ALM13 International Conference, Queen’s University, Belfast July 2006

Valerie Seabright

School of Education
Queen's University
v.seabright@qub.ac.uk

Proceedings from the conference will be available in December from v.seabright@qub.ac.uk

ALM 14 will further develop the themes from this year and will take place at the University of Limerick, Ireland next year from 26-29 June. (Further details www.alm-online.org)

This year's international conference of ALM (Adults Learning Maths, an international forum for researchers and practitioners) was hosted by the School of Education at Queen's University, Belfast. Over 65 researchers and practitioners in the fields of adult numeracy and mathematics met to share research, practice, and innovation under the theme of “Crossing Borders – Research, Reflection and Practice in Adult Numeracy”. During the conference Dr Diana Coben was honoured for her sterling work in adult numeracy which will see her hold, from September, the first Chair of Adult Numeracy at King's College, London.

Papers and workshops covered issues from professional development, classroom practice, practitioner research, researcher reports and practical, hands on workshops.

United Kingdom

The following papers/workshops were contributed by practitioners and researchers from England, Scotland, Northern Ireland and Wales.

Dr Diana Coben led a number of sessions with colleagues from Learning Connections, Scotland NRDC and King's College. An action research project using ICT in developing numeracy was presented. Diana alongside Dr Alison Tomlin presented findings from a project which examined the crossing of borders within curriculum boundaries. Finally she reflected on the NRDC project into what constitutes effective practice in numeracy and how can it be measured. Clive Kanes, King's College, London reviewed the notion of mathematics “problematising” the idea of content in terms of alternative context, epistemological status, and boundaries identifying the notion of knowledge itself. He also offered a paper which applied a radical consideration of the boundaries of discursivity in mathematics. Dr Alison Tomlin, King's College, and Jay Derrick, Institute of Education, presented an innovative workshop on the theme of Utopia – with no restrictions or boundaries in their approach to adult mathematics education. Jay presented a workshop using two ongoing research projects on formative assessment and improving assessment. LLU+(South Bank University) participant Beth Kelly gave a critical overview of numeracy skills within the vocational context since 1997 and presented implications for future developments. Graham Griffiths and Rachel Stone, (LLU+) discussed the issues involved in what should be the pedagogy for adult numeracy tutor education. David Kaye, also from LLU+, offered a workshop which incorporated the use of the history of mathematics into teaching of adult numeracy. Sarah Richards, Abingdon & Witney College, presented a paper which promoted the facilitation of development of self efficacy and the support of cognitive re-framing and behavioural experimentation while Lynne Jenkins, Swansea University, reported on results from a quantitative study on pre-nursing students which identified nursing student's mathematical ability in order to develop an online tool to assist in drug dispensing.

Professor Fred McBride, Queen's University, and colleagues presented their ICT based work “Adaptive Learning, Teaching and Assessment” (ALTA), which is a development...
to enhance formative assessment, specifically related to adult numeracy and reported on a smaller project using their work at Belfast Institute of Further and Higher Education. Kelly Watson and Fiona Watters, both numeracy practitioners in Belfast, presented their work in embedding numeracy within a vocational area, engineering, reflecting on issues of best practice in numeracy teaching.

Valerie Seabright and Fred Greer, Queen’s University, offered a workshop investigating context based activities in the numeracy classroom challenging the concept of context, whose context and purpose of context. Valerie also presented a paper on her research on the development of critical thinking skills in adult numeracy, arguing for positive implementation of thinking skills development as an essential requirement to enable useful reflective practice. Shelley Tracey, Queen’s University, offered a workshop reflecting upon a creativity workshop used with a numeracy tutor group. She discussed the identification of qualities of creative practitioners and its impact on curriculum design. Dr Joe Allen, Queen’s University, presented practical examples of teaching mathematics using ICT providing an opportunity for hands on experience.

U.S.A.

Kathy Safford Ramus and Anestine Hector Mason both talked, separately, on their experience of the research undertaken by the U.S. Office of Vocational Education which is researching mathematics and numeracy pedagogy and is to be used to support curriculum design, professional development and assessment in numeracy.

Lynda Ginsburg, Rutgers University, examined the interactions and affect of parental mathematical skills on school learning and homework in mathematics. Fred Peskoff and Leonid Khazanov, from Manhattan, further developed the concept of maths anxiety and strategies to overcome the issues. Peggy Moch, Valdosa State University, offered the CANE (Commitment & Necessary Effort) model as a basis for understanding and implementing interventions to improve adult’s attitudes to mathematics.

Australia and New Zealand

Gail Fitzsimons presented on two occasions, firstly on the discourses of mathematics and numeracy using a vertical and horizontal dimension and stressing the need to cross borders between the two discourses. She also presented an evaluative framework aimed at assisting development of materials to support adult numeracy using new technologies. Chris Klinger, Flinders University, developed the theme of early learning experiences and their impact on perceptions of mathematics. A statistical study was reported using a measurement tool devised by the author. Donald Smith, Victoria University, linked the development of probability teaching with teaching about gambling and stressed the importance of preventative issues in teaching in the area of gambling while Dr Barbara Miller Reilly, Auckland University, presented her research which explored teaching approaches used in mathematics for second chance learners investigating teaching approached and affective changes.

Sweden, Denmark, Holland, Germany and Austria

Lene Johansen, Aalborg University, discussed whether it is possible to empower adults through numeracy teaching. She referred to the research she has undertaken and to the contribution ALM has made to the debate over the last 13 years. Tine Wedege, Malmo University, opened the debate about what represents quality in research in the field of adults learning mathematics. She presented quality criteria to consider for research papers within the field. This session offered a follow up of the discussion to be continued on the ALM website and at next year’s conference.

Margarita Fries, Vuxenutbildningen, demonstrated the use of alternative methods of learning using written pieces suggesting this facilitated learning where students are able to record everything that is important and are able to use the “green Bible” in internal assessments. Inge Henningsen, University of Copenhagen, discussed the international studies of adult literacy and numeracy, which have major influences on policy, but which are not always analysed and interpreted professionally or correctly and Eigil Hansen, from VUC Syd, Copenhagen, presented new ideas and examples of the mathematical potential in art following on from previous contributions to ALM conferences. Kees Hoogland, Utrecht, considered the effect of using a “just in time” numeracy toolkit on students when they run into difficulties with their mathematics. Juergen Maaszk, University of Linz, offered a paper on the role of mathematics in politics and the economy, following from a request from the editor of “Der Standard” to examine the role as it could be conceived as a manipulating tool or just another ideology. Jens Langpaap, University of Hamburg, developed the theme of problem solving using two distinct approaches, solving real world problems by using knowledge about the mathematical world and solving mathematical problems by using knowledge about the real world.

Republic of Ireland

Eabhnat Ni Fhloinn, Dublin Institute of Technology, discussed the DIT maths learning centre, a new initiative to provide mathematical support to any student with a mathematics component linking activities with use of e-Learning. On a similar theme Olivia Gill, University of Limerick, presented her research on the effectiveness of a maths learning centre for “at-risk” students and those wishing to improve grades at a higher level. She outlined the work undertaken over a number of years which has produced a database of information on aspects of levels of mathematics prior to university, providing a standard comparative measure for incoming students. Her colleague Gerard Golding presented his findings on factors influencing learning in mathematics for adults returning to third level study, specifically linked to advanced mathematics.

The conference provided a platform for exchange of research and ideas for practice reflecting on the contribution ALM has made to the field of adult numeracy internationally. Professor Gelsa Knijnik, Brazil, presented a plenary session developing the theme of cultural influences on mathematics, presenting examples from her work in ethnomathematics.