

LACME

LITERACY ACROSS THE CURRICULUM MEDIA FOCUS

Volume 16 • Number 2

Connecting literacy, media and technology in the schools, community and workplace

Whither literacy? Consolidating our resources

The literacy map is being re-drawn as 2002 comes to a close, and the key word appears to be consolidation, in Canada and abroad. As the field matures and as governments move to invest more fully in adult education, the role of literacy and basic skills is being addressed more concretely, though still generally as the distant poor relation of the youth and post-secondary sectors.

For the Canadian literacy sector, this has been the most hopeful time we have ever lived.

When the 2001 Throne Speech singled out literacy as an issue of concern, everyone believed that a massive policy shift was imminent, perhaps bringing funding to build a sustainable system. That hope was dashed as the year wore itself out, and the complacency of North America was shattered by 9/11 and government shifted its energy to national security.

In 2002, however, the launch of Canada's federal Innovation and Learning Strategy found the literacy community ready. It constructed a coherent national response that has had political impact and raised hopes once again, this time with a difference. The six national organizations, lead by the Movement for Canadian Literacy, consulted across the country and developed a proposal for a national literacy strategy. Their representations in meetings with HRDC Minister Jane Stewart and



Consolidating knowledge:
Numeracy Institute 2002

at national workshops and consultations lead to literacy being identified as a specific target in the government's long term Innovation Strategy. Literacy organizations in this country have never before worked so collaboratively, and the skill with which they mobilized support from the grassroots was exemplary.

The proposal from the six nationals for a literacy strategy is printed on the Innovation web site¹, and literacy is noted in the final summary of consultations on the Innovation Strategy published at year-end by Industry Canada and Human Resources Development Canada. Nevertheless, we cannot help but notice that the phrase "aligning the learning system to meet

labour market needs" turns up more frequently in the report than does reference to "literacy", and the most specific reference to "literacy" falls under the "Goals and Proposed Actions" section for the Adult Labour Force. Under the further sub-heading "How the Government of Canada Could Contribute", the last recommendation reads:

Encourage the participation of those facing barriers to labour market participation.

Consider, in cooperation with provinces and territories and other partners, targeted skills development initiatives to help persons with disabilities, Aboriginal people, visible minorities, individuals with low levels of literacy or foundation skills, and others facing particular barriers to participation in the labour market. *Canadians Speak on Innovation and Learning: Canada's Innovation Strategy*, p. 91

So while the literacy community has recommended a broad definition of literacy and proposed an agenda linked to issues of equity and social justice, the wording of the government document suggests that currently their agenda is

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much narrower and focused on the labour market. The federal bureaucracy is also in a state of churn. Officials in the Skills and Learning Secretariat, some of whom had only recently become knowledgeable about literacy, changed in 2002. The National Literacy Secretariat was re-organized, and lost some funding as well. Rumour suggests that if new funds become available for literacy, it may be under different funding arrangements than the current grants system. The literacy community will have its work defined in trying to negotiate the shifting and sometimes contradictory policy landscape in 2003.

It is broad, socially inclusive, and works across departments and sectors. As with all initiatives, until we know what resources will be allocated to the implementation, it is impossible to predict the impact. Still, Quebec has produced a blueprint for excellence and set the marker for other provinces in relation to adult education policy.

In November, members of the two large Alberta umbrella organizations, Alberta Association for Adult Literacy (AAAL) and Literacy Coordinators of Alberta (LCA) voted with 96% approval to join into one

1,450 adult volunteer literacy organizations in the U.S.

These examples reflect a much-needed consolidation of resources that should be emulated in every province and state and at every level. There are currently too many organizations with overlapping mandates that are dissipating the limited energy and funding available in the sector by pulling in too many directions. The situation has often been fed by funders who have been unwilling to challenge the field. This new direction is a signal that the field itself has recognized the need to work together if larger goals are to be achieved. Funders should support these initiatives strongly.

On the world scene, the United Nations Literacy Decade begins on January 1, 2003, and runs until December 31, 2012. It grew out of the Education for All Framework for Action created in April 2000 at the World Education Forum in Dakar, Senegal. That Framework committed governments to achieving quality basic education for all by 2015 or earlier. It emphasized girls' education, and included a pledge from donor countries and institutions that "no country seriously committed

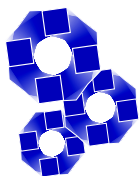
...Quebec has produced a blueprint for excellence and set the marker for other provinces in relation to adult education policy.

There are, however, some very positive trends within provincial literacy in Canada. In 2002, Quebec unveiled "Learning throughout Life,"² a comprehensive government policy on adult education and continuing education and training intended to create a culture of lifelong learning. It is without doubt the most thoughtful policy in this country and one that matches the best anywhere in the world.

provincial organization called Literacy Alberta Society.

In the U.S., on October 1, the world's two largest adult volunteer literacy organizations merged. Laubach Literacy International and Literacy Volunteers of America, Inc. became ProLiteracy Worldwide, serving more than 350,000 adult new learners annually around the world with programs in 45 developing countries, and

Continued on page 3.



LACMF
LITERACY ACROSS THE CURRICULUMEDIA FOCUS

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Literacy for the 21st century

Literacy encompasses a complex set of abilities to understand and use the dominant symbol systems of a culture for personal and community development. In a technological society, the concept of literacy is expanding to include the media and electronic text, in addition to alphabet and number systems. These abilities vary in different social and cultural contexts according to need and demand. Individuals must be given life-long learning opportunities to move along a continuum that includes the reading and writing, critical understanding, and decision-making abilities they need in their community.

The opinions expressed in articles are those of the author(s) and do not necessarily reflect the philosophy or policy of The Centre for Literacy.

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1 On literacy metaphors close to our hearts

...Our favorite metaphors for literacy – literacy as erotic act, as ecology, as world-making, as empowering technology – may all be too grandiose at last, at worst delusional and dangerous. So I invite you to consider two more modest and yet no less profound alternatives. First, Laura Esquivel connects writing with cooking in her novel *Like Water for Chocolate*, a deep meditation that inverts Plato's complaint against rhetoric, showing how in cooking and in writing about cooking, the present invokes the past, and the past informs the present, the aromas of meals from old recipes stirring the senses and stimulating the memory like the phrases of an old family story. Second, consider the metaphor used by one of Larry McMurtry's characters, the brilliant Kickapoo scout, Famous Shoes. The great tracker in his later life has but one ambition, to learn to read the tracks in white people's books, the shapes and letters, to see if they might lead him to worlds he has yet to see.

What if literacy involves little more than finding practices that help us visualize fragments of our thoughts and those of others and to record experiences or impressions that might otherwise disappear from our all too fallible memories – like recipes scrawled on paper napkins and maps sketched in

West Texas sand, or like letters written under duress in wartime trenches and homefront parlors? Even if our metaphors are humble – literacy as cooking, literacy as tracking – so long as they show that reading and writing stand close to the center of our lives, so long as we are cooking feasts and tracking big game, then literacy remains close to our hearts, and there is hope for those of us who are called to craft, study, and teach the written word.

Killingsworth, M. Jimmie. Texas A & M University. Excerpt from a paper presented at the Conference on College Composition and Communication, 2000.

2 On architecture and literacy

A door not only admits us to a building but also to a world of senses, the mind and the heart. Doors, together with windows, stairs and balconies, combine to produce something which speaks and at times even sings. The result is a building PLUS – that is to say, a work of architecture.

What can a building say or sing about? Whatever we, as individuals or as a society, want it to. It can tell about our powers, our dreams, concerns, fears, hopes – whatever can contribute to our present or future welfare. What we build will then combine with what we carve, paint, sing or write in order to learn from our past, to enrich our present and to project our future.

However, before a building can speak it must do: it must function efficiently, be accessible and fit into its neighborhood. It must help us cope with the problems of day-to-day living. Only then can the functional and the inspirational combine in an expressive duet.

This book, then, is about shelter, not only as protection, but as a vehicle for further understanding our world and revelling in it.

A little knowledge of the building's language – its grammar and vocabulary – will enable its song to ring more clearly in the ear, and even permit us, the listeners, to contribute to the chorus.

The building's language

We humans can communicate with each other by word – whether spoken, printed, written or electronically transmitted. We also make ourselves understood by body language. A building speaks to us also through signs, inscriptions or billboards. It usually tells us what it is and how it wants to be understood by its outer clothing – its special kind of body language. Its variety of gestures enables it to speak in prose, in poetry, in symbols. Its gestures can assert its dignity, flaunt its daring, or soar into fantasy.

Mayerovitch, Harry (1996). *How Architecture Speaks and fashions our lives*. Montreal: Robert Davies Publishing. 10 & 28. ISBN 1-895954-55-5
This book can be ordered from the publisher: <http://rdppub.com>

Whither literacy? - Continued from page 2
to basic education will be thwarted in the achievement of this goal by lack of resources.”

Sadly, no previous UN decades have achieved their promise. With some of the new focus and consolidations, perhaps this one will move closer than previous efforts. Certainly in Canada, we have to maintain a united front

to turn the new possibilities into policy realities that nourish continuing consolidation of our own efforts.

In this issue

The Centre is contributing to the new trend by helping to consolidate and disseminate knowledge in the field. This issue of *LACMF* offers reports from the 2002 Summer Institute on Adult Numeracy where a

group of outstanding researchers and teachers synthesized some of the best of what is known and practiced. The section begins on p.11.

