

*Discourse and learning in a Norwegian multicultural classroom*
Lutine De Wal Pastoor, University of Oslo, Norway

*Adaption processes in a multicultural classroom in Catalonia*
Montse Benlloch, University of Vic, Spain
Fransesc Martinez, University of Barcelona, Spain
M. Teresa Feu, University of Vic, Spain

*Drawing boundaries in everyday life. Identity markers in visually oriented school settings in Sweden*
Sangeeta Bagga-Gupta, Örebro University, Sweden

*Multilingual socialisation of young children in a Swiss kindergarten*
Christiane Perregaux, University of Geneva, Switzerland

*Collaboration and the construction of word meaning in a multicultural classroom in The Netherlands*
Ed Elbers, Utrecht University, The Netherlands
Mariëtte De Haan, Utrecht University, The Netherlands
Symposium

BEYOND THE MEANS AND SCORES: WHAT CAN WE LEARN FROM PISA AND OTHER INTERNATIONAL STUDIES

Organiser: Zemira Mevarech, Bar-Ilan University
Chair: Zemira Mevarech, Bar-Ilan University
Discussant: Eckhard Klieme, German Institute for International Educational Research, Germany

Teaching style, and perceptions of grading: What we learn from the Israel Pisa project
Bracha Karmarski, Bar-Ilan University, Israel
Nura Resh, Hebrew University of Jerusalem, Israel

Comparisons of good schools and poor schools: What can we learn from Pisa data?
Zemira Mevarech, Bar-Ilan University, Israel
Bracha Kramarski, Bar-Ilan University, Israel
Or Katz, Bar-Ilan University, Israel

Impact of social capital on reading, mathematics and science literacy: What we learn from the Hong Kong Pisa project
Sui Chu Ester Ho, University of Hong Kong, China

Remarks on the “inner structures” of mathematical achievement: Evidences from the Pisa mathematics data
Michael Neubrand, University of Flensburg, Germany
Symposium

SUCCESSFUL UNIVERSITY STUDENT LEARNING IN DIFFERENT LEARNING CONTEXTS

Organiser: Kirsti Lonka, Karolinska Institute, Stockholm, Sweden
Chair: Jan Vermunt, Leiden University, The Netherlands
Discussant: John Richardson, Open University, United Kingdom

*University students’ situational reaction tendencies: Reflections on general study orientations, learning strategies and study success*
Jarkko Mäkinen, University of Turku, Finland
Erkki Olkinuora, University of Turku, Finland

*The classroom as social context: Implications for our understanding of teaching and learning in higher education*
Sarah J. Mann, University of Glasgow, United Kingdom

*Learning in a Web-based system in medical education*
Italo Masiello, Karolinska Institute, Stockholm, Sweden
Kirsti Lonka, Karolinska Institute, Stockholm, Sweden

*The role of success expectation and task-avoidance in academic performance and satisfaction*
Katariina Salmela-Aro, University of Jyväskylä, Finland
Jari-Erik Nurmi, University of Jyväskylä, Finland

*Factors related to study success in technology education*
Päivi Tynjälä, University of Jyväskylä, Finland
Risto Salminen, Lappeenranta University of Technology, Finland
Tuula Sutela, Lappeenranta University of Technology, Finland
Anita Nuutinen, University of Jyväskylä, Finland
Seppo Pitkänen, Lappeenranta University of Technology, Finland
Symposium

**HOW CAN EXPERTS BE FLEXIBLE AND INNOVATIVE?**

Organiser: Giyoo Hatano, University of the Air, Chiba, Japan

Chair: Giyoo Hatano, University of the Air, Chiba, Japan

Discussant: Patricia Alexander, University of Maryland, USA

*Domain-crossing expertise of masters in the Japanese traditional weaving*
Yoko Oura, Niigata University, Japan

*Flexibility and consistency in experienced magistrates' sentencing of a thousand thieves*
Jeanette Lawrence, University of Melbourne, Australia
Ross Homel, Griffith University, Australia

*Socially supported cognitive autonomy of expert senior shutterbugs*
Giyoo Hatano, University of the Air, Chiba, Japan
Keiko Takahashi, University of the Sacred Heart, Japan
Makiko Tokoro, University of the Sacred Heart, Japan
PROFESSIONAL LEARNING IN SCHOOL AND BEYOND. AN EXPERT VIEW ON EMERGING THEMES

Organisers: Henny P.A. Boshuizen, Open University, The Netherlands
Hans Gruber, University of Regensburg, Germany

Chair: Erno Lehtinen, University of Turku, Finland

Theoretical underpinnings in analysing professional expertise
Anneli Eteläpelto, University of Helsinki, Finland

Changes of expert knowledge during professional learning: Do and should we care about differences within domains or differences between domains
Hans Gruber, University of Regensburg, Germany

Disrupted learning lines on the way from school to work
Henny P.A. Boshuizen, Open University, The Netherlands

Learning to use scientific knowledge in the workplace
Michael Eraut, University of Sussex, United Kingdom

How to change your way of learning when you start to become a professional
Robert-Jan Simons, Utrecht University, The Netherlands
REASONING ABOUT ADVANCED SCIENCE CONCEPTS IN ELEMENTARY SCHOOL

Organisers: Ilonca Hardy, Max Planck Institute for Human Development, Berlin, Germany
Susanne Koerber, University of Munich, Germany

Chairs: Ilonca Hardy, Max Planck Institute for Human Development, Berlin, Germany
Susanne Koerber, University of Munich, Germany

Discussant: Joyce Moore, University of Iowa, USA

*When is a difference, really a difference? Children's understanding of variation in an inquiry centered classroom*
Anthony Petrosino, University of Texas, USA

*Distributions as signatures of growth*
Richard Lehrer, Vanderbilt University, USA
Leona Schable, Vanderbilt University, USA

*Why does a large ship of iron float? Elementary school students' understanding of “floating and sinking” in constructivist learning environments*
Ilonca Hardy, Max Planck Institute for Human Development, Berlin, Germany
Angela Jonen, University of Münster, Germany
Kornelia Möller, University of Münster, Germany
Elsbeth Stern, Max Planck Institute for Human Development, Berlin, Germany

*Understanding the nature of scientific knowledge in elementary school children*
Claudia Thoermer, University of Munich, Germany
Beate Sodian, University of Munich, Germany
Patricia Grygiel, University of Würzburg, Germany
Johannes Günther, University of Würzburg, Germany
Ernst Kircher, University of Würzburg, Germany
**Poster Presentations**

**TEACHER EDUCATION AND PROFESSIONAL DEVELOPMENT**

**Discussants**: Theo Bergen, University of Nijmegen, The Netherlands (posters 1-10) and Michal Zellermayer, Levinsky College of Education, Israel (posters 11-20)

**POSTER G 1**
*Processes of change in the course “change in the education system” – From a real course to a virtual course*
Shosh Millet, Achva College of Education, Israel
Eti Gilad, Achva College of Education, Israel

**POSTER G 2**
*The Digital Learning Center (DLC) in Levinsky college - A research-based model for training teachers to novel learning environments*
Nili Mor, Levinsky College of Education, Israel
Ida Heilweil, Levinsky College of Education, Israel
Miriam Mevorach, Levinsky College of Education, Israel

**POSTER G 3**
*Assumptions underlying adult educator practice*
Jane Morgan, Auckland University of Technology, New Zealand

**POSTER G 4**
*Dealing with diversity: Pre-service teachers’ perceptions of their training and preparedness*
Donatille Mujawamariya, University of Ottawa, Canada
Gada Mahrouse, University of Toronto, Canada

**POSTER G 5**
*Theories and practices of teachers of young learners of English as a foreign language*
Marianne Nikolov, University of Pecs, Hungary

**POSTER G 6**
*Characterizing selected models of fieldwork in teacher education processes*
Michael Orly, Achva College of Education, Israel
Shosh Millet, Achva College of Education, Israel
Rinat Oren, Achva College of Education, Israel
POSTER G 7
*Tensions between beliefs and practices of a biology teacher*
Janet Paul de Verjovsky, Autonomous University of Morales, Mexico

POSTER G 8
*Training teachers to “non teaching” science in science museum*
Katerina Plakitsi, University of Athens, Greece
Panos Kokkotas, University of Athens, Greece
Ekaterini Malamitsa, University of Athens, Greece
Panagiotis Piliouras, University of Athens, Greece
Ioannis Vlachos, University of Athens, Greece

POSTER G 9
*The professional development of pedagogical instructors: Intuition or training?*
Barbara Rosenstein, Mofet Institute, Tel Aviv, Israel
Rivka Reichenberg, Mofet Institute, Tel Aviv, Israel

POSTER G 10
*The non-formal school teacher: Enhancing capacity to meet learners needs*
Sara Jerop Ruto, University of Heidelberg, Germany

POSTER G 11
*Student teachers’ beliefs and practices about the use of technology in the teaching of English as a second language*
Çigdem Sahin, Çanakkale Onsekiz Mart University, Turkey

POSTER G 12
*Are teaching trainees aware of pupils’ test-anxiety?*
Sarit Segal, Levinsky College of Education, Tel Aviv, Israel
Sara Shimoni, Levinsky College of Education, Tel Aviv, Israel

POSTER G 13
*A feminist reading of the professional concept of teachers*
Orna Schatz-Oppenheimer, Hebrew University David Yellin, Israel
Lily Halpert Zamir, Hebrew University David Yellin, Israel

POSTER G 14
*Teachers’ professional development in a process of redesigning the curriculum*
Marie L. Schreurs, University of Heerlen, The Netherlands
POSTER G 15
Novice teachers’ reasoning while making pedagogical decisions
Edna Shoham, Oranim Academic College of Education, Israel
Sophia Penso, Oranim Academic College of Education, Israel

POSTER G 16
Lessons from a radical innovation in teacher education
Johannes Slabbert, University of Pretoria, South Africa

POSTER G 17
Self-study in the context of institutional change
Edith Tabak, Levinsky College of Education, Israel

POSTER G 18
Decay of skilled performance in medicine
Geert Van de Brink, University of St. Radboud, Nijmegen, The Netherlands
Henny P. A. Boshuizen, Open University, The Netherlands
Pie Bartolomeus, University of Maastricht, The Netherlands

POSTER G 19
Drug calculation, nurse education and university preparation
Carolina Weller, Monash University, Australia

POSTER G 20
Designing electronic network-based mentoring for preservice teachers
Shu Ching Yang, National Sun Yat-sen University, Taiwan
Shu Fang Liu, National Sun Yat-sen University, Taiwan

MOTIVATION AND EMOTION

Discussants: Suzanne Hidi, OISE, University of Toronto, Canada (posters 21-30) and
Susan Bobbitt Nolen, University of Washington, Seattle, USA (posters 31-38)

POSTER G 21
Relation between children's math grades and attitudes and parents' attitudes toward mathematics
Lidija Arambašić, University of Zagreb, Croatia
Ves Vlahovic-Štetic, University of Zagreb, Croatia

POSTER G 22
“Everything is determined?” Relationship between pupil achievement and personality, regarding some factors
Éva Balázs, University of Pecs, Hungary
Mihaly Kocsis, University of Pecs, Hungary
Irén Vágó, University of Pecs, Hungary
Terézia Reisz, University of Pecs, Hungary

