

Briefly Noted

Selected papers, reports and sites that focus on numeracy

by **Maria Moriarty**

My first memories of numeracy are from a time long, long ago and far, far away. In grade school I was introduced to the horror known as 'mental arithmetic'. I was given problems such as, "If it takes 4 men 3 hours to dig a hole 8 feet wide and 9 feet deep, how long would it take 3 men to dig a hole 9 feet deep and 8 feet wide," and other such questions meaningful and practical to the everyday life of the average nine- or ten-year-old.

All I really learned during mental arithmetic was that I wasn't very good at it, was probably not very smart and that I was "unmathematical". I carried this knowledge about myself quite far into life—until I met some inspiring numeracy instructors. I did not know that an area I had studiously avoided learning anything about—math—was something that I do every day, something that I can do—as a knitter, a cook, a gardener and a home renovator. Sure I use my calculator, but I have discovered that my abilities in 'mental arithmetic' are not necessarily fixed at 'low-level' or 'unsatisfactory'. Through conversations with numeracy instructors and colleagues, I learned that I am not alone in my latent fear of my lack of ability, and that learning—even learning to enjoy math and numeracy—is still possible.

Here are some examples of work by numeracy instructors and researchers who love or who have learned to love numeracy. They are striving to understand how adults work with and learn math, and how and where numeracy operates in our adult lives.

National Roundtable on Numeracy Queen's University. March 23-24, 2000.

The roundtable, sponsored by the National Literacy Secretariat and the Science, Technological Education Group at Queen's University brought together numeracy instructors, researchers and academics to review and discuss concepts and issues of adult numeracy in Canada. A summary of the proceedings of the roundtable are available online at www.nald.ca/FULLTEXT/nls/inpub/numeracy/summary/cover.htm.

Two background papers were made available to participants prior to the roundtable. Each paper contains a comprehensive bibliography.

Improving Numeracy in Canada by John Dingwall www.nald.ca/FULLTEXT/nls/inpub/numeracy/improve/cover.htm

This paper is based on interviews with numeracy practitioners and a review of relevant literature. It provides an overview of current issues in and understandings of numeracy framed in the context of Economy and the Workplace, Personal Life, Education, and Knowledge and Citizenship and Public Life.

What Might 'Numeracy' Mean in Twenty-First Century Canada by William Higginson www.nald.ca/FULLTEXT/nls/inpub/numeracy/mean/cover.htm

This paper looks to future possibilities in relation to numeracy and the meanings of numeracy in Canada. The discussion of future possibilities is framed according to four perspectives or interpretations of numeracy: Numeracy Problems; Numeracy as Remedial Arithmetic; Numeracy as Quantitative Literacy and the Comprehension of Systems; and Numeracy as Mathesis/Patterns of Organized Knowledge.

Math for Learning, Math for Life: An Annotated Bibliography The Centre for Literacy of Quebec. 2002.

This comprehensive bibliography was prepared for the 2002 Summer Institute at the Centre for Literacy, entitled Math for Learning, Math for Life. The bibliography contains a list of annotated print resources, annotated web sites and recommended readings by participants in the institute. The bibliography also contains a listing of keywords from the Canadian Literacy Thesaurus that will be useful for researchers wishing to expand their search for numeracy-related reports and materials. This

extensive bibliography is an invaluable starting point for researchers in the field of adult numeracy and a very useful source of information about resources for adult numeracy instructors. It is available at www.centreforliteracy.qc.ca/Publication_Products/mathlife/cover.htm.

**Frameworks for Adult Numeracy Education
A Survey and Discussion**

by Lisa Hagedorn
Ottawa. Ottawa-Carleton District School Board.
2003.

This report provides a wide-ranging review of numeracy frameworks in Ontario, England, Scotland, Ireland, the United States and Australia. The author has defined a framework as "... any grid that presents numeracy or math skills and knowledge, sorted into sub-topics and, usually, into levels" (p.1). The review of frameworks is followed by a discussion of the purposes and organization of frameworks, the problems associated with using K-12 curriculum models; the challenges with distributing skills and knowledge through levels in a framework; the differences between a literacy framework and a numeracy framework; and the best ways to use a framework for assessment and evaluation. Finally, the report explores how a framework might be developed and implemented, including choosing the resources required, assessing the relevance and usefulness of the framework, and providing ongoing and meaningful professional development to numeracy practitioners in the field.