¹ See (<http://www.innovationstrategy.gc.ca> under Index – Reports - Canadian National Literacy Organizations)

² See http://www.meq.gouv.qc.ca/REFORME/formation_con/Politique/politique_a.pdf

Workforce literacy instruction and electronic writing: A study

by Heather Hemming, Lisa Langille, & Sonya Symons,
Acadia University, Nova Scotia

Rationale

The workforce of the 21st century demands an array of skills which likely include abilities to effectively manipulate some form of electronic writing technology. From this, there arises a need for an extended conception of literacy, as well as new pedagogies, to reflect the increasing presence of technologies in various areas of adult learners' lives (Kellner, 2001).

Literacy in today's society may involve different levels of participation in electronic communication. Although reading and writing are often the foundation of instruction offered in adult literacy programs, as new forms of communications emerge, it must be recognized that "having the literacy and skills to access, communicate, work, and create within computer and multimedia culture is quite different from reading and writing in the mode of print literacy" (Kellner, p.76). For example, electronic discussion groups and electronic mail systems require writing skills that place a unique emphasis on clarity and precision (Kellner).

A study aimed at improving the writing of adults in a work preparation program was carried out at the Annapolis Valley Work Centre in Nova Scotia by three Acadia University

researchers. Twenty-two participants (ages 18 - 48, mean 29.8) enrolled in food services, shop, janitorial/maintenance, and basic office skills vocational programs took part in this study. All had barriers to employment, and had been either out of employment for a significant period of time or had never been employed and were receiving social assistance. All participants felt that an improved ability to communicate electronically would better prepare them for their future workplaces.

The goals of this study were: to increase understanding of the experience of participants in workforce literacy programs; to assess the impact of an instructional protocol (developed to teach three specific writing strategies) on the quality of writing; and to examine changes in participant attitudes toward writing with computers. However, the main objective was to contribute to the understanding of effective instructional approaches for literacy development within workforce preparation programs.

Structure of study

This research involved the development and assessment of an electronic learning context for instruction to facilitate the development of writing skills necessary for effective communication within electronic spaces. The instruction, situated within a simulated work-

related context through electronic discussions, was provided through a combination of face-to-face and electronic tutorial sessions, using a reciprocal teaching framework. Reciprocal teaching involves providing instruction over several sessions beginning with the instructor modelling strategic approaches to tasks. Gradually, the instructor shifts more responsibility for strategy use to the learners. This process encourages learners to ask questions, clarify understanding, and receive supportive feedback prior to completing the strategy independently (Palinscar & Brown, 1984).

Case studies, created to reflect workplace scenarios, provided the context for electronic writing. The cases incorporated various issues such as trust, loyalty, fairness, work ethic, job searching, interview preparation, time management, setting priorities, and tolerance of differences, among others that often occur in workplace situations. As participants were focussed on finding and maintaining employment, these case studies were relevant and meaningful.

Before developing the instructional protocol, the researchers reviewed electronic writing produced within electronic discussion groups at Acadia University. After examining various examples, three strategies were identified as necessary

for effective communication: explaining/expressing a viewpoint, asking pertinent questions, and writing effective responses. These three strategies became the focus of the instructional protocol developed and assessed in this study.

Methodology

Prior to the instructional phase of the study, participants completed a computer usage survey designed to gather information about their experience with and attitudes toward computers. The computer usage survey revealed considerable diversity of computer experience. For example, fourteen percent viewed themselves as heavy computer users while another fourteen percent reported being infrequent users, with the remaining participants evenly dispersed across the categories in between. The survey also revealed that while a majority of participants (62%) had used computers for playing games, fewer than half (46%) had used e-mail one week prior to the study. This suggests that not all participants were gaining adequate experience communicating with others via computers; this is unfortunate considering that during pre-study interviews, thirty-six percent of participants had identified writing as a significant barrier to finding and maintaining employment.

During the introductory session, participants received basic computer instruction on IBM Thinkpads that would be used throughout the study, so they would know how to use electronic discussion

groups. In this session, after examining a case study, participants made an electronic entry into the discussion group, the format they would follow in sessions in the instructional phase.

The instructional phase had eleven tutorial sessions.

This study provides an optimistic glimpse of how electronic communication instruction may be integrated effectively in workforce literacy programs.

Three sessions were dedicated to each of the three strategies: 1) modelling of the strategy; 2) guided practice and 3) independent practice. After completing nine tutorial sessions, participants took part in two final sessions which involved the use of all three writing strategies, first with guidance and then independently. Modelling sessions were conducted through face-to-face interaction. Guided practice sessions entailed both face-to-face and electronic instruction and strategy use, while independent sessions involved only electronic strategy use. The gradual shifting of responsibility to participants was reinforced by the reciprocal teaching approach embedded in the tutorial sessions.

Each session included reading and discussing a case study, with questions to be addressed in electronic discussions. After considering the case study, participants made an electronic entry into the

discussion using the writing strategy of focus. Prior to making electronic entries, they completed worksheets and study guides throughout the session to help them work through the strategies and organize their information.

Findings

The impact of the instruction on writing was assessed through a comparison of electronic discussion entries made prior to the instructional phase and entries made during the final independent session. Changes in the quantity (number of words/number of sentences) of entries were examined. It was found that although the number of words per sentence did not differ, the number of sentences showed a significant increase, from 3.5 sentences per entry prior to instruction to 4.9 sentences per entry after instruction. Further, ninety-five percent of entries also showed an increased amount of explanation to support viewpoints. This may suggest that participants were beginning to be more concise, and make more thoughtful decisions about their writing processes.

When the quality of the arguments was assessed using a 5-point scale, it was

found that the arguments were stronger after instruction, with an average score of 4.7 compared to an average score of 1.5 before instruction. In addition, a scoring scheme based on a modified version of the TOWL-3 was developed to assess the overall quality of writing. The results revealed a significant increase in overall quality after instruction with an average score of 22.9 compared with an average score of 19.2 before instruction, with 29 points being the maximum score.

After receiving instruction, participants were invited to provide feedback on the effectiveness of the instructional approach. All participants maintained that the blend of face-to-face and electronic tutorial sessions was an essential component with regard to their overall comfort level. Further, many participants reported that they enjoyed writing with computers more than they enjoyed writing using the traditional paper and pen. There was also a consensus among participants that they felt more confident about their writing after receiving instruction than they did before. This increased confidence seemed to transfer to their perceived readiness to find and maintain employment, a common goal among all participants. Many requested ongoing assistance in computer use after the study ended, suggesting that these participants might not have been able to participate in the instruction without the inclusion of face-to-face interaction.

Conclusion

In conclusion, this study resulted in an increased understanding of participant experiences with and attitudes toward computers. It was found that although participants had diverse experience with computers, fewer than half of participants had used computers for electronic communication one week prior to the study. These findings may suggest that there is a need for instruction around electronic communication within the context of workforce literacy programs, given the increasing presence of technologies in today's workplace. The assessment of the impact of the instructional protocol on the quality of writing revealed that overall quality of writing improved, with the inclusion of more and better arguments to support their viewpoints. Finally, participants' attitudes toward writing with computers was also found to change, as many indicated greater enjoyment of the writing process and increased confidence in writing with computers. Given the new learning and work realities, educators may have to rethink their approaches to literacy instruction in the context of adult literacy programs. This study provides an optimistic glimpse of how electronic communication instruction may be integrated effectively in workforce literacy programs.

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The Centre
for Literacy



Report from Summer Institute 2002 Math for learning, math for life

Adult numeracy and basic skills



Numeracy Numeracy is now seen as the “mirror image of literacy” as applied to mathematics. International surveys are giving it equal weight, stressing the centrality of numbers in our lives, and the difficulties and fears faced by many adults when confronted by calculations.

Government policy makers are also talking about literacy and numeracy as foundational skills along with IT.

However, there is still a general lack of understanding about the difference between “numeracy” and “math.” There are also challenges for many adult basic educators who now have to teach



numeracy when a majority of them have come from language/literacy backgrounds, and sometimes share a fear of numbers not so different from those of their students.



KEY QUESTIONS AT THE INSTITUTE

- How does math thinking develop in adults?
- What is the math that adults need to know and be able to do in their roles as workers, family members, citizens, and lifelong learners?
- Why is numeracy/math not included in most adult basic education policies? When it is, why is the vision often so limited?
- Why are most adult basic education teachers limited in their own math background? How can this be addressed?
- Why is so much math classroom practice driven by rote learning and workbooks rather than starting from a vision of what students need?
- What kind of math learning is most effective in workplace training?
- How have visions such as the US *Equipped for the Future* (EFF) project shaped new practice in adult numeracy?
- How has the UK National Strategy for Adult Literacy and Numeracy affected practitioners in giving equal status to numeracy?
- How has Australian practice influenced colleagues around the world?
- How do Canadian teachers teach math in widely variant frameworks such as Ontario's Learning and Basic Skills Outcomes?
- How can cultural awareness be used to enhance math teaching?
- How is the new international survey, now called the Adult Literacy and Lifeskills (ALL) rather than the IALS, assessing “quantitative literacy” in 2002?



The 2002 Summer Institute brought together some of the best-known numeracy researcher/practitioners in the world for three days of talking, exchanging and exploring ideas on teaching, professional development, theory and policy related to adult numeracy.

This section includes the presenters and descriptions of

their presentations. The text of the Think Papers by Dave Tout, Beth Marr, Donna Curry, and Lynda Ginsburg are printed in full. All presentations are described and web sites and e-mail addresses provided for direct contact.