POSTER G 23
Group differences in self-regulated learning revisited
Sarah Blom, University of Amsterdam, The Netherlands
Hein Broekkamp, University of Amsterdam, The Netherlands

POSTER G 24
Future time perspective, goal theory and student motivation in high school
Isabelle Bourque, University of Montreal, Canada
Frédéric Legault, University of Montreal, Canada
Monique Brodeur, University of Montreal, Canada
Sylvie Fréchette, University of Montreal, Canada

POSTER G 25
Elaboration and validation of a scale measuring self-regulated learning in a context of teachers’ educational integration of information technology
Monique Brodeur, University of Montreal, Canada
Julien Mercier, McGill University, Canada
Colette Deaudelin, University of Sherbrooke, Canada
Marc Dussault, University of Quebec, Trois-Rivières, Canada

POSTER G 26
Task demands and test expectations: Theory and empirical research on students’ self-regulated studying in preparation for teacher-made tests
Hein Broekkamp, University of Amsterdam, The Netherlands
Huub Van den Bergh, Utrecht University, The Netherlands
Bernadette Van Hout-Wolters, University of Amsterdam, The Netherlands
Gert Rijlaarsdam, University of Amsterdam, The Netherlands

POSTER G 27
The German adaptation of the strategic approach to coping scale
Petra Buchwald, University of Düsseldorf, Germany
Christine Schwarzer, University of Düsseldorf, Germany
Heinrich Heine, University of Düsseldorf, Germany

POSTER G 28
A self-regulated model to elicit teachers candidates’ motivation to teach
Maria Cardelle-Elawar, Arizona State University West, USA
Maria Luisa Sanz de Acedo Lizarraga, University of Navarra, Spain
POSTER G 29
Are fixed and incremental conceptions of intelligence mutually exclusive?
Thérèse Bouffard, University of Montreal, Canada
Carole Vezeau, College of Joliette, Canada
Valérie Dubois, University of Montreal, Canada

POSTER G 30
Prospective motivation: The role of feeling about reading, writing and mathematics from kindergarten to middle school
Lerida Cisotto, University of Padova, Italy
Daniela Lucangeli, University of Padova, Italy

POSTER G 31
Fostering the will to learn: Which position for the tutor in distance learning?
Gerard Delacour, University of Nantes, France
Sandra Bruno, University of Paris VIII, France

POSTER G 32
Self image and significant others’ perceived feedback as factors associated with school deviance: A pilot study in 11-14 year old Greek & Italian children
Georgios Dimou, University of Ioannina, Greece
Panayotis Tsakalis, University of Ioannina, Greece

POSTER G 33
An NLP based goal setting procedure for fostering the will to learn and motivation of the 6th grade students at regional primary boarding schools in Turkey
Feyza Doyran, Middle East Technical University, Turkey

POSTER G 34
Relationships between coping strategies, stress, personal resources, school, and psychosocial adaptation at the adolescence
Michelle Dumont, University of Quebec, Trois-Rivières, Canada

POSTER G 35
Preservice teachers’ conception of students’ motivation within a knowledge-building process
Sylvie Fréchette, University of Montreal, Canada
Judith Lapointe, McGill University, Montreal, Canada
Monique Brodeur, University of Montreal, Canada
Frédéric Legault, University of Montreal, Canada
Isabelle Bourque, University of Montreal, Canada
POSTER G 36
A training in self-regulated learning for computer science students
Heidrun Stoeger, University of Ulm, Germany

POSTER G 37
The development of intrument for measuring adult self-regulated learning
Cheng-Yen Wang, University of Kaohsiung, Taiwan

POSTER G 38
Relationship between classroom management and students motivation: An exploration with factor analysis
Franco Zambelli, University of Padova, Italy
Eraldo Nicotra, University of Padova, Italy
Monica Frigo, University of Padova, Italy

LEARNING AND TEACHING

Discussants: Joost Lowyck, University of Leuven, Belgium (posters 39-46) and Margarita Limón, Autonomous University of Madrid, Spain (posters 47-55)

POSTER G 39
Student quality of primary school life - A multilevel analysis
Carl Anthon Leonard, University of Newcastle, New South Wales, Australia
Sid F. Bourke, University of Newcastle, New South Wales, Australia
Neville J. Schofield, University of Newcastle, New South Wales, Australia

POSTER G 40
Constructing knowledge by studying texts in compulsory secondary education
Eva Liesa, Ramon Llull University, Barcelona, Spain
Montserrat Castelló, Ramon Llull University, Barcelona, Spain

POSTER G 41
Technology’s impact on learning process in science teaching in primary school
Katerina Malamitsa, University of Athens, Greece
Panagiotis Kokkotas, University of Athens, Greece
Panagiotis Piliouras, University of Athens, Greece
Katerina Plakitsi, University of Athens, Greece
Ioannis Vlahos, University of Athens, Greece
POSTER G 42
The role of pictorial representations on problem solving: The case of ratio and proportion tasks
Christina Misailidou, University of Manchester, United Kingdom
Julian Williams, University of Manchester, United Kingdom

POSTER G 43
The role of problems in the mathematics lessons of the TIMSS-video-study
Johanna Neubrand, University of Lueneburg, Germany

POSTER G 44
The classroom microculture and students' involvement in learning
Lucie Mottier Lopez, University of Geneva, Switzerland

POSTER G 45
Teaching concepts by means of analogy: A process model
Andrys Onsman, Monash University, Melbourne, Australia

POSTER G 46
Skills development and the value of undergraduate project work
Paul Orsmond, Staffordshire University, United Kingdom
Stephen Merry, Staffordshire University, United Kingdom
Kevin Reiling, Staffordshire University, United Kingdom

POSTER G 47
Interconnected versus compartmentalised knowledge: Seeking connections in English, French and German mathematics textbooks
Birgit Pepin, Oxford Brookes University, United Kingdom
Linda Haggarty, The Open University, United Kingdom

POSTER G 48
What the heck is “amphistomatic”? Plant identification as a cognitive process and as a subject of biology teaching
Stephanie Pieschl, University of Muenster, Germany
Rainer Bromme, University of Muenster, Germany

POSTER G 49
Applying a model of classroom learning processes in a case study of five students
Harri Pitkäniemi, University of Helsinki, Finland
POSTER G 50
Making sense of photographs
Lilian L. Pozzer, University of Victoria, Canada
Wolff-Michael Roth, University of Victoria, Canada

POSTER G 52
Video-based, cross-cultural studies on the quality of math teaching and schooling: The international TIMSS-R video study and the Swiss national video study
Kurt Reusser, University of Zurich, Switzerland
Christine Pauli, University of Zurich, Switzerland
Isabelle Hugener, University of Zurich, Switzerland

POSTER G 53
Working at home for school: The significance of intelligence and school achievement
Natalie Rinner, University of Vienna, Austria
Petra Wagner, University of Vienna, Austria
Christiane Spiel, University of Vienna, Austria

POSTER G 54
Research as design approach in the school development
Tiina Soini, University of Helsinki, Finland
Kirsi Pyhältö, University of Helsinki, Finland
Satu Eerola, University of Helsinki, Finland
Maijaliisa Rauste-von Wright, University of Helsinki, Finland

POSTER G 55
Toward a model of learning in the visual arts
Jeffrey K. Smith, Rutgers University and The Metropolitan Museum of Art, USA
Lisa F. Smith, Kean University and The Metropolitan Museum of Art, USA

LITERACY QUESTIONS
Discussants: Herre van Oostendorp, Utrecht University, The Netherlands (posters 56-61) and Maria Chiara Levorato, University of Padova (posters 62-67)

POSTER G 56
Story comprehension and related abilities in emergent literacy
Beatrice Accorti Gaminossi, University of Florence, Italy
Giuliana Pinto, University of Florence, Italy
POSTER G 57
Reading and thinking like historians in 4th grade: Linking performance assessment, theoretical constructs and curriculum
Peter Afflerbach, University of Maryland at College Park, USA
Bruce VanSledright, University of Maryland at College Park, USA
Ann Dromsky, University of Maryland at College Park, USA

POSTER G 58
Text and context: Undergraduate language students’ representations of translation
Charles Anderson, University of Edinburgh, Scotland, United Kingdom
Richard Easton, University of Edinburgh, Scotland, United Kingdom
Richard Wakely, University of Edinburgh, Scotland, United Kingdom

POSTER G 59
The learning process and reading comprehension of high school biology students reading primary literature
Gilat Brill, The Weizmann Institute of Science, Israel
Anat Yarden, The Weizmann Institute of Science, Israel

POSTER G 60
Individual styles in learning to spell: Cognitive, learning and literacy profiles and their relations to interventions
Peter Brooks, University of Surrey, Guildford, United Kingdom
John Everatt, University of Surrey, Guildford, United Kingdom
Sally Weeks, University of Surrey, Guildford, United Kingdom

POSTER G 61
The development of definitional skills as a metalinguistic ability and their relations with school achievement
Gianluca Gini, University of Padova, Italy
Beatrice Benelli, University of Padova, Italy
Carmen Belacchi, University of Urbino, Italy
Daniela Lucangeli, University of Padova, Italy

POSTER G 62
Impact of different aid systems in reading comprehension
António Gonzalez, ISPA, Lisbon, Portugal

POSTER G 63
Notetaking and academic writing
Sara Hauptman, Achva College, Israel
Rivka Tamir, Achva College, Israel
POSTER G 64
*And what about the reader? A reading workshop*
Vera Korine-Shafir, Levinsky College of Education, Tel-Aviv, Israel

POSTER G 65
*A study on wait-time in classroom interaction*
Barbara Maroni, University of Rome La Sapienza, Italy
Clotilde Pontecorvo, University of Rome La Sapienza, Italy

POSTER G 66
*Fostering self-explanations when learning with text and animations: The use of an annotation facility*
Monika Nobs, University of Heidelberg, Germany
Peter Reimann, University of Sydney, Australia

POSTER G 67
*Negotiating about conceptual information during computer supported collaborative writing*
Cathy Van de Laak, TNO Human Factors, Soesterberg, The Netherlands
Jerry Andriessen, Utrecht University, The Netherlands

**INSTRUCTIONAL TECHNOLOGY**

**Discussants:** Andrea Karpati, Eötvös University, Budapest, Hungary (posters 68-75), Campbell McRobbie, Queensland University of Technology, Australia (posters 76-83) and Beatrice Ligorio, University of Bari, Italy (posters 84-91)

POSTER G 68
*Talking to the computer? Differences in adaptation strategies of initial users of speech recognition systems*
Ivy Ackerman, University of Antwerp, Belgium
Mariëlle Leijten, University of Antwerp, Belgium
Luuk Van Waes, University of Antwerp, Belgium

POSTER G 69
*Knowledge spaces and adaptivity in e-learning*
Dietrich Albert, University of Graz, Austria
Cord Hockemeyer, University of Graz, Austria

POSTER G 70
*The mentor's role in real/virtual communities for learning*
Adalgisa Battistelli, University of Verona, Italy
Benedetta Bellò, University of Verona, Italy
POSTER G 71
*Children’s, teachers’ and parents’ point of view: Learning abilities and depression*
Paola Bonifacci, University of Bologna, Italy
Cristiana Santinelli, University of Bologna, Italy
Silvana Contento, University of Bologna, Italy