**ANAMOL – The Adult Numeracy
and Maths On-Line Project**

www.aris.com.au/numeracy/anamol/

This site is the result of a project in Australia to create an online forum which would allow numeracy practitioners to share ideas and knowledge about their practice and to develop and share materials. The site includes teaching ideas, conversations about teaching, and links to numeracy sites and resources. It is a perfect example of grass roots work by and for

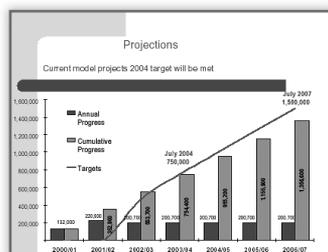
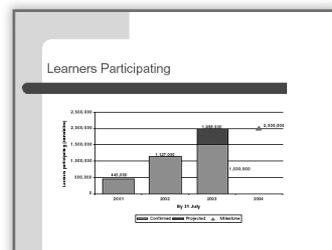
practitioners and a source of fresh ideas and inspiration.

**Moving the Mountain – Part Two: Delivering
Skills for Life**

by Barry Brooks
www.nald.ca/fulltext/movemntn/cover.htm

This is a presentation given at a conference in British Columbia.

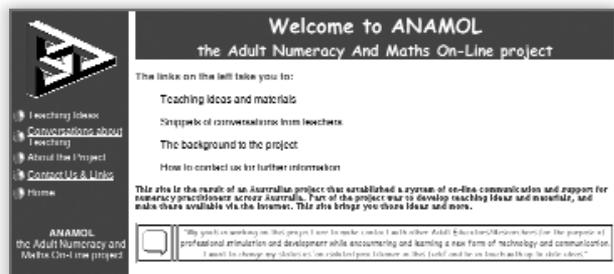
Author Barry Brooks is the Acting Director of the Adult Basic Skills Strategy Unit of the Department for Education and Skills in the UK. His presentation gives an overview of the government's strategy for improving adult literacy and numeracy skills. While the content is interesting in itself, the presentation also serves as a fascinating example of the uses of numeracy. It incorporates charts, graphs and statistics as powerful narrative elements to



enhance the story being told. Analyzing this type of presentation to examine the persuasive uses of numeracy would make an enthralling project.

**The Inclusion of Numeracy in Adult Basic Education
by Dave Tout and Mary Jane Schmitt in *The Annual Review of Adult Learning and Literacy*
Vol.3, (pp.152-202) San Francisco. Jossey-Bass.
2002.**

This article provides a thorough review of definitions of numeracy and descriptions of what is often called numerate behaviour in the United Kingdom, the United States and Australia. The review includes a discussion of trends and developments in numeracy instruction and argues for the inclusion of numeracy as "... part of the core skill base of any literate individual" (p.193). The wide-ranging discussion provides a very useful starting point for opening up the conversation about our understandings of numeracy: what we know and what we need to know more about. The article also raises challenging questions about the implications that shifting and developing definitions and understandings of numeracy could have for research, policy and practice.



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Adults Learning Mathematics – An International Journal www.alm-online.org/

This is the journal of an international forum dedicated to bringing together practitioners and researchers to promote adults learning mathematics. Adults Learning Mathematics (ALM) hosts an annual international conference. Past themes have included, A Conversation between Researchers and Practitioners (2000), Numeracy for Empowerment and Democracy (2001) and Learning Mathematics to Live and Work in our World (2003). Proceedings of each conference are available through their web site.

The 12th conference will take place in Melbourne, Australia in July 2005. The theme will be Connecting Voices: Practitioners, Researchers and Learners. Full details of the conference along with information about membership in ALM and the journal can be found at www.alm-online.org.

Mathematical Fiction math.cofc.edu/faculty/kasman/MATHFICT/default.html

A well-organized if whimsical web site devoted to mathematics in fiction—in print, film and television. The site allows visitors to search by topic, genre, medium and motif. Hours of fun and learning for math lovers and the merely curious! ■

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