Acknowledgments

The Centre for Literacy organized the Institute with support from the National Literacy Secretariat (NLS),

Format of the Institute

Institutes at The Centre are limited to under 40 participants, and anyone who has something to present is given the opportunity. Before participants arrive, they submit a short biography, any questions about the topic that they would like to see addressed, and recommended resources that have informed their thinking. These are integrated into the Institute binders. We invite a few of the presenters who have in-depth experience in particular aspects of the topic to prepare a short "Think Paper" of 4-5 pages that we send ahead to all participants to start ideas flowing. We ask that presentations be problem or issue-based, rather than show-and-tell; time is left at the end of each day for optional demonstrations and viewings, and display tables and screens are up for the full three days for sharing materials. Everyone attends all presentations with time for discussion and reflection throughout the three days.

The Centre produced an Annotated Bibliography on Adult Numeracy. It is on our website and can also be ordered in print. See sample entries on p. 31.

Human Resources Development Canada, and from Dawson College, Montreal. This year, our host partner was the National Institute for Literacy (NIFL), Washington, DC, who sponsored the participation of Susan Cowles and Donna Curry. Fraser Beebe, husband of presenter Leonee Beebe, generously volunteered to videotape the entire three days.

Introductory thoughts on numeracy

by Dave Tout, Language Australia

A brief history of the word

A quick look into the history of the word "numeracy" will tell you that the word is very new so it is no surprise that there are debates about what it is and what it means. Its initial use in 1959 was in the UK Crowther Report where it was named as the mirror image of literacy. Different countries have since developed different meanings, and, during the growth and interest in adult literacy provision throughout the 1970s, 1980s and 1990s, there have been changes in the way the term was used.

Regardless of these changes, numeracy has often been cast as the pretender - the junior, inferior partner to mathematics -- because it was seen as just dealing with numbers and the four basic arithmetical operations and doing sums with pen and paper. This was particularly the way it was viewed by the school sector, the general public, the media and often government as well. Because it was perceived as a lesser discipline, practicing ABE teachers also questioned its use as a term to describe their work. There was an attraction to the term mathematics, which while incorporating number skills, also included other strands such as data, geometry, measurement, and even algebra.

However, "mathematics" brought with it many of the negative aspects related to its teaching in schools where it was often taught by rote, outside of any real life context, and was seen as irrelevant, and not understood by many students. Most adult basic education students failed mathematics under this system

and return to mathematics education with much trepidation. For them it is associated with feelings of failure, stupidity and powerlessness. To them, mathematics is a competitive and abstract subject filled with lots of work in text books, stressful tests and little explanation of why and how many of the skills are used in society.

Most definitions of numeracy in the 1980s and 1990s have included the use of mathematics in real situations, and the notion that these can be used or addressed by a person in a goal-oriented way, dependent on needs and interests within some context (home, community, workplace, etc.), as well as on beliefs and attitudes. They also recognize that it is important to be able to communicate about math. It is clear from these definitions that numeracy does not refer only to operating with numbers as the word might suggest, but to a much wider range of skills.

Numeracy in Australia

In recent years, especially in Australia, there has been much discussion and debate in the adult education sector about defining the relationship between mathematics and numeracy and also about the concept of 'critical' numeracy. Betty Johnston has argued that numeracy in fact incorporates, or should incorporate, this critical aspect of using mathematics. She argues:

To be numerate is more than being able to manipulate numbers, or even being able to 'succeed' in school or university mathematics. Numeracy is a critical awareness which builds bridges between mathematics and the real world, with all its diversity (Johnston, 1994).

She continues:

In this sense ... there is no particular 'level' of Mathematics associated with it: it is as important for an engineer to be numerate as it is for a primary school child, a parent, a car driver or a gardener. The different contexts will require different Mathematics to be activated and engaged in (Johnston, 1994).

So the view of numeracy and mathematics that has developed in the adult basic education sector in Australia sees numeracy as making meaning of mathematics and sees mathematics as a tool to be used efficiently and critically for some social purpose.

Now there seems to be almost Australia-wide agreement that yes, it is okay to use that word "numeracy" to describe what we do - it isn't downgrading, it isn't inferior to mathematics. As stated in the introduction to *Adult Numeracy Teaching*, "numeracy is not less than mathematics, but more" (Johnston and Tout, 1995).

Parallel to the debate about numeracy versus mathematics, there has been ongoing development of ideas, concepts and theories about numeracy - what it means, how it can be described, and how to teach it.

The current view of numeracy is very different from being just about numbers, and it is a step forward from the meaning that relates to doing functional everyday maths. It is about using and understanding mathematics, all of maths, not just number skills, to make sense of the real world, and using maths critically and being critical of maths itself. It acknowledges numeracy as a social activity, and is why we can say that numeracy is not less than mathematics, but more.

An interesting outcome of this view is that it therefore values mathematics as an important, useful and vital tool in today's

society – a bridge between school or traditional mathematics and the real world. It does not ignore the role or importance of mathematics, which unfortunately many people do by their negative attitude where they feel that math is only used by a few very talented and “brainy” mathematicians. Therefore numeracy can be seen as a wider, and more user-friendly, term compared to the traditional term math, and as a useful concept to take forward into the twenty-first century.

“numerate behaviour” rather than numeracy. According to them, “numerate behaviour is observed when people manage a situation or solve a problem in a real¹ context; it involves responding to information about mathematical ideas that may be represented in a range of ways; it requires the activation of a range of enabling knowledge, behaviours, and processes” (Gal et al, 1999, 11). [See Table 1.]

Numeracy in the ALL framework has to do not only with quantity and number, but

...the framework...recognizes that to be numerate, adults need not only mathematical skills, but also literacy and problem-solving skills.

This view of numeracy and mathematics in Australia has had implications for, and made an impact on many, but not all, national and state or provincial curriculum, professional development, assessment and instructional materials. (See Tout, Johnston, 1995)

An international view – numerate behaviour

But further developments need to be considered. For the first time, international cooperation is now occurring on projects such as the numeracy component of the International Adult Literacy and Lifeskills (ALL) Survey. In their working paper, *Adult Literacy and Lifeskills Survey Numeracy Framework Working Draft* (Gal et al, 1999) the authors have extended the concept and meaning of numeracy further. They too have taken the view that numeracy is the bridge between mathematics and the real world, and in considering the mathematical demands that adults face and the skills needed to meet those demands effectively, the authors have arrived at a definition for adult

also with dimension and shape, patterns and relationships, data and chance, and the mathematics of change. They argue that people need to identify, interpret, act upon, and communicate about mathematical information; the framework details the ways mathematical information may be represented, and also recognizes that to be numerate, adults need not only mathematical skills, but also literacy and problem-solving skills.

Implications for teaching

In terms of classroom teaching, there appears to be a difference in what you do depending on the view you hold of what you are teaching. If as a teacher you see yourself as teaching math, this often means using a text book, getting students to sit for tests or exams, having students learn more formal math rules by rote, and so on. If your view is that you teach numeracy, you are more likely to teach math from a real life, contextual point of view where math is derived from some actual or modeled activity and where your students can learn

Table 1: The ALL Numeracy team's elaboration of numerate behaviour. The statement distinguishes five facets, each with several components.

Numerate behavior involves:

managing a situation or solving a problem in a real context

everyday life
work
societal
further learning

by responding

identifying or locating
acting upon
interpreting
communicating

to information about mathematical ideas

quantity & number
dimension & shape
pattern and relationships
data & chance
change

that is represented in a range of ways

objects & pictures
numbers & symbols
formulae
diagrams & maps
graphs
tables
texts

and requires activation of a range of enabling knowledge, behaviors, and processes

mathematical knowledge and understanding
mathematical problem-solving skills
literacy skills
beliefs and attitudes.

Table 1: Facets of Numerate Behavior

through investigations and projects, and where you recognize, support and build upon the student's own ways of doing math.

¹ The authors distinguish between the word “real” and “realistic.” The former implies that real adults are managing real situations in the real world, whereas the latter implies adults operating within someone's simulation or approximation of the real world.

It is for this reason that the term used to name and describe what we are teaching is important, and it is for this reason that the term “numeracy” as described above should be used to describe what it is we do when we teach math in ABE. It is a way forward.

Mary Jane Schmitt recently wrote:

Adult basic education and GED mathematics instruction should be less concerned with school mathematics and more concerned with the mathematical demands of the lived-in world: the demands that adults meet in their roles as workers, family members, and community members. Therefore we need to view this new term numeracy not as a synonym for mathematics but as a new discipline defined as the bridge that links mathematics and the real world. (Schmitt, 2000)

This interest in the new meaning of the word and in the view of numeracy as a way of moving forward is not only happening in the ABE sector. At a recent international math education conference in Japan, Alan Bishop said of numeracy in the school sector:

There is also an increasing interest in numeracy, reflecting both a concern that Mathematics teaching is not succeeding, and also a desire to have a more relevant and context-related mathematics curriculum in schools. (Bishop, 2000)

Challenges and questions for the Summer Institute

Numeracy, not just literacy and language, should be considered a central focus of adult basic education. If this goal is to be realized, adult numeracy education must be supported by research, embraced in practice, and clearly communicated in policy at the national or federal, state or provincial, and local levels.

Research

Research in adult numeracy is thin, so we need to encourage and develop a research culture.

How?