POSTER G 72
*Can ICT switch children on to learning? Indications from a longitudinal observational study*
Carolyn Bromfield, University of West of England, United Kingdom
Susan Waite, University of Plymouth, England, United Kingdom
Steve Wheeler, University of Plymouth, England, United Kingdom

POSTER G 73
*ThinkAboutIt: A web-based tool for developing critical thinking*
Roger Bruning, University of Nebraska-Lincoln, USA

POSTER G 74
*Visual dynamic events in 3D environments: The role of viewpoint in multimedia presentations*
Bärbel Garsoffky, IWM and Knowledge Media Research Center, Tübingen, Germany
Stephan Schwan, Johannes Kepler University, Linz, Austria

POSTER G 75
*How 6-9 year old students come to learn a computer game based on the operations of addition*
Jacinthe Giroux, University of Montreal, Canada

POSTER G 76
*Information retrieval and processing skills using hypermedia learning environments*
Jean Loiselle, University of Quebec, Trois-Rivières, Canada
Josiane Basque, TELUQ University, Canada
Martine Chomienne, Cegep@Distance, Canada
Louise Marchand, University of Montreal, Canada
Hélène Fournier, University of Quebec, Trois-Rivières, Canada

POSTER G 77
*Developing second language learner autonomy in Italian through the use of computer mediated audio-conferencing*
Greer Johnson Cavallaro, Griffith University, Brisbane, Australia
Claire Kennedy, Griffith University, Brisbane, Australia
POSTER G 78
Talking learning into being - A frame analysis of talk about web-based learning
Leena Kuure, University of Oulu, Finland
Maarit Saarenkunnas, University of Oulu, Finland
Peppi Taalas, University of Jyväskylä, Finland

POSTER G 79
Advancing understanding of technological fluency through a learning ecologies perspective
Brigid Barron, Stanford University School of Education, USA

POSTER G 80
Doing it online: An analysis of the activities of online facilitators of learning
Johannes C. Cronjé, University of Pretoria, South Africa

POSTER G 81
Instrumentation of IT tools: The case of computer algebra
Paul Drijvers, Utrecht University, The Netherlands
Koeno Gravemeijer, Utrecht University, The Netherlands

POSTER G 82
Partner trust, teacher change: Writing project integration of web log technology at the national network and local school site levels
Patrick Delaney, University of California, Berkeley, USA

POSTER G 83
Implementing an electronic learning environment in secondary schools
Jan F. Deinum, University of Groningen, The Netherlands

POSTER G 84
Success and failure of learning from the screen: Is screen-design a critical factor?
Isabelle De Ridder, University of Antwerp, Belgium
Luuk Van Waes, University of Antwerp, Belgium

POSTER G 85
A scheme for analysis and evaluation of science problem solving in a computerized learning environment: Construction and application
Zvia Fund, Bar-Ilan University, Israel

POSTER G 86
Improving online learning using a communities of practice model
Mandia Mentsi, Massey University, Auckland, New Zealand
Jean Annan, Massey University, Auckland, New Zealand
Ken Ryba, Massey University, Auckland, New Zealand

POSTER G 87
*Incidence of computer mediation in interaction processes and in problem solving strategies: The case of using a spreadsheet*
Manoli Pifarré, Lleida University, Spain

POSTER G 88
*What is the potential of learning in an Internet environment during early childhood?*
Ofra Nir-Gal, Achva Academic College of Education, Israel
Talia Nur, Achva Academic College of Education, Israel

POSTER G 89
*Assessing the instructional power of e-learning applications*
Sigmar-Olaf Tergan, Knowledge Media Research Center, Tübingen, Germany

POSTER G 90
*Who benefits from the integration of role-based guidance in a computer-based training*
Claudia Winter, University of Mannheim, Germany
Holger Horz, University of Mannheim, Germany
Stefan Fries, University of Mannheim, Germany

POSTER G 91
*Searching the web for medical information: Do laypersons guide their search on a metacognitive level?*
Marc Stadtler, University of Muenster, Germany
Rainer Bromme, University of Muenster, Germany

**STUDIES ON THE QUALITY OF SCHOOL (BIQUA): TEACHING AND LEARNING MATHEMATICS AND SCIENCE DEPENDING ON IN-SCHOOL AND OUT-OF-SCHOOL CONTEXTS**

Poster fair organised by Manfred Prenzel and Joerg Doll, University of Kiel, Germany
**Discussant:** Philip Adey, King’s College, London, United Kingdom (92-100)

POSTER G 92
*Teaching and learning processes in physics instruction - A videotape classroom study*
M. A. Lena Meyer, Inger Marie Dalehefte, Tina Seidel, Manfred Prenzel, Reinders Duit, Manfred Euler, Manfred Lehrke, Christoph Müller, Rolf Rimmele, Maike Tesch and Ari Widodo, University of Kiel, Germany
POSTER G 93
Teaching expertise and teaching scripts: Conditions for their modification
Helmut Fischler, Free University of Berlin, Germany

POSTER G 94
Teaching with worked-out examples: Reducing the gap between theory and practice
Alexander Renkl, University of Freiburg, Germany
Silke Schworm, University of Freiburg, Germany

POSTER G 95
Nature of science understanding in German elementary school teachers and its advancement through teacher training
Ernst Kircher, University of Würzburg, Germany
Patricia Grygier, University of Würzburg, Germany
Johannes Günther, University of Würzburg, Germany
Claudia Thoermer, University of Munich, Germany
Beate Sodian, University of Munich, Germany

POSTER G 96
Enhancing self-directed learning in science-classes: The effects of teacher training
Thomas Puhl, Saarland University, Saarbruecken, Germany
Anja Baer, University of Kiel, Germany
Ilka Parchmann, University of Kiel, Germany
Cornelia Gräsel, Saarland University, Saarbruecken, Germany
Ilka Parchmann, University of Kiel, Germany

POSTER G 97
Training program to improve self-regulative competence and problem solving behaviour
Susanne Bruder, Technical University Darmstadt, Germany
Franziska Perels, Technical University Darmstadt, Germany
Bernhard Schmitz, Technical University Darmstadt, Germany

POSTER G 98
Palma - project for the analysis of achievement development in mathematics - First results from a longitudinal research program
M. A. Anne Zirngibl, University of Munich, Germany
Reinhard Pekrun, University of Munich, Germany
Rudolf vom Hofe, University of Regensburg, Germany
Thomas Götz, University of Munich, Germany
Michael Kleine, University of Regensburg, Germany
POSTER G 99
Adolescents’ perceptions of high-achieving peers in gender-stereotyped school subjects
Ursula Kessels, Free University of Berlin, Germany
Bettina Hannover, Free University of Berlin, Germany

POSTER G 100
School culture, segregation of the sexes and socialization of girls - girls’ schools in Augsburg
Leonie Herwartz-Emden, University of Augsburg, Germany
Andrea Reiter, University of Augsburg, Germany
Verena Schurt, University of Augsburg, Germany
G 28th Aug 11:00-11:40

**Round Tables**

Round Table  G 1  Room  PSY 2 D

*Tools for learning*
Rosamund Sutherland, University of Bristol, United Kingdom,  
Steve Godwin, Federica Olivero, Richard Brawn, Linda Baggott LaVelle,  
Angela McFarlane, Tim Shortis, Alison Taylor, Pat Triggs, Sasha Matthewman, Peter John, Neil Todman, Marina Gall, Nick Breeze, Celia Tidmars, University of Bristol, United Kingdom

Round Table  G 2  Room  BIO 1 H

*Power in relations of education*
Eevastiina Parikka, University of Helsinki, Finland

Round Table  G 3  Room  PSY 2 C

*From bureaucratic conception to systemic community approach: Proposals for a new organizational structuring of Jewish schools in Brussels, Paris and Geneva*
Zehavit Gross, Bar-Ilan University, Ramat-Gan, Israel

Round Table  G 4  Room  BIO G D

*A study of asynchronous discussion groups in distance learning courses at the Open University of Israel*
Avner Caspi, Open University of Israel, Israel  
Eran Chajut, Open University of Israel, Israel  
Paul Gorsky, Open University of Israel, Israel

Round Table  G 5  Room  BIO 1 M

*Predictors of adaptive help-seeking behaviours among Malaysian adolescents*
Rosna Awang-Hashim, Northern University of Malaysia  
Jahara Hashim, Northern University of Malaysia

Round Table  G 6  Room  PSY 2 E

*Designing post-modern preprimary learning materials for the implementation of individually configured education*
Cheung Kwok-cheung, University of Macau, China

Round Table  G 7  Room  PSY 3 F
Matches and mismatches: Academics and students’ orientations to phd supervision
Noela Murphy, Nanyang Technological University, Singapore

Round Table  G 8  Room  PSY 3 H
“Opening doors”: When a teacher education program meets organizational learning
Bobbie Turniansky, Kaye College of Education, Beer Sheva, Israel
Dina Friling, Kaye College of Education, Beer Sheva, Israel
Varda Doody, Kaye College of Education, Beer Sheva, Israel
Smadal Tuval, Kaye College of Education, Beer Sheva, Israel

Round Table  G 9  Room  PSY 3 I
Interaction of social practice and individual learners in the communities constructing professional identities
Anneli Eteläpelto, University of Helsinki, Finland

Round Table  G 10  Room  PSY 3 G
Formative assessment within an electronic learning system: Efficiency and sufficiency
Uriël Schuurs, ITP De AanZet, The Netherlands

Round Table  G 11  Room  PSY 3 L
“It always happen to me” or “that’s typical micros…” – Learners’ reactions: if computer errors occur
Holger Horz, University of Mannheim, Germany

Round Table  G 12  Room  PSY 4 P
Lessons learned from working on European projects
Margaret Brady, Anglia Polytechnic University, United Kingdom

Round Table  G 13  Room  PSY 2 B
Changing teachers’ beliefs of learning and philosophy of subject matter through discourse communities
Anja Fey, Saarland University, Saarbruecken, Germany
Thessa Ebel, Institute for Science Education, Kiel, Germany
Ilka Parchmann, Institute for Science Education, Kiel, Germany
Cornelia Gräsel, Saarland University, Saarbruecken, Germany

Round Table G 14 Room BIO G C

*What importance is attached to thinking skills in the post-16 sector?*
David Moseley, Newcastle University, United Kingdom
Julian Elliott, Sunderland University, United Kingdom

Round Table G 15 Room BIO 1 C

*Teacher competence for multicultural classrooms*
Theo Wubbels, Utrecht University, The Netherlands
Perry Den Brok, Utrecht University, The Netherlands
Jan Van Tartwijk, Utrecht University, The Netherlands
Ietje Veldman, Utrecht University, The Netherlands
Yvonne De Jong, Utrecht University, The Netherlands

Round Table G 16 Room BIO 1 D

*How does the degree of freedom in interactive simulations attach the learning success?*
Timo Ehmke, University of Kiel, Germany
Thilo Wünscher, University of Kiel, Germany

Round Table G 17 Room BIO 1 F

*The science teacher as an epistemological resource in students learning processes*
Eva Lundqvist, Uppsala University, Sweden
Malena Persson, Uppsala University, Sweden
Leif Östman, Uppsala University, Sweden

Round Table G 18 Room BIO G A

*Conceptualizing epistemological beliefs by tracking their development*
Cornel De Brabander, Leiden University, the Netherlands
Jeroen S. Rozendaal, Leiden University, the Netherlands
Tove Dahl, University of Tromso, Sweden

Round Table G 19 Room BIO 1 E
The personal and social effects of peer-tutoring on child tutors
Paul Naylor, University of Nottingham, United Kingdom
Julia Findlay, University of Surrey Roehampton, United Kingdom

Round Table G 20 Room BIO 1 L

Scope and limitation of teacher teamwork and joint planning in education reform
Franziska Vogt, College of Education, St. Gallen, Switzerland

Round Table G 21 Room BIO 1 G

Different types of teachers and new media in schools
Martin Senkbeil, University of Kiel, Germany
Timo Ehmke, University of Kiel, Germany
CIT Presentations

G 22 Room PSY 2 A

*Mile-flanders: A video-based learning environment as a powerful tool for learner-oriented construction of expertise by pre-service primary school teachers*

Raf Canters, University of Leuven, Belgium
Peter Op’t Eynde, University of Leuven, Belgium
Lieven Verschaffel, University of Leuven, Belgium
Jan Elen & Steven Janssens, University of Leuven, Belgium

G 23 Room PSY 4 S

*A metacognitive support during the process of problem solving in a computerized environment*

Esther Kapa, Talpiot College, Israel

G 24 Room PSY 4 R

*Who is the fastest runner in the world? Kinematics and sports*

Yaron Lehami, Hebrew University, Jerusalem, Israel
Yaron Schur, International Center for the Enhancement of Learning Potential, Jerusalem, Israel

Special Session

G 25 Room BIO G Aula Magna

*Meeting of some Journal Editors with the audience*

Organiser: Filip Dochy, University of Leuven, Belgium and University of Maastricht, The Netherlands

Introduction: Patricia Alexander, "Instructional Science"
Wolfgang Schnotz, "Learning & Instruction"

Panelists:

Gavriel Salomon, "Educational Psychologist"
David Nevo, "Studies in Educational Evaluation"
M. Tight, "Studies in Higher Education"
Greta Morine-Dershimer, "Teaching and Teacher Education"
Dai Hounsell, "Higher Education"
Felice Carugati, "European Journal for Psychology of Education"
Sergio Salvatore and Beatrice Ligorio, "European Journal for School Psychology"
Julie Dockrell, "British Journal of Educational Psychology"
Donna Alvermann, "Reading Research Quarterly"
Geoffrey Underwood, "Computers in Education"
Keynote Addresses

Room  BASSI  2 D

Michelene T.H. Chi, LRDC, University of Pittsburgh, USA

Emergent versus commonsense causal processes: How misconceptions in science arise and how they can be overcome

Chair: Camilla Gobbo, University of Padova, Italy

Room  BASSI 3 E

Sanna Järvelä, University of Oulu, Finland

Motivation in technology-based learning context

Chair: Reinhard Pekrun, University of University of Munich, Germany

Room  BASSI 3 F

Jean-Francois Rouet, National Centre for Scientific Research and University of Poitiers, France

Information search and learning

Chair: Susan R. Goldman, University of Illinois, Chicago, USA
Symposium

FLOW-EXPERIENCE IN LEARNING AND LEISURE ACTIVITIES: ASSESSMENT, DETERMINANTS AND CONSEQUENCES

Organiser: Falko Rheinberg, University of Potsdam, Germany
Chair: Falko Rheinberg, University of Potsdam, Germany
Discussant: Antonella Delle Fave, University of Milan, Italy

Learning elementary statistics – Does flow help?
Stefan Engeser, University of Potsdam, Germany

Motivating adolescents to learn: The role of optimal experience
Marta Bassi, University of Milan, Italy
Antonella Delle Fave, University of Milan, Italy

Towards an affect based definition of flow. A study with the Experience Sampling Method (ESM) using the example of rock climbing
Steff Aellig, University of Zurich, Switzerland

Task difficulty and flow
Regina Vollmeyer, University of Potsdam, Germany
Falko Rheinberg, University of Potsdam, Germany

Flow experience during Graffiti spraying
Falko Rheinberg, University of Potsdam, Germany
Yvette Manig, University of Potsdam, Germany
EARLI Invited Expert Panel

THE GENERALITY-SPECIFICITY ISSUE ON CONCEPTUAL CHANGE: INFLUENCE OF DOMAIN EPISTEMOLOGY IN CONCEPTUAL CHANGE RESEARCH

Organiser: Margarita Limón, Autonomous University of Madrid, Spain
Chair: Lucia Mason, University of Padova, Italy
Discussant: Matti Sintonen, University of Helsinki, Finland

Learning about biological evolution involves epistemic conceptual change
Gale M. Sinatra, University of Nevada, Las Vegas, USA

Is domain specificity of epistemological beliefs a matter of degree: The case of mathematics?
Erik De Corte, University of Leuven, Belgium
Peter Op ‘t Eynde, University of Leuven, Belgium

Can epistemological beliefs affect conceptual change?
Stella Vosniadou, University of Athens, Greece
Christina Stathopoulou, University of Athens, Greece

The influence of domain epistemology for conceptual change: The case of history
Margarita Limón, Autonomous University of Madrid, Spain

The influence of domain epistemology within the framework of developing expertise
Patricia A. Alexander, University of Maryland, USA
Symposium

RESEARCH ON LEARNING AS A NATIONAL INVESTMENT AND INTERNATIONAL RESOURCE

Organiser: Hannele Niemi, University of Helsinki, Finland
Chair: Hannele Niemi, University of Helsinki, Finland
Discussant: Roger Säljö, Göteborg University, Sweden

The UK’s Teaching and Learning Research Programme (TLRP)
Andrew Pollard, University of Cambridge, United Kingdom

The Norwegian research programme knowledge, Education and Learning
Kirsti Klette, University of Oslo, Norway

Dutch Educational Research Programming Council, (PROO) - The research programme in The Netherlands
Hetty Dekkers, Dutch Educational Research Programming Council, The Netherlands
Annet van der Veen, Dutch Educational Research Programming Council, The Netherlands

Life as Learning (Learn) – The research program on learning in Finland
Hannele Niemi, University of Helsinki, Finland
Raija Latva-Karjanmaa, University of Helsinki, Finland
SIG Invited Symposium

VARIOUS PERSPECTIVES ON COLLABORATIVE LEARNING AND THE QUALITY OF KNOWLEDGE CONSTRUCTION IN HIGHER EDUCATION

Organisers: Jan Vermunt, Leiden University, The Netherlands
Sari Lindblom-Ylänne, University of Helsinki, Finland

Chair: Jan Vermunt, Leiden University, The Netherlands

Discussant: Cees van der Vleuten, University of Maastricht, The Netherlands

Analysing the pedagogical implementation of progressive inquiry in a university course
Minna Lakkala, University of Helsinki, Finland
Hanni Muukkonen, University of Helsinki, Finland
Jiri Lallimo, University of Helsinki, Finland
Kai Hakkarainen, University of Helsinki, Finland

Improving elaboration in problem based student learning through study teams
Herma Roebertsen, University of Maastricht, The Netherlands
Jos Moust, University of Maastricht, The Netherlands

Effects of collaborative and individual learning in a blended learning environment
Pierre van Eijl, Utrecht University, The Netherlands
Albert Pilot, Utrecht University, The Netherlands
Peter de Voogd, Utrecht University, The Netherlands
Bart Thoolen, Utrecht University, The Netherlands

Knowledge-building in asynchronous computer conferencing environments in higher education
Sarah Schrire, Centre for Educational Technology and Kibbutzim College, Israel

Cross-national online learning in higher education: The role of social affordances
Marold Wosnitza, University of Koblenz-Landau, Germany
Simone Volet, Murdoch University, Western Australia
PROFESSIONS AND ITS MORALITY (Part 1)

Organiser: Fritz Oser, University of Fribourg, Switzerland
Chair: Fritz Oser, University of Fribourg, Switzerland
Discussant: Fritz Oser, University of Fribourg, Switzerland

Promoting purpose in professional development: A "good-work" program in journalism
William Damon, Stanford University, USA

Normative professionality of teachers
Wiel Veugelers, University of Amsterdam and Utrecht University, The Netherlands

Preparing teachers as moral educators
Ann Power, University of Notre Dame, USA
Clark Power, University of Notre Dame, USA
Vladimir Khmelkov, University of Notre Dame, USA

Morals for merchants – Desirable, reasonable, feasible?
Klaus Beck, University of Mainz, Germany
Symposium

COGNITIVE LOAD THEORY: INSTRUCTIONAL IMPLICATIONS OF THE INTERACTION BETWEEN INFORMATION STRUCTURES AND COGNITIVE ARCHITECTURE (Part 2)

Organisers: Fred Paas, Open University, The Netherlands
Alexander Renkl, University of Freiburg, Germany

Chairs: Fred Paas, Open University, The Netherlands
Alexander Renkl, University of Freiburg, Germany
John Sweller, University of New South Wales, Sydney, Australia

Discussant: Remy Rikers, Erasmus University, Rotterdam, The Netherlands

Relative cognitive learning analysis for strategic educational resource development planning
Juhani Tuovinen, Charles Sturt University, Australia

Fading worked-out solution steps in cognitive skill acquisition: Implications for productive and unproductive cognitive load
Alexander Renkl, University of Freiburg, Germany
Robert K. Atkinson, Arizone State University, USA
Cornelia S. Grosse, University of Freiburg, Germany

Acquiring problem-type schemas versus understanding individual solution steps: Comparing learning outcomes and cognitive load for two formats of worked-out examples
Peter Gerjets, Knowledge Media Research Center, Tübingen, Germany
Katharina Scheiter, University of Tübingen, Germany
Richard Catrambone, Georgia Institute of Technology, Atlanta, USA

The development of process-oriented worked-out examples
Tamara A. J. M. Van Gog, Open University, The Netherlands
Fred Paas, Open University, The Netherlands
Jeroen J. G. Van Merriënboer, Open University, The Netherlands

54
Symposium

COMPUTERS AND TEACHING THINKING: A COMMUNICATIVE APPROACH

Organiser: Rupert Wegerif, Open University, United Kingdom
Chair: Gavriel Salomon, University of Haifa, Israel
Discussant: Gavriel Salomon, University of Haifa, Israel

Using computer-based activities to bridge the teaching of general thinking skills in the form of dialogic reason, and specific learning within the curriculum
Rupert Wegerif, Open University, United Kingdom

Conceptual thinking as mediated action: A sociocultural analysis of children’s explanations in an early years classroom
Kristiina Kumpulainen, University of Oulu, Finland
Marjatta Kangassalo, University of Tampere, Finland

Developing dialogue with digital resources
Steve Higgins, University of Newcastle upon Tyne, United Kingdom

The effects of communication medium on the development critical thinking in developmental psychology
Richard Joiner, University of Bath, United Kingdom
Sarah Jones, University of Bath, United Kingdom
Symposium

**IMPROVEMENTS IN STUDENT'S SELF-CONCEPT MOTIVATION AND MORAL DEVELOPMENT**

Organiser: Anna Laura Comunian, University of Padova, Italy

Chair: Anna Laura Comunian, University of Padova, Italy

Discussant: Dennis McInerney, University of Western Sydney, Australia

*A longitudinal study of the effects of a school-based peer support program*
Louise A. Ellis, University of Western Sydney, Australia
Herbert W. Marsh, University of Western Sydney, Australia
Rhonda G. Craven, University of Western Sydney, Australia