Teacher training and professional development

The approach, feelings and attitudes about mathematics education are entrenched in its own history. Debate on this issue (Boomer 1986, Siemon 1989) has suggested that teachers need to be challenged and provided with different theories of mathematics education which will change them away from their traditional view of mathematics education. An Australian educator in discussing this issue said:

"While teachers operate at an intuitive level as pragmatists, not articulating to themselves the present theory which drives their practice, they are effectively paralysed in terms of their capacity to change radically. The non-theorised practitioner is a kind of well-intentioned misguided or unguided missile in the classroom, likely to take up a new idea and add it to the repertoire but unable to generate infinite practice for new contexts." (Boomer, 1986)

A large segment of ABE teachers lack the pedagogical and content knowledge adequate to teach adults mathematics – and many are literacy or ESL teachers with little or no training in teaching mathematics. Any change in practice needs to begin by equipping ABE teachers with both pedagogical and content knowledge of numeracy as well as with good instruction techniques, instructional materials, curriculum frameworks, and assessment instruments.

This will only happen through teacher training or substantial professional development. Teachers need to be given a theoretical base on which to give them the confidence and knowledge to move forward.

How?

Curriculum, instruction and assessment

Another crucial aspect of improving practice is the writing of innovative curricula, instructional materials and assessment schemes. Cohesive, comprehensive curricula are needed that will provide students with opportunities for problem solving and communication and that connect with real and important issues in their lives.

How?

Policy

Why has literacy upstaged numeracy in the language of policy making? Numeracy, not just literacy and language, should be considered a central focus of adult basic education. Numeracy should be viewed as a core essential skill, one that is critical for adults in society. The public needs to see the importance of numeracy, not simply mathematics, as a personal resource that can benefit the community at large. Numeracy needs to be brought to the fore.

How?

Some of the ideas for this background paper have been adapted from:

Tout, D. & Schmitt, M.J. (2002). The inclusion of numeracy in adult basic education. In J. Comings, B. Garner, & C. Smith (Eds.), *Annual review of adult learning and literacy* (Vol. 3, pp. 152-202). San Francisco: Jossey-Bass.

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Adult numeracy curriculum and assessment: How they shape and are shaped by our visions of 'competence'

by Beth Marr
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Beth Marr put together a paper as a tool for reflection, argument, and perhaps a framework for future discussion.

Beth wrote to participants:

To get the maximum benefit from this paper, it would be worth a few minutes, before reading it, to consider the following question from your own perspective:

'What would you look for in your students to decide if they were 'competent' at a particular level of numeracy?'

Considering the question beforehand will enable you to compare your own response with the opinion from Australian numeracy teachers described in the paper. At the end of the paper there are other, more general, questions regarding curriculum, assessment and teaching practices which you might like to consider as you make your way to the Institute.

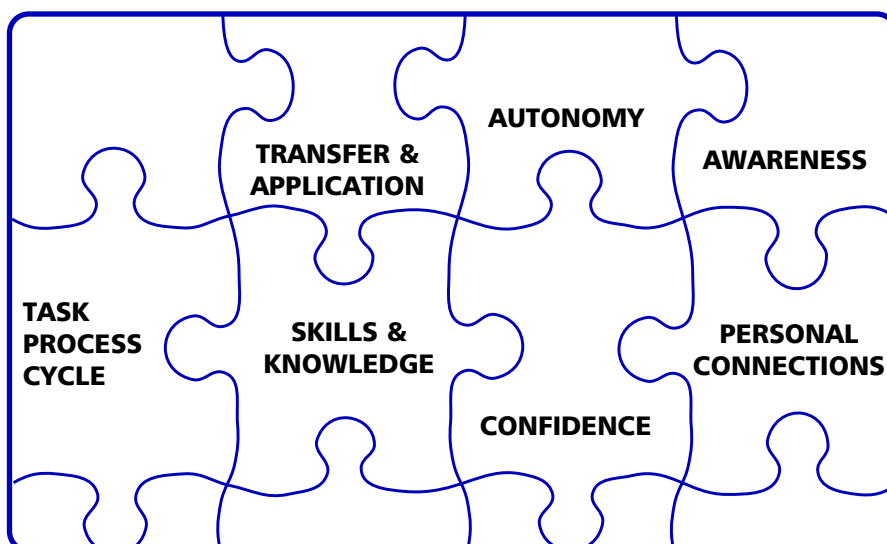


Figure 1: Model of Holistic Numeracy Competence - Numeracy 'Identity'

During a recent project in Australia on assessment tasks and procedures, experienced adult numeracy teachers were asked about their notions of numeracy competence. The common themes in their responses led us to develop a model of Holistic Numeracy Competence in the form of a jigsaw puzzle. [Figure 1]

The seven interlocking, or interdependent, components of this model are seen as integral to the full picture – a developing 'identity' as a more numerate

person. A change from an 'I can't ...' to an 'I can ...' type of person: a shift towards an identity as a more numerate individual.

Whilst we consider the components, on either side, to be equally important, we acknowledge that the divisions are arbitrary and that there is a degree of overlap. However, some essential features of a prospective model of holistic competence seem less arbitrary: There is a cognitive domain and an affective

(feelings) domain, with confidence touching all aspects in a two-way relationship. Some confidence is necessary to begin the development of any of the other components, and it is likely to increase as any of them is strengthened.

The model

Here is a brief description of the components of the model, grouped as cognitive and affective aspects:

Cognitive aspects of competence

Skills and Knowledge

Achieving the skills and knowledge listed in the curriculum documents was seen as a basic requirement for competence. Three aspects were highlighted: *repeated demonstration, understanding, and integration*.

Repeated demonstration

Students are able to confidently demonstrate the skills on more than one occasion.

Understanding

This requires understanding of concepts that go beyond the demonstration of skills and processes. For example, considering the formula for the area of a triangle, 'Oh yes! I can see the triangle's half of a rectangle.'

Integration

Students can fit together different pieces of knowledge and connect new mathematics skills into their existing repertoire of past knowledge; different aspects of numeracy are integrated, or drawn together by the students. They can see numeracy as related competencies rather than isolated skills.

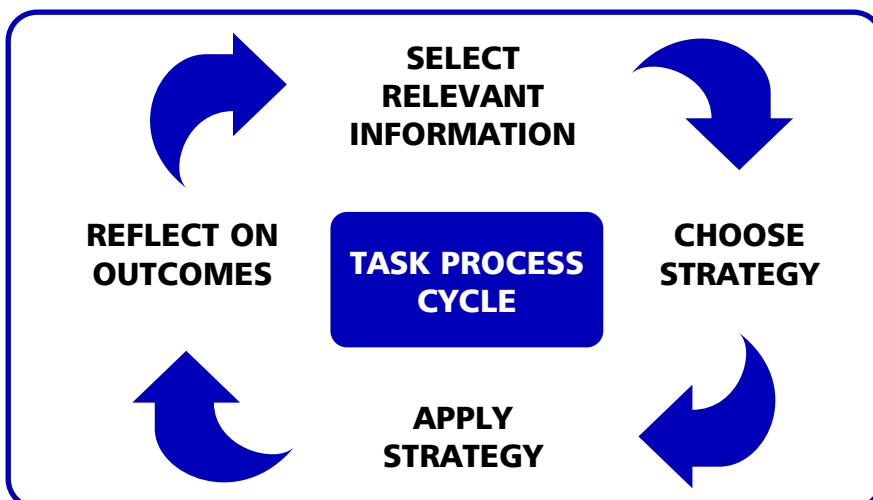


Figure 2

Task Process Cycle

Students are able to find a pathway through whole tasks, not just perform isolated, out of context, mathematical skills: before using the mathematical skills, students need to be able to select the information they will need and decide on the appropriate strategy to apply; after performing the mathematical operations, reflecting on the meaning of their results, deciding how reasonable they seem in real-world terms and considering likely implications.

We have called this series of steps the 'Task Process Cycle.' In short, it can be conceived of as four related components as shown in figure 2.

Many teachers referred to the importance of fostering this approach to numeracy at all levels, and very early in the teaching program. They referred to it variously as 'thinking about thinking', or 'mathematical thinking.' 'So to solve that problem, what do I have to do?' Also, the evaluative aspect indicates an important difference in competence: "between getting the wrong answer and knowing you've got the wrong answer, and getting the wrong answer but not knowing."

Transfer and application (of skills and knowledge)

This means being able to apply numeracy outside the classroom in a variety of situations, to real-life problems that may involve skills from a number of numeracy maths areas as well as the problem-solving process. "Would this person, in a shop, be able to deal with the money, would they be able to find their way around the world ... and could they recall if the need is there?"

Transferring and applying skills can be seen as the culmination of the cognitive domain. It complements the combination of skills and knowledge used within the task process cycle to handle new situations. However, teacher comments such as: "When I feel that they've gained the skills, can apply them over a variety of situations and have the self esteem and the confidence to do more" indicate that the affective components of the model are considered essential companions to the cognitive aspects.

Affective aspects of competence

Confidence

The most interwoven component of all: the word 'confidence' arises constantly in descriptions of all other aspects. Since mathematics anxiety has a detrimental effect on students' learning, "self-esteem has to be built up before a great deal of learning will occur." Shifts in students' confidence were, therefore, seen as vital. Experienced teachers explained that they look for more positive self-talk and confident body language as indicators of this kind of change.