*Assessment of achievement motivation and academic self-concept: Results from longitudinal data*
Katrina Barker, University of Western Sydney, Australia
Dennis McInerney, University of Western Sydney, Australia
Martin Dowson, Institute of Christian Tertiary Education, Australia

*The motivation of female Japanese university students towards the study of English as a foreign language and at university in general*
Dexter Da Silva, Keisen University, Japan
Dennis McInerney, University of Western Sydney, Australia

*Similarities and differences in students related to kindness and moral development in Australia and Italy*
Anna Laura Comunian, University of Padova, Italy
Katrine Simpson, University of Western Sydney, Australia
Katrine Baker, University of Western Sydney, Australia
Symposium

THE DEVELOPMENT AND ENHANCEMENT OF EARLY MATHEMATICAL SKILLS

Organisers: Lieven Verschaffel, University of Leuven, Belgium
Erno Lehtinen, University of Turku, Finland

Chair: Lieven Verschaffel, University of Leuven, Belgium

Discussant: Elsbeth Stern, Max Planck Institute for Human Development, Berlin, Germany

Spontaneous focusing on numerosity in the development of early mathematical skills
Minna M. Hannula, University of Turku, Finland
Erno Lehtinen, University of Turku, Finland

Enhancing spontaneous focusing on numerosity in 3-year-old children
Aino Mattinen, University of Turku, Finland
Minna M. Hannula, University of Turku, Finland
Erno Lehtinen, University of Turku, Finland

The development of simple addition and subtraction strategies in mathematically weak children
Joke Torbeyns, University of Leuven, Belgium
Lieven Verschaffel, University of Leuven, Belgium
Pol Ghesquière, University of Leuven, Belgium

The use of mathematical symbolism in word problem solving: An analysis through “children profile”
Annick Fagnant, University of Liege, Belgium
Expert Panel

STANDARDS OF TEACHING PERFORMANCE AND TEACHERS' TESTS: WHERE DO THEY LEAD US

Organisers: Ruth Zuzowsky, Tel Aviv University, Israel
Harm Tillema, Leiden University, The Netherlands

Chairs: Ruth Zuzowsky, Tel Aviv University, Israel
Harm Tillema, Leiden University, The Netherlands

Standards of teaching and teacher tests: Where do they lead us?
Ruth Zuzovsky, Tel Aviv University, Israel
Tzippi Liebman, Kibbutzim College of Education, Israel

Recognizing competence: Evaluation of an alternative teacher licensing assessment
Harm Tillema, Leiden University, The Netherlands

Standards alone are not enough
Ruth Heilbronn, University of London, United Kingdom

The role of standards and testing in a new conception of the teaching profession
Robert J. Yinger, Baylor University, USA
Symposium

THE FORMATION OF THEORETICAL THINKING IN PRIMARY SCHOOL PUPILS

Organiser: Bert Van Oers, Free University, Amsterdam, The Netherlands
Chair: Bert Van Oers, Free University, Amsterdam, The Netherlands
Discussant: Falk Seeger, Bielefeld University, Germany

Reflective learning as a result of school activity
Maria Serena Veggetti, University of Rome “La Sapienza”, Italy

Cooperative learning and theoretical thinking: An experimental study in primary school
Vera Marzi, University of Rome “La Sapienza”, Italy

Didactical contracts and the personal meaning of mathematical learning
Bert Van Oers, Free University, Amsterdam, The Netherlands
Chantal Kessels, Free University, Amsterdam, The Netherlands

Discussion of “the formation of theoretical thinking in primary school pupils”
Falk Seeger, Bielefeld University, Germany
Symposium

PROFESSIONAL LEARNING: NEW PERSPECTIVES

Organisers: Hans Gruber, University of Regensburg, Germany
Henny P.A. Boshuizen, Open University, The Netherlands

Chairs: Hans Gruber, University of Regensburg, Germany
Henny P.A. Boshuizen, Open University, The Netherlands

Discussant: Tina Hascher, University of Bern, Switzerland

Exploring teachers' will to learn
Ilse M. van Eekelen, Maastricht University, The Netherlands
P.A. Boshuizen, Open University, The Netherlands
Jan Vermunt, Leiden University, The Netherlands

Failure culture in enterprises – A critical indicator for "learning organizations"
Johannes Bauer, Christian Harteis, Dagmar Festner, Hans Gruber and Helmut Heid,
University of Regensburg, Germany

Artifacts and talk: Developing understanding of who knows what in a multi-professional team
Hanni Muukkonen, University of Helsinki, Finland
Lasse Lipponen, University of Helsinki, Finland
Jiri Lallimo, University of Helsinki, Finland
Kai Hakkarainen, University of Helsinki, Finland

Changes of knowledge structures in the transition from novice to expert. Results from the domain of counseling
Josef Strasser, University of Regensburg, Germany
Hans Gruber, University of Regensburg, Germany

Learning from errors and failures as crucial aspect of organizational development
Dagmar Festner, University of Regensburg, Germany
Christian Harteis, University of Regensburg, Germany
Johannes Bauer, University of Regensburg, Germany
Hans Gruber, University of Regensburg, Germany
Symposium

**ASSESSMENT AND E-LEARNING: THREATS, CHALLENGES AND OPPORTUNITIES**

Organisers: Jim Ridgway, University of Durham, United Kingdom  
Mien Segers, University of Maastricht, The Netherlands

Chairs: Jim Ridgway, University of Durham, United Kingdom  
Mien Segers, University of Maastricht, The Netherlands

Discussant: Paul Brna, University of Northumbria, United Kingdom

*World class arena – Delivering rich and diverse tasks in a computer-mediated test*
Daniel Pead, University of Nottingham, United Kingdom  
Jim Ridgway, University of Durham, United Kingdom

*Distributed performance assessment for an international e-learning environment: Issues and methodologies*
Eduardo C. Cascallar, American Institutes for Research, Washington, USA  
Alicia S. Cascallar, Assessment Group International Ltd., London, United Kingdom

*Digital portfolios and feedback practices in an undergraduate university course*
Olga Dysthe, University of Bergen, Norway  
Astrid Tolo, University of Bergen, Norway

*The effects of peer assessment support in a computer supported collaborative learning environment*
Paul A. Kirschner, Open University, The Netherlands  
Frans Prins, Open University, The Netherlands  
Dominique Sluijsmans, Open University, The Netherlands
Symposium

RECONCEPTUALIZING LEARNING SCIENCE: LINGUISTIC, PHILOSOPHICAL, PSYCHOLOGICAL AND SOCIOCULTURAL PERSPECTIVES

Organiser: Vaughan Prain, La Trobe University, Australia
Chair: Vaughan Prain, La Trobe University, Australia
Discussant: Tytler Russell, Deakin University, Australia

A small girl walking backward: Of cultural histories, social context, and learning science
Donna Alvermann, University of Georgia, USA

Scientists’ and engineers’ views of science, using writing to do science, and the compatibility of their epistemic and language views
Vaughan Prain, La Trobe University, Australia
Larry Yore, University of Victoria, Canada
Brian Hand, Iowa State University, USA

The language of argumentation in science
Jonathan Osborne, King’s College, London, United Kingdom

Psychological analysis of the processes of using language for learning
David Galbraith, Staffordshire University, United Kingdom
Gert Rijlaarsdam, University of Amsterdam, The Netherlands
Symposium

OPENNESS AND CLOSURE IN INTERACTIVE LEARNING ENVIRONMENTS STUDIES OF LEARNER-TOOL DYNAMICS IN COMMUNICATIVE PRACTICES

Organiser: Berner Lindström, Göteborg University, Sweden
Chair: Berner Lindström, Göteborg University, Sweden
Discussant: Sten R. Ludvigsen, Oslo University, Norway

Situating openness in Swedish secondary school
Patrik Lilja, Linköping University, Sweden

Openness and closure with digital representations: Reasoning and the “canons of representation”
Jonas Ivarsson, Göteborg University, Sweden

Representations of knowledge in infrastructures for learning
Frode Guribuyi, University of Bergen, Norway

Problem-solving in simulation-based learning environments as a boundary crossing activity
Hans Rystedt, Göteborg University, Sweden
Berner Lindström, Göteborg University, Sweden

Approaching interactive-engagement tasks
Oskar Lindwall, Linköping University, Sweden
Jonte Bernhard, Linköping University, Sweden
SIG Invited Symposium

**YOUNG AT-RISK STUDENTS: A METHODOLOGICAL CHALLENGE TO INVESTIGATE HOW OPPORTUNITIES TO THEIR EDUCATIONAL NEEDS CAN BE PROVIDED OPTIMALLY**

Organisers: Carol Aubrey, University of Warwick, United Kingdom
Geerdina van der Aalsvoort, Leiden University, The Netherlands

Chair: Carol Aubrey, University of Warwick, United Kingdom

Discussant: Andrew Sutton, The National Institute for Conductive Education, United Kingdom

*Children at risk of developing reading disabilities: The roles of naming speed and phonological awareness*
John R. Kirby, Queen's University, Ontario, Canada
Rauno Parrila, University of Alberta, Canada
Jennifer Curry, Queen's University, Ontario, Canada
Robindra Sidhu, Queen's University, Ontario, Canada

*Longitudinal study of children with very low mathematical competence in preschool years*
Marija Kavkler, Counselling Centre for Children, Adolescents and Parents, Ljubljana, Slovenia
Simona Tancig, University of Ljubljana, Slovenia
Lidija Magajna, Counselling Centre for Children, Adolescents and Parents, Ljubljana, Slovenia

*Increasing participation and achievement in inner-city nurseries*
Carol Aubrey, University of Warwick, United Kingdom

*Instructing at-risk students in mathematical problem solving with a computer supported adventure game*
Anu Kajamies, University of Turku, Finland
Riitta Kinnunen, University of Turku, Finland
Marja Vauras, University of Turku, Finland

*Poets’ dreams, hard realities and several doubts: Illuminating the process of inclusion*
Ana Sofia Freire, University of Lisbon, Portugal
Margarida César, University of Lisbon, Portugal
Sympoium

NEW ENCOUNTERS FOR EDUCATIONAL PSYCHOLOGY

Organiser: Maria Beatrice Ligorio, University of Bari, Italy
Chair: Clotilde Pontecorvo, University of Rome “La Sapienza”, Italy
Discussant: Clotilde Pontecorvo, University of Rome “La Sapienza”, Italy

Educational psychology and dynamic psychology: A dialectic space within the socio-constructivism framework
Sergio Salvatore, University of Lecce, Italy
Maria Beatrice Ligorio, University of Bari, Italy

Going to no-where: The role of diagnosis in educational practice
Emily Abbey, Clark University, Worcester, USA
Jaan Valsiner, Clark University, Worcester, USA

Is education ready for the “new knowledge” challenge?
Marlene Scardamalia, University of Toronto, Canada
Carl Bereiter, University of Toronto, Canada

Theories of unconscious learning confronted
Robert-Jan Simons, Utrecht University, The Netherlands
Symposium

**VYGOTSKY’S THEORY IN THE CLASSROOM**

**Organiser:** Alex Kozulin, International Center for the Enhancement of Learning Potential and Hebrew University, Israel

**Chair:** Alex Kozulin, International Center for the Enhancement of Learning Potential and Hebrew University, Israel

**Discussant:** Felice Carugati, University of Bologna, Italy

*Development of reflection through learning activity*
Galina Zuckerman, Psychological Institute of Russian Academy of Education, Russia

*Vygotskian theory and mathematics education: Resolving the conceptual-procedural dichotomy*
Jean Schmittau, State University of New York, Binghamton, USA

*Ascending from the abstract to the concrete – Seeking new ways for learning science*
Hartmut Giest, University of Potsdam, Germany

*Dynamic assessment of literacy: English as a third language*
Alex Kozulin, International Center for the Enhancement of Learning Potential and Hebrew University, Israel
Erica Garb, International Center for the Enhancement of Learning Potential and Hebrew University, Israel
Symposium

LEARNING AND TEACHING THE LITERATURE CURRICULUM. HOW READERS APPROACH LITERARY TEXTS, AND HOW INSTRUCTION MAY ENHANCE LITERARY COMPETENCE

Part 1: Processes in reading and interpreting literary texts

Organisers: Tanja Janssen, University of Amsterdam, The Netherlands
Gert Rijlaarsdam, University of Amsterdam, The Netherlands

Chair: Gert Rijlaarsdam, University of Amsterdam, The Netherlands
Discussant: Wolfgang Schnotz, University of Koblenz-Landau, Germany

Implications of a meaning-based theory of reading for the literature curriculum
Peter Smagorinsky, University of Georgia, USA

Local incoherence detection and interest in literary texts
Lucia Lumbelli, University of Trieste, Italy
Chiara Odorico, University of Trieste, Italy

Poetry: Prima Vista – The foreign language learner reading poetry
Signe Mari Wiland, Agder University College, Norway

Reading practices in the L2 Italian literature classroom: Promoting awareness and change
Piera Carroli, Australian National University, Australia

The three friends by Winterson: A study of students’ interpretation processes related to the quality of literary response
Tanja Janssen, University of Amsterdam, The Netherlands
Martine Braaksma, University of Amsterdam, The Netherlands
Problem based learning and its effectiveness in continuing nursing education: Result from a randomized trial
Mark Newman, Kate Ambrose, Phyl Morris-Vincent, Shella Quinn, Lesley Vernon, Sarah Walls and Corner Trevor, Middlesex University, United Kingdom

Problem-based learning for improving the quality of environmental hygiene services in Tuscany region
Giovanni De Virgilio, National Institute of Health, Rome, Italy
F. G. Pernisco, National Institute of Health, Rome, Italy

The effectiveness of problem based learning: Results of a pilot Campbell collaboration systematic review
Mark Newman, Middlesex University, United Kingdom
Jean McKendree, University of Newcastle, United Kingdom
Tony Roberts, University of Durham, United Kingdom
Isobel Rolfe, University of Newcastle, Australia
John Smucny, State University of New York Upstate Medical University, USA
Giovanni De Virgilio, National Institute of Health, Rome, Italy
Piet Van Den Bossche, University of Maastricht, The Netherlands
David Gijbels, University of Maastricht, The Netherlands
Charles Engel, University of London, United Kingdom
The relation between assessment practices and outcomes of studies: The case of problem-based learning
David Gijbels, University of Maastricht, The Netherlands
Filip Dochy, University of Leuven, Belgium and University of Maastricht, The Netherlands
Piet Van Den Bossche, University of Maastricht, The Netherlands
Mien Segers, University of Maastricht, The Netherlands
SIG Invited Symposium

**PATTERNS OF VARIATION/INVARIANCE AS NECESSARY CONDITIONS FOR THE APPROPRIATION OF CERTAIN MEANINGS**

Organiser: Jonas Emanuelsson, Göteborg University, Sweden
Chair: Jonas Emanuelsson, Göteborg University, Sweden
Discussant: Daniel Schwartz, Stanford University, USA

*Variation and the space of learning*
Ference Marton, Göteborg University, Sweden
Ulla Runesson, Göteborg University, Sweden

*Learning Cantonese tones*
Wing-wah KI, University of Hong Kong, China
Ference Marton, Göteborg, University, Sweden

*Patterns of variation in teaching “the colour of light” to primary three students*
Lo Mun Ling, Hong Kong Institute of Education, China
Chik Pui Man Pakey, University of Hong Kong, China
Ming Fai Pang, University of Hong Kong, China

*The teaching of fractions. Two examples of simultaneity and variation*
Ulla Runesson, Göteborg University, Sweden
Ida Ah Chee Mok, University of Hong Kong, China
Symposium

A BETTER LOOK AT INTELLIGENCE AND LEARNING DIFFICULTIES

Organisers: Carmen Timoneda-Gallart, University of Girona, Spain
Federico Pérez-Álvarez, University of Girona, Spain

Chairs: Carmen Timoneda-Gallart, University of Girona, Spain
Federico Pérez-Álvarez, University of Girona, Spain

Discussant: Thimos Papadopoulos, University of Cyprus, Cyprus

Intelligence in the light of PASS theory
Jagannath P. Das, University of Alberta, Edmonton, Canada

Practical application of PASS theory in population of Spain
Carmen Timoneda-Gallart, University of Girona, Spain

Cognitive processing and emotional processing: Integrated knowledge
Federico Pérez-Álvarez, University of Girona, Spain

PASS cognitive planning as to learning difficulties
Jordi Baus-Rosset, University of Girona, Spain
Jordi Hernández-Figuerola, University of Girona, Spain

PASS planning and emotional processing
Judith Alabau, University of Girona, Spain
Silvia Mayoral, University of Girona, Spain
Symposium

THE IMPLEMENTATION OF NEW TECHNOLOGY INTO HIGHER EDUCATION: CURRENT STATUS AND FUTURE PROSPECTS

Organiser: Stefan Fries, University of Mannheim, Germany
Chair: Stefan Fries, University of Mannheim, Germany
Discussant: Päivi Häkkinen, University of Jyväskylä, Finland

Scrutinising the logic of innovations: A case of mistaking publishing for teaching?
Peter Goodyear, Lancaster University, United Kingdom
Christopher Jones, Lancaster University, United Kingdom
Maria Zenios, Lancaster University, United Kingdom

The importance of perspective and methods for the evaluation of virtual university teaching
Charlotte Haimerl, University of Mannheim, Germany
Holger Horz, University of Mannheim, Germany
Stefan Fries, University of Mannheim, Germany

What skills does a university teacher need when teaching in a virtual learning environment?
Anne Nevgi, Heikki Kynäslahti, Sanna Vahtivuori, Katja Ryti and Annukka Uusitalo, University of Helsinki, Finland

Collaborative video based teacher training in a virtual learning environment
Dominik Petko, University of Zurich, Switzerland
Caspar Noetzli, University of Zurich, Switzerland
Kurt Reusser, University of Zurich, Switzerland

Interactive lectures. Using wireless networks to optimise lectures
Anja Wessels, University of Mannheim, Germany
Stefan Fries, University of Mannheim, Germany
Holger Horz, University of Mannheim, Germany
Manfred Hofer, University of Mannheim, Germany
Symposium

**STUDENTS’ CONCEPTIONS ABOUT LEARNING ENVIRONMENTS IN HIGHER EDUCATION: NATURE AND IMPACT**

Organiser: Elen Jan, University of Leuven, Belgium

Chair: Elen Jan, University of Leuven, Belgium

Discussant: Noël Entwistle, University of Edinburgh, United Kingdom

*Towards a theoretical framework on the nature and impact of students’ conceptions about learning environments*

Joost Lowyck, University of Leuven, Belgium

Jan Elen, University of Leuven, Belgium

*Learning with electronic authentic cases: Do students really get what they expect?*

Rob Martens, Open University, The Netherlands

Theo Bastiaens, Open University, The Netherlands

Judith Gulikers, Open University, The Netherlands

*Students’ conceptions and guided independent learning*

Geraldine Clarebout, University of Leuven, Belgium

Joost Lowyck, University of Leuven, Belgium

Jan Elen, University of Leuven, Belgium

*The impact on students’conceptions of giving presentations*

Paul Sander, University of Wales Institute, United Kingdom

Lalage Sanders, University of Wales Institute, United Kingdom

Keith Stevenson, University of Nottingham, United Kingdom
Symposium

MORAL ATMOSPHERE IN SCHOOL AND MORAL DEVELOPMENTS AS PRECONDITIONS FOR ADOLESCENTS’ DEVELOPMENT AND LEARNING

Organiser: Daniel Brugman, Utrecht University, The Netherlands
Chair: Daniel Brugman, Utrecht University, The Netherlands
Discussant: Jan Boom, Utrecht University, The Netherlands

Moral atmosphere in school, adolescents’ moral development and their misbehavior
Daniel Brugman, Utrecht University, The Netherlands
Jan Boom, Utrecht University, The Netherlands

The Moral Learning Cycle - New findings on the relevance of moral judgment competence for learning and teaching
Georg Lind, University of Konstanz, Germany

Moral atmosphere and aggressive behaviours in school. An Italian sample
Tiziana Mancini, University of Parma, Italy
Laura Fruggeri, University of Parma, Italy

Intervening school moral atmosphere perception: Lessons learned from an empirical study
Andrei Podolskij, Moscow State University, Russia
Olga Karabanova, Moscow State University, Russia
Symposium

THE IMPACT OF NOTATIONS UPON CHILDREN’S COGNITIVE DEVELOPMENT IN THE VERBAL AND NUMERICAL DOMAINS

Organiser: Eva Teubal, Hebrew University of Jerusalem, Israel
Chair: Eva Teubal, Hebrew University of Jerusalem, Israel
Discussant: Giyoo Hatano, University of the Air, Chiba, Japan

The differential impact of various notational systems upon children’s understanding of mathematical word problem solving
Barbara M. Brizuela, Tufts University, USA

Young Japanese children’s knowledge of mapping speeches to spellings
Kiyomi Akita, University of Tokyo, Japan

Developing notational competence: Comparing children with specific linguistic impairments with chronological and linguistic controls
Richard Cowan, University of London, United Kingdom
Chris Donlan, University College London, United Kingdom
Elizabeth J. Newton, University College London, United Kingdom
Delyth Lloyd, University College London, United Kingdom

Children’s iconic, numerical and verbal notations across task
Julie Dockrell, University of London, United Kingdom
Eva Teubal, Hebrew University of Jerusalem, Israel
Paper Presentation

**ASPECTS OF SELF-REGULATION**

Chair: Monique Boekaerts, Leiden University, The Netherlands

*Development of a training program for pupils and their parents to improve self-regulative competence*

Susanne Bruder, TU - Darmstadt, Germany
Franziska Perels, TU - Darmstadt, Germany
Bernhard Schmitz, TU - Darmstadt, Germany

*Effort avoidance and volitional components*

Wolfram Rollett, Technical University Berlin, Germany
Stefan Engeser, University of Potsdam, Germany

*Students’ motivational appraisals, persistence and performance in a complex problem-solving task*

Anna Tapola, University of Helsinki, Finland
Markku Niemivirta, University of Helsinki, Finland