Personal Connections

This aspect seems to touch on students' emotional relationship to their learning. It might be a connection with personal lives, interests and goals that motivates them to learn. Sometimes it is the ability to see how their learning is usable in their life outside the numeracy classroom that indicates real learning taking place: "making connections between what they do outside and what's happening in class". For example, *"I won't use any of this stuff - I won't - I just get my brothers for things like that (building or painting). I would learn it better if I could see how it connects with things I might use in the office!"*

Awareness of Themselves as Learners

Practitioners also highlighted students' awareness of the skills and knowledge they had gained, and the ways in which they had gained them – "to recognize what they know and understand ... For somebody else to be telling them they're competent I'm not quite sure

whether that helps. ... I encourage students to become more aware of their own competence by pointing it out to them when they explain something to another student". Student participation in assessment discussions was suggested as another strategy for focusing on students' awareness of their learning. "It's a matter of them telling me how they're feeling and whether they can do it, whether they're happy, and they also get feedback from me".

Awareness of their learning style, "knowing how you learn," was also seen as important, for example, a visual learner who benefited from realizing that she could understand better if she drew diagrams or pictures. Other students who were "very active, touchy, sort of 'doing people' - mechanics and the like ... That's how they've learned things". Their learning style was validated by encouraging the use of concrete aids like blocks and counters. "They know that's how they need to do it, then they can move on from there. Once people know that it is OK to do it any way that you like, then I think that is very important for them to grow."

Growth of Autonomy as a Learner

This dimension of competence describes a growing independence in the learner, "their move from dependence to independence," "taking some control over their learning," for example, taking class investigations home and extending them, or saying to the teacher 'I really don't know this well enough. What can I do to be able to do it better?' "the confidence to ask you questions about their learning". Growing autonomy

is also evident in students' willingness to have opinions and take risks, to get started on new tasks with less assistance than before - not saying 'I don't know, I've got to ask somebody else' ... "Some of these people have been so wrong for so long, there is a real risk in putting anything down on paper at first."

Having seen the description of our proposed model you might like to pause and think back to your own responses to the questions of 'competence.' Are your responses reflected within the model? Do you agree with the aspects named? Are there important features missing?

Why a model?

After hearing the characteristics that teachers look for in their students when judging them 'competent,' we decided it was worth looking more closely at these aspects. We hope that explicitly 'naming' them might acknowledge their importance and raise questions regarding the focus in numeracy teaching, curriculum and assessment practices. We hope that this model, or others, might put both cognitive and affective aspects back on the agenda.

Naming the affective aspects

Some of the affective aspects were given a great deal of attention in the eighties when 'mathematics anxiety' was a new construct and adults were encouraged back to the classroom to right the old wrongs. However, more recently, with accredited curriculum, and restricted time to achieve prescribed numbers of learning outcomes, it may be considered dispensable, a non-essential and time-

consuming aspect of teaching. Perhaps it is discussed in the first class, when students fill out a short questionnaire and discuss their feelings about past mathematics learning. Often it is never formally addressed again. Reflecting on the model now, it seems obvious and desirable to spend time on the affective side.

The model led us to recognize that we should reconsider strategies for working with the affective (emotional and reflective) aspects of students' learning. We have trialed discussion starters, and written feedback tools designed to focus on students' feelings about their progress. We are looking for strategies that encourage them to acknowledge and articulate their positive achievements, not just their problems.

Naming the cognitive aspects

Naming the three cognitive components specifically should highlight some fundamental priorities in curriculum and teaching practice. For example, for application and transfer to be possible, the curriculum and teaching resources should not limit students in unrealistic ways. For instance, adult curricula which specify that at certain levels students should only operate on 'whole numbers' or numbers below certain magnitudes, like 10 or 100, run counter to the reality of adults' lives. Lives are full of messy numbers: prices like \$259.95 and trains that run at 12:56 or 18:09.

The 'naming' of the aspects has certainly raised questions about how each of them might be achieved and particularly what priority each should be

given. For example: Does a strategy of teaching through application to real situations, prevent some of the 'big ideas' of mathematics being appreciated? Does it matter? And if it does matter, then what are the important "big ideas" that should be

combination of written responses to realistic tasks connected to students' lives and interests, and records of teacher observations of practical tasks involving real artefacts and measuring equipment.

For instance, adult curricula which specify that at certain levels students should only operate on 'whole numbers' or numbers below certain magnitudes, like 10 or 100, run counter to the reality of adults' lives. Lives are full of messy numbers: prices like \$259.95 and trains that run at 12:56 or 18:09.

emphasized? 'How can we best model or 'scaffold' 'numerate thinking' and is it the same as 'mathematical thinking'?

The model as framework

It is possible to use a model of this sort as a developmental or planning framework: to ask questions such as: 'What sort of teaching practices flow from this model? What sort of curriculum? What sort of assessment? Our recent project examined assessment implications. It is also possible to use the model as a framework for reflection. I will look at some of these below.

What sort of assessment flows from this model?

The model has led us to describe, and develop further, a variety of assessment strategies. For example, at lower levels, we use assessment through observation of real or simulated practical activities so that low literacy levels will not get in the way of realistic numeracy performance. At higher levels, we use a

Tasks we have discussed for assessment purposes include:

- tasks which use realistic artefacts, such as supermarket items, cooking equipment, real maps, timetables calendars, clocks...
- tasks which are open-ended, allowing students to achieve success at a range of levels;
- tasks negotiated between the teacher and the student, around student's interests.

These assessment strategies are far removed from short answer tests and rote-learned processes applied to sets of abstract exercises, especially if these are centrally dictated by distant government officials.

What sort of curriculum flows from this model?

Having spent a great deal of time considering these aspects of teaching over the last year, I have given this some priority on my current agenda. However, I am aware of the likely feelings of teachers when these ideas are put before them. "How will I fit all

that into the short time I am given to cover the curriculum?"

In Australia we have worked hard to counteract the 'limited vision' of numeracy as number calculations, broadening it to focus on a range of practical functions: from measurement and design to data analysis; from money manipulation to navigation. There is a focus on whole tasks, on applications relevant to the various real worlds of our students, the 'social discourses' that are part of our students' lives. The most commonly used curriculum, the 'Certificates of General Education for Adults' (CGEA) (ACFE, 1996) is based on this approach. Learning outcomes such as: 'Can use and interpret whole numbers (including large numbers), simple fractions, decimals and percentages **to make decisions about money and time in familiar situations**' are used to keep this functional approach uppermost (see Ciancone & Tout, 2000). Also, as requested by teachers during the curriculum consultation phase, we have included details of the mathematical skills that would be likely to be incorporated in these outcomes at the four levels of the curriculum framework. In doing this we have covered all or most strands of formal mathematics: 'space and shape,' 'measurement,' 'chance and data,' not just 'number.' Most teachers are happy with the approach of our CGEA curriculum document and say that it has led them to broaden the scope of their numeracy teaching (Marr, et. al., 1998).

On the other hand, teachers are also saying that it is difficult to cover the

curriculum, given the funding limitations on the time available for teaching. There is a risk that lack of time, together with stringent reporting requirements, might pressure teachers away from spending time on the development of the whole person in relation to numeracy and reduce the curriculum to a checklist of skills to be demonstrated.

If we want to ensure that teachers can spend time scaffolding a logical, mathematical approach to tasks (using the 'Task Process Cycle') , or facilitating 'awareness' of learning and developing autonomy in our students, then we may have to make some hard decisions.

Do we have to stop worrying about the broad range of numeracy outcomes and encourage students to work towards those they will find most rewarding or relevant 'applications'? Do we focus on the outcomes that will encourage their 'personal connections', and through these build their 'confidence' and numeracy identity? If this is the way forward it opens up a number of other dilemmas.

How would the students make meaningful choices about their areas of interest if we did not introduce them to the range of possibilities? For example, some students' reason to be in the class is to change their identity in relation to the discourse of the school mathematics classroom, that is, to be able to finally succeed with the things they failed at school. Would we then be doomed to teaching fractions and long division forever? Sometimes the curriculum is the external motivator to broaden students' outlook or expose

them to new, interesting and important aspects of numeracy.

How does individual negotiation about content and applications fit in with other important aspects of classroom teaching methodology? For example, observation and past practice have alerted me to the importance of facilitating connections between students in adult numeracy classes. I strive to encourage learning 'noise', in order to develop social rapport in the classroom, to lessen anxiety about the mathematics and to forge cooperative working relationships between the students (Baynham, 1996; Beach, 1992; Benn, 1999) [see also Marr, 2000]. These strategies create an atmosphere as far removed from the traditional, anxious and silent mathematics classroom as possible. To me that means a mixture of games, cooperative activities to explore concepts and to build related mathematical language, as well as some individual, calculation-based tasks. I wonder how my techniques will fit with more individual negotiation of meaningful whole tasks in diverse content areas. Does it come down to a clash between numeracy and mathematics teaching?

The model as a framework for reflection

Our Holistic Model of Competence, can, and probably should be, critiqued, since the arbitrary nature of boundaries and naming are perhaps more useful at the stage of analysis than after their inception. But if it can be accepted for the moment, it may be a useful framework for reflection on current curriculum, teaching and assessment practices.

Hopefully practitioners, practitioner-researchers and curriculum writers can pause to look through objective eyes at their current educational circumstances, and ask themselves:

"Which of the seven components of the model are more likely to be developed through my current situation?"

'Situation' is a deliberately broad term. It could apply to the curriculum, the program in which we work, or our own classroom practices. The model can be a useful tool for

concern. You might then consider whether this assists 'personal connections': whether the situations for application are chosen by the teacher, the students or the worksheets. (Do contexts outside students' experiences help or hinder their learning of new skills?) It might also be interesting to find out if students actually feel they are developing mathematical 'skills and knowledge' through the process. Does their confidence usually increase and what are the contributing factors?