*Procedural aspects of self-regulated learning*

Joachim Wirth, University of Essen, Germany
Paper Presentation

INDIVIDUAL DIFFERENCES IN READING COMPREHENSION

Chair: Jean-Francois Rouet, CNRS and University of Poitiers, France

Attributional beliefs, goal orientations, strategy use and reading comprehension of good and poor readers
George Botsas, University of Thessaly, Greece
Susana Padeliadu, University of Thessaly, Greece

Text comprehension and idiom comprehension in children: A follow-up investigation of poor readers
Maria Chiara Levorato, University of Padova, Italy
Barbara Nesi, University of Padova, Italy

Are there differences in lexical ambiguity resolution between less-skilled and skilled readers? The role of dependent variable measures
Juan L. Luque, University of Málaga, Spain
Rosa Elosúa, National University of Distance Education, Madrid, Spain
José M. Díaz, University of La Laguna, Tenerife, Spain
Joni Karanka, University of Málaga, Spain
Miguel López-Zamora, University of Málaga, Spain
Juan Moreno, University of Málaga, Spain

Metacognitive strategies and skills for effective reading comprehension: A developmental approach
Efi Papadimitriou, National and Capodistrian University of Athens, Greece
Ioannis Marmarinos, National and Capodistrian University of Athens, Greece
Eleni Renzoula, National and Capodistrian University of Athens, Greece
Evaggelia Palogou, National and Capodistrian University of Athens, Greece
Vassiliki Kouroud, National and Capodistrian University of Athens, Greece
Anastassia Papadopoulou, National and Capodistrian University of Athens, Greece
Olympia Palikara, National and Capodistrian University of Athens, Greece
J 3  28th Aug  17:00 - 18:20  Room BIO G A

Paper Presentation

PROFESSIONAL ASPECTS OF TEACHING

Chair: Jurgen Baumert, Max Planck Institute, Berlin, Germany

The meeting of the educator and the pupil in the school situation, perspectives of biographical research
Helena Hovila, University of Tampere, Finland
Ropo Eero, University of Tampere, Finland

The nature and outcomes of academic upgrading as perceived by the faculty of a teachers' college
Ron Hoz, Ben Gurion University, Beer Sheva, Israel
Anat Kainan, Kaye College of Education, Beer Sheva, Israel
Dan Bowman, Ben Gurion University, Beer Sheva, Israel
Olzan Goldstein, Kaye College of Education, Beer Sheva, Israel

Decision making processes in the choice of teaching as a profession among first year student teachers
Yael Katzir, Levinsky College of Education, Israel
Itzhak Gilat, Levinsky College of Education, Israel
Rachel Sagi, Levinsky College of Education, Israel

Teaching as a career change: An exploration of motives and influences
Paul W. Richardson, Monash University, Australia
Helen M.G. Watt, University of Western Sydney, Australia
Paper Presentation

ISSUES IN SOCIAL INTERACTION

Chair: Michèle Grossen, University of Lausanne, Switzerland

*Exploring distance learners’ interaction in CSCL environments*
Silvia Dewiyanti, Open University, The Netherlands
Saskia Brand-Gruwel, Open University, The Netherlands
Wim Jochems, Open University, The Netherlands

*The meaning of mediation in the epistemology of innovative knowledge communities*
Sami Paavola, University of Helsinki, Finland
Kai Hakkarainen, University of Helsinki, Finland

*Repair as a tool for language learning in SLI classroom discourse*
Julie Radford, University of London, United Kingdom

*Appropriation and social interactions: How some taught strategies can be transformed in tools to solve a problem?*
Valérie Tartas, University of Toulouse “Le Mirail”, France
Anne-Nelly Perret-Clermont, University of Neuchâtel, Switzerland
Paper Presentation

**INFLUENCE OF COMMUNITIES AND/OR COLLABORATIVE WORK: MYTH OR REALITY?**

Chair: Marina Santi, University of Padova, Italy

*Restructuring staff meetings for teachers’ in-service training*
Panayiotis Angelides, Intercollege, Cyprus
Charalambo Vrasidas, Intercollege, Cyprus
Michalinos Zembylas, Intercollege, Cyprus
Eleni Gabrielidou, Intercollege, Cyprus

*Collaborative networked learning in teacher training*
Klara Bolander, Karolinska Institute, Sweden
Kirsti Lonka, Karolinska Institute, Sweden

*Teacher educators create a virtual learning community*
Lea Kozminsky, Kaye College of Education, Israel
Olzana Goldstein, Kaye College of Education, Israel

*Partnership or collaborative research? Building the conditions for a research knowledge production and sharing process*
François Larose, University of Sherbrooke, Canada
Johanne Bédard, University of Montreal, Canada
Jean-François Morin, University of Sherbrooke, Canada
Paper Presentation

APPLYING ICT AT VARIOUS CONTENT DOMAINS

Chair: Andrea Kárpáti, Eötvös University, Budapest, Hungary

Socio-emotional and contextual features framing knowledge construction in a Web-based history project
Maarit Arvaja, University of Jyväskylä, Finland

Exploring the efficacy of an online iterative simulations for teaching physics concepts
Robert K. Atkinson, Arizona State University, USA
Taha Mzoughi, Mississippi State University, USA
Paul Hutchison, University of Maryland, College Park, USA

The effect of computer-based instruction on achievement, attitudes and self-esteem in the study of mathematics
Alfred Errera, Beer Sheva University, Israel
Dorit Patkin, Kibbutzim College of Education, Israel
Agnès Morillo, IUFM de Foix, France

Student approaches to design in a robotics challenge
Campbell McRobbie, Queensland University of Technology, Australia
Steven Norton, Queensland University of Technology, Australia
Ian Ginns, Queensland University of Technology, Australia
Paper Presentation

**MOTIVATIONAL ASPECTS OF ADULT LEARNING**

Chair: Brigitte Rollett, University of Vienna, Austria

*Career identity constitution: Developing the means for students to steer their own learning in education and work*
Peter Den Boer, Stoas Research, Wageningen, The Netherlands
Annet Jager, Stoas Research, Wageningen, The Netherlands
Frans Meijers, Meijers Research and Consultancy, The Netherlands
Hester Smulders, Stoas Research, Wageningen, The Netherlands

*Motivation in adult education - An application of the theory of reasoned action and perceived self-efficacy as the factors that influences adult's motivation for learning*
Marko Radovan, Slovenian Institute for Adult Education, Ljubljana, Slovenia

*The impact of educational environment on interests, emotions, learning strategies, and achievement of university students*
Gerald A. Straka, Bremen University and LOS-Research/ITB, Germany
Cornelia Schaefer, Bremen University and LOS-Research/ITB, Germany

*The motivation of adult learners and self-discrepancies*
Denise Van Dam, University of Notre-Dame de la Paix, Belgium
Sandrine Neuville, Catholic University of Leuven, Belgium
Jean Nizet, University of Notre-Dame de la Paix, Belgium
Bernadette Charlier, University of Fribourg, Switzerland
Paper Presentation

ACADEMIC WRITING

Chair: Linda Allal, University of Geneva, Switzerland

Construction of shared meanings and construction of knowledge through teacher-learner interactions
Kristine Balslev, University of Geneva, Switzerland

A multidimensional approach to understanding college writing processes
Ellen Lavelle, Southern Illinois University, USA
Anthony Guarino, Auburn University, Alabama, USA

An activity-theory lens for teaching writing: The case of the many-splendored abstract
Christine Räisänen, Chalmers University of Technology, Göteborg, Sweden
Paper Presentation

BURNOUT DISCREPANCIES IN ROLE EXPECTATIONS AND TEACHING-LEARNING PROCEDURES

Chair: Paolo Sorzio, University of Trieste, Italy

Construction of teaching profession, and burnout syndrome among teachers
Victoria Fernández-Puig, Ramon Llull University, Barcelona, Spain
Montserrat Castelló Badia, Ramon Llull University, Barcelona, Spain

Discrepancies between role expectations and reality as predictors of burnout among novice teachers
Bella Gavish, Levinsky College of Education, Israel
Isaac A. Friedman, The Henrietta Szold Institute, Israel

Teaching learning procedures: Advantages and difficulties for teachers and students
Teresa Guasch, Open University of Catalonia, Spain
Montserrat Castelló, Ramon Llull University, Barcelona, Spain

Burnout in kindergarten teachers, teachers, and counselors
Christine Schwarzer, University of Duesseldorf, Germany
Dirk Weimar, University of Duesseldorf, Germany
Paper Presentation

TEACHING AND LEARNING HIGH-ORDER THINKING

Chair: Benő Csapó, University of Szeged, Hungary

*Teaching/learning systemic thinking*
Silvia Caravita, CNR, Rome, Italy

*The results of inquiry-based learning – Do qualitative data tell the same story as the learning outcomes?*
Hanna Salovaara, University of Oulu, Finland
Piritta Leinonen, University of Oulu, Finland
Sanna Järvelä, University of Oulu, Finland

*Teaching higher order skills - Does it make a difference?*
Ornit Spektor-Levy, Weizmann Institute of Science, Rehovot, Israel
Bat Sheva Eylon, Weizmann Institute of Science, Rehovot, Israel
Zahava Scherz, Weizmann Institute of Science, Rehovot, Israel

*Structure of, access to, and uncertainty in reasoning and their dependence on content*
Henk Vos, Twente University, Enschede, The Netherlands
EXPLORING AND APPLYING METACOGNITION

Chair: Marja Vauras, University of Turku, Finland

Student perceptions of instructional design for independent learning
Beryl Crooks, Open University, United Kingdom

Exploring the relationship between metacognitive skills and intelligence in upper primary school children
Erik De Corte, University of Leuven, Belgium
Els Van Pelt, University of Leuven, Belgium

Using a metacognitive strategy to solve mathematical word problems
Tajika Hidetsugu, Aichi University of Education, Japan
Narao Nakatsu, Aichi University of Education, Japan
Hironari Nozaki, Aichi University of Education, Japan

Constructing metacognitive knowledge in an information technology environment: Analyzing students' reflections during search for information and construction of databases
Rikki Rimor, Ben Gurion University, Beer Sheva, Israel
Ely Kozminsky, Ben Gurion University, Beer Sheva, Israel
ASSESSMENT: STATISTICAL ASPECTS

Chair: Celia Hoyles, University of London, United Kingdom

The possible influence of class size on assessment for learning
Hester Geyser, Rand Afrikaans University, South Africa
Neels Fourie, Rand Afrikaans University, South Africa

Estimating scale reliability: A proposition for an estimator adapted to ordinal measurements
Thierry Huart, University of Liege, Belgium

Empirical evaluation of non-linearities in professional growth data
Petri Nokelainen, University of Tampere, Finland
Tomi Silander, Helsinki University of Technology, Finland
Pekka Ruohotie, University of Tampere, Finland
Henry Tirri, Helsinki University of Technology, Finland

Developing statistical tools for non-linear and non-causal models of educational systems
Ruurd Taconis, Eindhoven University of Technology, The Netherlands
Dees Van Oosterhout, Ik-Consult, The Netherlands
Paper Presentation

APPLYING INFORMATION TECHNOLOGY IN DIFFERENT EDUCATION SYSTEMS

Chair: Paul Brna, Northumbria University, England, United Kingdom

Characteristics of empowerment amongst master teachers (MT) in the international training program on the use of information technology (IT) in schools in Israel
Orit Avidov, Achva Academic College of Education, Israel
Rinat Oren, Achva Academic College of Education, Israel
Orly Zak, Achva Academic College of Education, Israel

Integration of information and communications technology in Italian schools: Some notes on assessment and evaluation
Camilla Gobbo, University of Padova, Italy
Chiara Papini, University of Padova, Italy
Vissia Zanobi, University of Padova, Italy

Computers as physical printers: A new view of educational technology
Mitchell J. Nathan, University of Colorado, USA
Michael Eisenberg, University of Colorado, USA

Engaging students in higher order thinking: A collective case study of ICT integration in Singapore schools
Lim Cher Ping, Nanyang Technical University, Singapore
Tay Lee Yong, Nanyang Technical University, Singapore
Philip Wong, Nanyang Technical University, Singapore
Paper Presentation

STUDENTS' EPISTEMOLOGICAL BELIEFS, MOTIVATION AND ACADEMIC PERFORMANCE

Chair: Cornelis J. De Brabander, Leiden University, The Netherlands

Epistemological beliefs, learning strategies and academic achievement
Barbara Moschner, University of Oldenburg, Germany
Ulrich Schiefele, University of Bielefeld, Germany

Understanding the achievement of inner-city adolescents: The influence of epistemological beliefs and achievement goal orientation on academic performance
P. Karen Murphy, Pennsylvania State University, USA
John F. Alexander, Pennsylvania State University, USA

Epistemological beliefs and motivation in university students: Comparisons across four countries
Michelle Riconscente, University of Maryland, USA
Liliana Maggioni, University of Maryland, USA

Cognitive, emotional, and attributive aspects of students’ conceptions of learning
Alessandro Antonietti, Catholic University of Milan, Italy
Olga Liverta-Sempio, Catholic University of Milan, Italy
Antonella Marchetti, Catholic University of Milan, Italy
Sonia Perez-Tello, Catholic University of Milan, Italy
Paper Presentation

PROBLEM SOLVING IN MATHEMATICS

Chair: Cinzia Bonotto, University of Padova, Italy

Educational aspects of problem posing in spatial geometry: The experience of two groups of the teacher education students
Irina Bershadsky, Technion Israel Institute of Technology, Haifa, Israel
Ilana Lavy, Emek Yezreel College, Israel

How many buses are needed? Hungarian students' achievement on "problematic" word problems
Csaba Csikos, University of Szeged, Hungary

The impact of superficial and structural similarity on sequence effects in solving algebra word problems
Katharina Scheiter, University of Tuebingen, Germany
Peter Gerjets, Knowledge Media Research Centre, Tuebingen, Germany

Co-evolution of model and symbol: Inventing math with a new fraction manipulative
Taylor Martin, Stanford University, Stanford, USA
Daniel L. Schwartz, Stanford University, Stanford, USA
Anna Veit, Stanford University, Stanford, USA
Paper Presentation

TEACHERS' BELIEFS AND TEACHING PRACTICES

Chair: Miriam Mevorach, Levinsky College of Education, Israel

Secondary education teachers’ conceptions about teaching, learning and development
Elena Martin, Autonomous University of Madrid, Spain
Mar. Mateos, Autonomous University of Madrid, Spain
María del Puy Pérez-Echevarría, Autonomous University of Madrid, Spain
Juan Ignacio Pozo, Autonomous University of Madrid, Spain
Ana Pecharromán, Autonomous University of Madrid, Spain
Patricia Martinez, Autonomous University of Madrid, Spain
Ruth Villalón, Autonomous University of Madrid, Spain

The match between constructivist teacher education and student teachers’ beliefs and conceptions
Peter Teune, Fontys University of Professional Education, Eindhoven, The Netherlands
Anouke Bakx, Fontys University of Professional Education, Eindhoven, The Netherlands
Johan Van der Sanden, Fontys University of Professional Education and Eindhoven University of Technology, The Netherlands

The effects of teaching on learners’ epistemological development: Implications for the design of science-and-technology learning environments
Nicos Valanides, University of Cyprus, Cyprus
Angeli Charoula, University of Cyprus, Cyprus

Knowledge restructuring processes, educational beliefs, and teaching practices among teachers who use information technologies in their classrooms
Rivka Wadmany, Teachers College of Technology, Tel-Aviv, Israel
Tamar Levin, Tel-Aviv University, Israel
Paper Presentation

MODELS FOR INSTRUCTIONAL DESIGN

Chair: Jan Elen, University of Leuven, Belgium

“Chain of signification” as a design heuristic and an instrument of analysis in design research
Arthur Bakker, Utrecht University, The Netherlands
Koeno Gravemeijer, Utrecht University, The Netherlands

A new curriculum emerges
Hanna Ezer, Levinsky College of Education, Tel Aviv, Israel

A conceptual framework for comparing and integrating instructional design models
Markus Molz, University of Koblenz-Landau, Germany
Wolfgang Schnotz, University of Koblenz-Landau, Germany

Iteration in instructional design: An empirical study
Daniëlle Verstegen, TNO Human Factors, The Netherlands
Yvonne F. Barnard, EURISCO, France
Albert Pilot, Utrecht University, The Netherlands
Paper Presentation

STUDENTS' PERCEPTIONS

Chair: Bianca De Bernardi, University of Verona, Italy

Students' and lecturers’ perceptions of factors influencing academic performance at two South African universities
William Fraser, University of Pretoria, South Africa
Roy Killen, University of Newcastle, Australia

How do students conceive of learning when entering and leaving university?
Gunnar Handal, University of Oslo, Norway
Tone Dyrdal Solbøk, University of Oslo, Norway
Berit Karseth, University of Oslo, Norway
Kirsten Hofgaard Lycke, University of Oslo, Norway

Living is learning: A reconceptualisation of cognition, epistemology, intelligence and learning in the doctoral experience
Gavin Hazel, University of Newcastle, Australia

Students’ course perception and their approaches to studying in undergraduate science courses
Carolin Kreber, University of Alberta, Canada
Never say it’s beta: Quality expectations and learners’ performance  
Stefan Fries, University of Mannheim, Germany  
Charlotte Haimerl, University of Mannheim, Germany  
Holger Horz, University of Mannheim, Germany

Differences in reading literacy between private and public compulsory schools in Sweden  
Eva Myrberg, Göteborg University, Sweden  
Monica Rosén, Göteborg University, Sweden

Background music and classroom performance: A far from simple relationship  
Rhona Stainthorp, University of London, United Kingdom  
June Dominquez, University of London, United Kingdom

Student progress, aspirations and perceptions following the introduction of coeducation into a single sex school  
Shirley Yates, Flinders University, Adelaide, Australia
J 20  28th Aug  17:00 - 18:20  Room PSY 3 G

Paper Presentation

SOCIAL INTERACTION AND DISCOURSE

Chair: Angela O’Donnell, Rutgers State University of New Jersey, USA

Content or cognition? Teachers’ use of questioning to scaffold pupils’ learning
Debra Myhill, University of Exeter, United Kingdom
Susan Jones, University of Exeter, United Kingdom
Frances Dunkin, Field Place First School, Worthing, United Kingdom
Margaret Brackley, Hawthorns First School, Worthing, United Kingdom
Pauline Warren, Elm Grove First School, Worthing, United Kingdom

Listening to context. Rethinking the nature of metacognitive control of listening within classrooms
Pauline Sangster, University of Edinburgh, United Kingdom
Charles Anderson, University of Edinburgh, United Kingdom

How do story telling promote shared understanding in a group learning situation?
Ulla Maija Valleeala, University of Jyväskylä, Finland

The role of discourse in the construction of social reality in the classroom
Esther Vardi-Rath, Kaye College of Education, Israel
Paper Presentation

COLLABORATION IN WRITING

Chair: Bernard Schneuwly, University of Genève, Switzerland

How virtual discussions improve writing process: A descriptive study and a writing learning tool
Elena Barberà, Open University of Catalonia/IN3, Spain
Toni Badia, Open University of Catalonia/IN3, Spain
Anna Espasa, Open University of Catalonia/IN3, Spain
Teresa Guasch, Open University of Catalonia/IN3, Spain
Daniela Ruiz, Open University of Catalonia/IN3, Spain

Student interactions and writing competencies within a paired writing classroom
Loretta Ho, University of Hong Kong, HKSAR, China

Collaborative argumentation-based learning: Quality of interactions and tool use
Marije Van Amelsvoort, Utrecht University, The Netherlands
Jerry Andriessen, Utrecht University, The Netherlands

An examination of interactional coherence in e-mail use of elementary school children
Hans Van der Meij, University of Twente, The Netherlands
Bregje De Vries, University of Twente, The Netherlands
HOW TEACHERS DEVELOP A PROFESSIONAL IDENTITY

Chair: Sanneke Bolhuis, University of Nijmegen, The Netherlands

Professional development of university professors as teachers: Theories and challenges
Mónica Feixas, Autonomous University of Barcelona, Spain

Monitoring pre-service teachers’ perceptions about teacher roles through a practice-based education programme
Annemarie Hattingh, University of Pretoria, South Africa

Constructing teacher identity in classroom contexts: Student-teachers’ relations to chemistry and the adoption of teacher identity in socioculturally oriented chemistry classes
Sinikka Kaartinen, University of Jyväskylä, Finland
Eero Ropo, University of Tampere, Finland

Student teachers’ understanding of teacher profession
Iva Stuchlikova, University of South Bohemia, Czech Republic
Bina Daniel, University of South Bohemia, Czech Republic
INTERVENTION STUDIES: WHAT HAS BEEN LEARNED?

Chair: Jesus Alonso-Tapia, University of Madrid, Spain

Fostering students’ learning motivation with computer based attributional retraining
Markus Dresel, University of Ulm, Germany
Albert Ziegler, University of Ulm, Germany

Establishing the effectiveness of interventions in literacy
Judy Parr, University of Auckland, New Zealand
Helen Timperley, University of Auckland, New Zealand

Comparing the effects of three methods that developed kindergarten children ability to generate questions on achievements in analogical problem solving, self-directed learning and transfer of learning
Tamir Vered, Bar-Ilan University, Israel

Cognitive acceleration intervention and teachers’ pedagogical thinking
Juha Wikström, University of Helsinki, Finland
Jarkko Hautamäki, University of Helsinki, Finland
28th Aug

**SIG Meetings**

18:30-19:30

SIG 1  Room PSY 2 D
SIG 3  Room PSY 2 C
SIG 4  Room PSY 2 B
SIG 5  Room PSY 2 E
SIG 7  Room PSY 2 A
SIG 9  Room PSY 3 I
SIG 11 Room PSY 3 H
SIG 13 Room PSY 3 G
SIG 15 Room PSY 3 F

19:30-20:30

SIG 2  Room PSY 2 B
SIG 6  Room PSY 3 G
SIG 8  Room PSY 3 I
SIG 10 Room PSY 2 E
SIG 12 Room PSY 2 D
SIG 14 Room PSY 2 A
SIG 16 Room PSY 2 C
SIG 17 Room PSY 3 F

21:00

**EARLI Presidential Reception**
Erno Lehtinen, University of Turku, Finland

for Keynote Speakers, EARLI Executive Committee Members, International and National Programme Committee Members, Past EARLI Presidents

at Caffè Pedrocchi, Via VIII Febbraio 15