Literacy teaching has moved beyond merely teaching fragmented skills such as grammar and spelling, towards a real-task approach. Can such a fragmented approach remain acceptable for numeracy?

reflecting at all of these levels. For example, if the curriculum is still being largely influenced by school mathematics thinking, then the 'skills and knowledge' component is likely to be given a great deal of emphasis. You might then consider whether students make 'personal connections' in any real-world sense and whether 'application and transfer' is given space in the teaching. Literacy teaching has moved beyond merely teaching fragmented skills such as grammar and spelling, towards a real-task approach. Can such a fragmented approach remain acceptable for numeracy?

On the other hand, if the teaching is predominantly influenced by literacy/ numeracy philosophies, then 'application' is likely to be a paramount classroom

These are just some examples of the questions generated by the model. I expect that you will come to the Summer Institute with lots more.

1 Further details of this project and a fuller description of the model can be found in the working draft of Marr, B & Helme, S. (2002). Towards a Model of Holistic Numeracy Competence. - by email beth.marr@rimt.edu.au.

2 The skills of 'Using mathematical techniques' and 'Problem solving' are acknowledged as desirable generic skills to be fostered in all Australian Vocational Education and Training curriculum documents.

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Thinking about Numeracy Instruction

by Lynda Ginsburg
National Center on Adult Literacy, University of Pennsylvania

One popular way to think about any instruction is to think of an equilateral triangle with teacher, learner and content at the corners, and with the interactions between each of the pairs forming the sides of the triangle. (The teacher is only coincidentally on the "top.")

Recognizing that the teacher and learner both interact with the content and each other during the teaching and learning process sounds clean and simple; however, an exploration of what it means to be a teacher or learner in adult education and even an examination of "content" raises questions about what adult numeracy instruction is, could be, or should be.

This short "think paper" places the teachers, the learners, and the content within the complexity that is adult numeracy education and points to implications that must inform and balance how we go about helping adult learners improve their numeracy.

The Teachers

Adult numeracy teachers are a varied group. One U.S. national

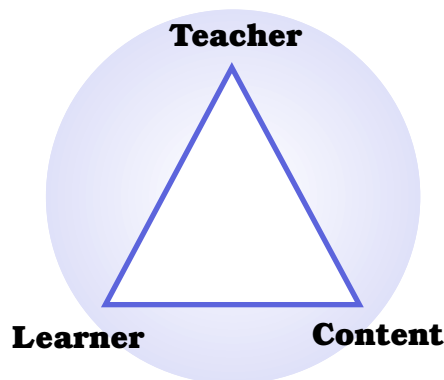
survey of full time adult educators (regardless of teaching assignment) determined that 64% of the responding teachers felt "prepared" or "very prepared" to teach math. More than half, regardless of the number of years teaching, indicated that they would most want to

know more about "number sense" to improve their math teaching (Sabatini, et al., 2000). An earlier survey of adult education programs in the United States showed that 80% of adult learners receive some mathematics-related instruction but only 5% of the instructors in the programs are certified to teach mathematics (Gal & Schuh, 1994).

Adult educators also vary according to the way they see their role as adult educators. In a study based on interviews with 250 teachers of adults, Pratt (1998) identified five perspectives teachers take in defining their educational role:

- transmission, where the primary purpose is the delivery of content;
- apprenticeship, in which the teacher models ways of being;
- developmental, which cultivates ways of thinking;
- nurturing, which focuses on facilitating self efficacy; and
- social reform, which encourages seeking a better society (pp. xiii).

These categories could similarly apply to teachers at any level, including K-12. However, unlike many other teaching environments, adult educators have high levels of control over what happens in their classes and few imposed



structures. Thus they are relatively free to design classroom activities in accordance with their own perspective and their own vision of the impact instruction will have on learners.

The Learners

Adult learners come to instruction with their own reasons for wanting to study numeracy, their own goals for numeracy learning and life, and their own experiences. Their unique sets of experiences related to numeracy encompass

- 1) memories of previous schooling (often frustrating and demoralizing);
- 2) affective responses to numeracy learning (reflective of school experience as well as cultural and familial biases);
- 3) numeracy knowledge, skills and strategies that were learned or individually developed and that may be meaningful or meaning-less, complete or fragmentary, usable or misconceived.

In addition, the learners also may have diagnosed or undiagnosed disabilities or at least learning styles that may erect barriers to particular modes of instruction.

Learner goals and expectations impact their willingness to engage in certain activities and the levels of frustration and/or ambiguity they may be willing to tolerate. Indeed, many

learners are comfortable with endless workbook exercises, familiar and well-defined tasks, even if they don't understand why they are doing what they are doing and will forget the ostensibly arbitrary algorithm that is guiding their work.

The Content

One might suppose that the content of adult numeracy instruction is fixed and reflective of traditional elementary, middle and secondary school mathematics curricula. However, in recent years, numerous international documents and taskforces (ANN, ALL, EFF, British and Australian national documents, etc.) have expanded the universe of adult numeracy to include real world tasks, representations, behaviors, dispositions, and so forth.

The introduction of technology has also had an impact on determining what content should be the focus of instruction. Long division may no longer be considered appropriate content for adult numeracy instruction with the proliferation of calculators. However, algebra for use with spreadsheets and statistical representations has become more and more useful in work and community settings.

While there is certainly overlap between school math and "numeracy," and perhaps mounting evidence that school math has been gradually moving in the direction of numeracy (as defined by the ALL team), the definition of what the content is continues to be more of a moving target than textbooks or workbooks might suggest.

Add in Time Constraints

All of these conflicting goals, priorities and approaches might not be all that important if learners had time to address

multiple goals of their own, to encounter multiple teachers and to participate in in-depth investigations, conversations and reflections. Such is certainly the case for children who have approximately 12 years during which their primary task is to learn. But, adults generally do not have extended time to devote to adult basic education; they may have to simultaneously balance work and family, and are often erratic in their attendance and participation due to personal and other factors.

This means that at every juncture, teachers and learners make choices about how to spend limited instructional time. These decisions may be made with input from both teachers and learners or, more commonly are made by teachers and are accepted or not by learners. When learners do not feel that the decisions about content and instructional process are appropriate, they may stop participation.

Conflicting Implications for Instruction

In *Chart 1* there are some examples of implications that might derive from the numeracy-related goals of learners, the instructional priorities of teachers, and the view of numeracy content. Of course these are pretty much caricatures, but they are meant to show the extremes. (I'm sure you can fill in better implications than these; please share improvements with me - it's a "think paper.") Of most concern to me is that perhaps many teachers and learners do not recognize that instructional decisions are being made, by teachers and by learners, some that are overt and others that are less apparent. As they said in the sixties, "Not to decide is to decide."

Questions to think about

Do learners need to develop understanding of the "why" of what they are doing, or does that come for many people after they have mastered the "how" and attained some level of automaticity? Or, does much of the "why" only come when one has to teach someone else (probably true for many teachers)? Should we bend to learners who say, "I don't care why, just show me how to do it"?

Does instruction need to start at the beginning and follow a ladder or can people find meaning in "just in time" models that start with the need and work backwards as needed ?

Does everyone need to learn the same content? In the same order?

So how does one make good instructional decisions? On what basis? Representing whose priorities?

How does one balance competing priorities, in light of limited time? Is there one right way, or even a bunch of "best ways"?

What does efficiency in learning look like?

Are there strategies that invite and enable further study, either within the class setting or independently, leading to a commitment to lifelong learning?

Do all teachers have the ability to create appropriate learning activities?

Are numeracy-rich extended projects viable in open entry/open exit settings?

CHART 1 SCENARIOS FOR NUMERACY INSTRUCTION

If the Learners' goal is to:	Then:	At a cost of:
Pass a general high stakes test (i.e., GED, TABE, other standardized assessment)	An ILS (Integrated Learning System) geared to practice for the test is efficient and effective	Integrating instruction with real life applications
Solve actual problems in a particular work setting	Using such problems should drive instruction with just-in-time numeracy content and emphasizing numeracy in context	Developing concepts sequentially that might enhance meaning (i.e., the "ladder"). Transferrability to other settings
Be better able to help children with school math	A curriculum based on mastering the school math that children might encounter	Transferrability to real life applications
If the Teachers' priority is to:	Then:	At a cost of:
Transmit content	The teacher will tell the learners everything of importance	Learners becoming passive 'receivers' with no active learning or integration of content
Model problem-solving	The teacher will focus on imparting strategies for solving problems, focus on situated learning and provide coaching	Learners will not develop their own strategies or learn to deal with false starts; transferrability to other contexts
Develop understanding	Few ideas will be studied, but in great depth	Many topics will never be encountered due to lack of time
Nurture self-image and feelings of empowerment	Provide tasks for which learners only have to reach a little beyond their comfort zones.	Challenging learners by allowing them to become frustrated with false starts and have to search for new strategies and be independent. Perhaps proceed so slowly that they see little progress, but feel good
Promote social reform	Focus on particular social problems with just-in-time math content - perhaps emphasizing statistics; learning what is necessary to address particular problems	Learners may not establish a coherent, interrelated mathematics structure; content may be limited due to time spent in other ways
If the content is seen as:	Then:	At a cost of:
A sequence of numerical computation skills	Following text books, work books, or an ILS is an organized approach	Applications and "messy problem-solving"
Mathematical "Big Ideas"	Identify the big ideas and focus on rich conceptual understanding	Developing computational skills and perhaps making connections between and among big ideas
Problem-solving	Focus on actual examples and developing problem-solving strategies	Seeing connections between problems and the mathematical structures

References:

Gal, I. & Schuh, A. (1994). Who counts in adult literacy programs" *A national survey of numeracy education* (Technical Report No. TR94-09). Philadelphia: University of Pennsylvania, National Center on Adult Literacy. Available <http://www.literacyonline.org/products/ncal/pdf/TR9409.pdf>

Pratt, D.D. & Associates (1998). *Five perspectives on teaching in adult and higher education*. Malabar, FL: Krieger Publishing Co.

Sabatini, J.P., Daniels, M., Ginsburg, L., Limeul, K., Russell, M., & Stites, R. (2000). *Teacher*

perspectives on the adult education profession: National survey findings about an emerging profession (Technical Report No. TR00-02). Philadelphia: University of Pennsylvania, National Center on Adult Literacy. Available <http://literacyonline.org/products/ncal/pdf/TR0002.pdf>

Introduction to the Workplace Numeracy Workbook

by Lynda Fownes, Executive Director, SkillPlan BC

The Workplace Numeracy Workbook is a new project at SkillPlan. We envision a resource that could be used by educators, trainers and learners in both the public schools and adult education settings. When young people and adult learners ask the dreaded "Why do we have to learn this math concept?" this resource will provide some answers. It can be adapted to need. Parts can be pulled from it to enhance or enrich topics or units in math or in other subject areas.

Based on the model established in the HRDC Essential Skills Profiles*, the Workbook is organized into four application areas taken from workplace settings: Money Math; Budgeting, Scheduling and Accounting; Measuring and Calculating; and Data Analysis. For example, in the Data Analysis area, we noticed that many workers have to calculate the percentage of moisture in products or feedstock. Examples of workers who perform this task range from wood kiln operators, farmers, forestry technicians, operators in wallboard manufacturing plants and bakers, to grain elevator operators. Even more generic is the basic understanding from the Measurement and Calculation area that: A gross weight less tare equals net weight which precedes the calculation of an actual percentage. We believe that several practical



applications of the same numeracy skills will give instructors the opportunity to teach the generic, transferable skills inductively, using exciting, real-world problems.

The Workplace Numeracy Workbook has been put together as a loose leaf binder to facilitate the reproduction of teaching materials and problems. A general introduction outlines the understanding of numeracy which underlies the workbook, and describes the four application areas. An Introduction for each section explains the features, complexity and sequence of problems in the section. Each section has five to 10 examples illustrating workplace applications. Each example has common elements such as information about the workplace setting and occupation. Answer keys and a summary of math

functions accompany every problem.

Because this is a workplace collection, the problems are authentic with many contributed by job incumbents. The role of SkillPlan has been to collect, select, sort and edit. Our challenge was to get diverse examples in all four application areas, a process that took many months. Potential users and an advisory panel will be invited to give feedback at various stages in the development process.

SkillPlan, the BC Construction Industry Skills Improvement Council is a not-for-profit society, dedicated to upgrading the essential skills of workers.

* The Essential Skills Profile can be found at <http://www15.hrdc-drhc.gc.ca/english/es.asp>

Helping Teachers Use Math to Solve Problems and Communicate



by Donna Curry
Equipped for the Future National
Center, University of Maine

“Use Math to Solve Problems and Communicate” is one of the 16 content standards developed by the *Equipped for the Future* project to broaden the range of knowledge and skills that are currently addressed in federally funded adult education programs in the United States. Derived from what adults need to know and be able to do in their everyday lives as parents, workers and members of communities, these standards expand the traditional definition of literacy from a set of communication skills to include decision making, interpersonal and lifelong learning skills. The focus of the standards, as seen in the math standard [see Box], is on application of skills in a specific context, to achieve one’s purposes for learning.

Equipped for the Future is the national standards-based system reform initiative of the U.S. National Institute for Literacy (NIFL), an independent federal agency. NIFL launched *Equipped for the Future* in 1994 to develop this new definition of results – and a new approach to measuring results – that aligns adult goals with state and federal policy goals.¹ EFF proposes that the expanded set of 16 skills standards defines the domain of adult education and literacy programs, so that teaching and learning, assessment and reporting on results will focus not just on what adults know – but whether and how well adult students can use what they know to achieve purposes in their lives. This means that teachers must focus much more on whether students

know when to use a particular operation, e.g., when to round and to what degree, what data to select and use in order to solve a problem or make a decision, and how to communicate the results.

The EFF Framework for adult literacy focuses the delivery system on helping adults achieve their purposes for learning by providing:

- a clear set of standards of what adults need to know and be able to do to achieve their goals;
- a common framework that adult education teachers and programs can use to link curriculum and instruction, assessment, and program improvement;
- a common language that can align all parts of the lifelong learning system; and
- a common definition of results that can be used to support program and system accountability.²

EFF’s current field research is focused on the development of assessment tools that will enable this alignment and can be used for accountability purposes. Drawing on cognitive science research on expertise, we are mapping real descriptions of adult learner performance on each standard onto an adult continuum of performance from novice to increasingly expert. The performance continuum focuses on the depth and structure of the knowledge base, the independence and fluency of performance, and the range of conditions for performance. This work of building developmental models is being carried out with the

the Use Math to Solve Problems and Communicate:

- Understand, interpret, and work with pictures, numbers, and symbolic information.
- Apply knowledge of mathematical concepts and procedures to figure out how to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension.
- Define and select data to be used in solving the problem.
- Determine the degree of precision required by the situation.
- Solve the problem using appropriate quantitative procedures and verify that the results are reasonable.
- Communicate results using a variety of mathematical representations, including graphs, charts, tables, and algebraic models.

help of practitioners and programs in five partner states – Maine, Ohio, Oregon, Tennessee, and Washington.

For example, teachers in some of the field research sites have used the Math standard to develop EFF performance tasks (instruction with imbedded assessment) and document what students know and are able to do as they carry out the task.

Each EFF performance task:

- explicitly addresses all of the components of performance of the standard;
- has a clearly defined purpose;
- has clearly defined roles for the learner and the teacher;
- represents a meaningful, real-world application of the standard.

When completed, the EFF Assessment Framework will include:

- a developmental sequence of descriptions of learner performance for each of the 16 Standards that can be used to guide learning and instruction;
- model performance-based assessments and scoring guidelines (rubrics) for each Standard that can be used to mark transitions from one level of performance to the next (for at least six specified levels to correspond to the current six adult basic education and six English as a Second Language Educational Functioning Levels of the National Reporting System); and
- materials, training, and technical assistance to support the implementation of these EFF-based curriculum and instructional resources and assessment tools.

Need for staff development

With the development of a new system for adult education well underway in the United States, we need to examine what this means for adult educators who will use the tools and language of this new system. Clearly, extensive staff development will be required. How do we help practitioners move from the traditional view of literacy and

“math”? How do we help math teachers understand that teaching and assessing is about the application of math concepts? How do we help them understand how to teach math concepts in the context of their learners’ lives? How do we help them learn how to develop and use learning activities that include continuous assessment? And how do we help them learn how to document learner progress in terms not just of knowledge but of increasing independence, fluency, and range?

Part of the challenge for the EFF initiative is to help teachers understand that teaching math is much more than teaching computation. It is about using all the components of performance for the standard in developing activities so that the math is applied in contexts meaningful for learners. This is a change from teaching for a test or focusing on word problems as the only “real life” math that learners are currently exposed to. Another part of the challenge is to provide training for teachers so that they understand the math concepts they are teaching. So, even though our standards are in place and the assessment framework is progressing well, we still have a long road ahead if we are truly to create a new adult education system.

¹ EFF has been in development for 8 years. For an overview of its development history, see *Equipped for the Future Content Standards: What Adults Need to Know and Be Able to Do in the 21st Century*.

² Bingman, B. & Stein, S. (2001). *Results that matter: An EFF approach to quality*. Washington, DC: National Institute for Literacy

See http://novel.nifl.gov/lincs/collections/eff/about_eff.html

Sample Performance Task:

Learners are asked to total a restaurant bill and to determine an appropriate amount for the tip. Learners may choose one of several methods for calculating the tip (tip table, estimating, or calculator). Learners must also decide whether the tip should be 15% to 20% or higher and must justify their decision for the amount of the tip with an explanation of how the quality of the service and cost of the meal influenced the amount of the tip. The task takes approximately four hours to complete. The task is relatively structured. The teacher provides a tip table and instructions on how to use it as well as instruction on other strategies for calculating a tip (estimation, using a calculator). Learners prepare bills to be calculated by themselves and other learners and also choose a tip calculation strategy. Learners are evaluated on their choice of strategies for completing the task, on their use of strategies to complete the task accurately, and on their explanations of the tip amount.

Other Key Web Sites for Adult Numeracy

Adult Numeracy Network

<http://www.std.com/anpn/>

Adult Learning Mathematics - A Research Forum

<http://www.alm-online.org/>

Dr. Diana Coben, from the U.K. National Research and Development Centre for Adult Literacy and Numeracy, was unable to attend the Institute but sent a Powerpoint presentation outlining the current status of numeracy in the British Skills for Life strategy.

NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

Adult Numeracy in the Centre...

...the new National Research and Development Centre for Adult Literacy and Numeracy (England), part of the government's Skills for Life strategy

Dr Diana Coben

National Research and Development Centre for Adult Literacy and Numeracy
and University of Nottingham
d.coben@joe.ac.uk



NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

Skills for Life

the national strategy for improving adult literacy and numeracy skills
www.skillsforlife.gov.uk/skillsforlifepage

7,000,000 adults have poor literacy and numeracy skills

Skills for Life sets out how the government plans to tackle this problem

Priority to improve the skills of groups with greatest needs

Aim: 750,000 adults to improve skills by 2004

Spending £1.5 billion over the next three years

Establishing a new university based national research and development centre to support Skills for Life, called...



NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

...the National Research and Development Centre for Adult Literacy and Numeracy

The Centre is a consortium of:

- 4 universities: Nottingham, Sheffield, Lancaster and the University of London Institute of Education (lead institution)
- development and practitioner partners working with the Basic Skills Agency



NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

The Mission, Purpose and Values of the Centre

Building a new discipline to support Skills for Life through the generation of knowledge and its transformation into practice



NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

Values

The Centre will seek to address the following values in all aspects of its work:

- ensure that the learner is at the centre of our work
- aim for a world class standard in our research
- ensure practitioner involvement in all stages of our work
- strive for consortium members to put our findings into practice



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NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

The Centre's work is in 4 strands:

- Strand A research relating to poverty and social exclusion
- Strand B research relating to best practice in teaching and learning
- Strand C initial teacher education and continuing professional development (CPD)
- Strand D national resource centre and dissemination work

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NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

For adult numeracy, this is the chance of a lifetime

- to redress the neglect of adult numeracy, at a time when the importance of lifelong learning is widely acknowledged
- to bring together research, theory and practice to inform policy
- to come in from the margins of educational research and provision and public concern

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NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

Challenges for research and development in adult numeracy

- 'numeracy' is a notoriously slippery concept
- seriously under-researched
- 'poor relation' of adult literacy
- shortage of experienced teachers, teacher trainers and researchers
- big problem: 40% of adults have some numeracy problems; 20% 'very low' numeracy skills (but problems in measuring these skills)
- poor numeracy has a deleterious impact on people's lives
- adults' numeracy difficulties may be compounded by difficulties in literacy and/or language

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NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

Aims of research and development in adult numeracy

- increase knowledge and understanding of adult numeracy through a sustained programme of research and development designed to inform, identify and evaluate best practice in adult numeracy teaching drawing on relevant national and international research
- Ensure that our work is meaningful and accessible to adult numeracy teachers, learners, policy-makers and providers by consulting widely in the field
- Integrate adult numeracy in the Centre, both as a discrete area and linked with research and development in literacy, ESOL and specific learning difficulties and disabilities

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NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

Numeracy - work under development

Consultation - with practitioners, policy-makers and researchers

Projects:

- review of research in adult numeracy
- making numeracy meaningful to adult learners
- investigating adults' 'sliding points', e.g.
 - teaching and learning fractions, decimals, percentages, ratio and proportion
 - measurement of length and area at Entry Level
- assessment in adult numeracy education

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NATIONAL RESEARCH AND DEVELOPMENT CENTRE
FOR ADULT LITERACY AND NUMERACY

Consultation on adult numeracy here in Canada, at ALM9* and elsewhere

What questions and issues should be investigated?

What sources should be included in our review of research?

- How can we make the review of research useful and accessible to researchers, practitioners and policy-makers?

*ALM9 is the 9th International conference of Adults Learning Mathematics - A Research Forum (ALM)

- 17-20 July, 2002, in London
- <http://www.alm-9.org>
- AN welcome!

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SUMMER INSTITUTE 2002 - PRESENTATIONS



Leonne Beebe

Presentation: The Visual/Spatialness of Math

Does the way we learn English affect the way we learn math? Leonne lead participants through simple activities to experience some of the effects of the visual/spatialness of math and how it could affect and limit learning of basic skills and concepts and higher levels of math. She showed sophisticated visual representations of math concepts created by her ABE students after they gained confidence.

Leonne teaches Fundamental and Intermediate math in the College and Career Prep Department at the University College of the Fraser Valley in Chilliwack and Hope, BC. She has co-ordinated and taught First Nations adult students, English as a Second Language to immigrants, refugees and francophones, and has a particular interest in family literacy.

RESOURCES RECOMMENDED

- The work of Dr. Linda Silverman (Denver, Co) with gifted underachievers and the visual/spatial learner.



Tom Ciancone

Presentation, with Dave Tout: Two Approaches to Numeracy Learning Outcomes

Tom and Dave compared the skill-based numeracy learning outcomes from Ontario using traditional school math strands and the function-based one from Australia which focuses on the social purpose and use of mathematics within meaningful contexts

Tom has taught high school mathematics and worked for twenty years as an adult ESL instructor, numeracy facilitator, trainer and curriculum writer in Toronto - in the school board sector and in union-sponsored workplace programs. He is interested in research around skills versus functional approaches to learning mathematics by adults.

RESOURCES RECOMMENDED

- Marr, B., Helme, S. and Tout, D. (1991). *Breaking the maths barrier*. Canberra: Department of Employment, Education and Training.
- Goddard, R., Marr, B. and Martin, J. (1991). *Strength in numbers*.
- Dondertman, B. and Ciancone, T. (1991). *Numbers in our lives*.
- Marr, B. and Helme, S. (1987). *Mathematics: A new beginning*. Victoria: State Training Board.
- Stenmark, J. K., Thompson, V. and Cossey, R. (1986). *Family math*.
- *The numbers game* (1985). Hammersmith & Fulham Council for Racial Equality: UK.



Susan K. Cowles

Presentation: Painless Ways to Connect Science to the Teaching of Math to Adults!

Susan focused on using scientific contexts to facilitate the development of mathematical skills in adults. She outlined strategies for finding appropriate teaching activities (using low-cost materials) and adapting them for adult learners, with particular attention to some of the sites listed in her recommended resources. Susan also discussed problems encountered and lessons learned through the use of various activities and materials with adult learners and with instructors in staff development workshops.

Susan teaches adult basic skills development at Linn-Benton Community College in Oregon. A Literacy Leader Fellow for the National Institute for Literacy, 1996-1997, Susan is interested in issues linking numeracy, science, and technology. She is project director of the NIFL Science and Numeracy Special Collection of online resources at <http://literacynet.org/sciencelincs>. In winter 2002, Susan spent two months at Palmer Station, Antarctica as a participant in the National Science Foundation project, "Teachers Experiencing Antarctica and the Arctic."





Cathy Coleman

RESOURCES RECOMMENDED

- Science and Numeracy Special Collection:
<http://literacynet.org/sciencelincs>
- Polar Science Station:
<http://literacynet.org/polar>
- *Mission Mathematics: Linking Aerospace and the NCTM Standards*, a NASA/NCTM Project. (three vols, K-4, 5-8, 9-12, various authors). NCTM, 1997.
- C. V. Johnson (1995). *In the air: Real-world mathematics through science*, Addison-Wesley. One of many middle-grades instructional modules created and field-tested by the Washington MESA (Mathematics, Engineering, Science Achievement) project.
- *Multiplying people, dividing resources: Global math activities*, Population Connection.
<http://www.populationconnection.org/education> 2001-2002
- *Using mathematics: From the seas to the stars, From your backyard to the Great Wall*. Teacher Development Component, the University of Chicago School Mathematics Project, Everyday Learning Corporation, Evanston, Illinois, 1993.

Presentation:

The Massachusetts ABE Math Curriculum Frameworks

This draft document includes learning standards in math for adult education students as well as “habits of mind” and “guiding principles” in teaching math. Cathy talked about its use with ABE programs to guide curriculum development, and its use in her teaching to encourage the “habits of mind” (curiosity, respect for evidence, ownership, reflection, etc.). She also addressed the challenges of the implementation.

Cathy works for SABES (System for Adult Basic Education Support) in Massachusetts and provides staff development to adult educators in the areas of curriculum development and assessment. She has also taught GED, Pre-GED, ABE, and ESOL. Cathy was part of the Massachusetts ABE Math Team that developed math standards (adapted from the NCTM standards) for adult basic education. The group did qualitative teacher research projects on implementing the math standards in their classrooms.



Donna Curry

Presentation:

The EFF Math Content Standard

Donna outlined her work in helping develop and do site research on “Use Math to Solve Problems and Communicate,” one of the 16 content standards developed by *Equipped for the Future* to broaden the range of knowledge and skills currently addressed in federally funded adult education programs in the United States. The focus of the standards is on application of skills in a specific context, to achieve one’s purposes for learning.

Donna is publications coordinator for the Equipped for the Future (EFF) National Center at the University of Maine. She has been a staff development specialist and offered training throughout the U.S. related to GED, math and workplace education. She has coordinated and taught in a variety of adult basic education programs, including GED, ESL, ABE, Corrections, Family Literacy and Workplace. Donna has worked with the EFF initiative since its beginning, representing the Adult Numeracy Network.

RESOURCES RECOMMENDED

- *Equipped for the Future Content Standards: What Adults Need to Know in the 21st Century*
- *Results that Matter: An Approach to Program Quality Using Equipped for the Future*
- *A Framework for Adult Numeracy Standards: The Mathematical Skills and Abilities Adults Need to be Equipped for the Future.*

Lynda Fownes

Presentation, with Elizabeth Thompson:

Numeracy at Work

Lynda and Elizabeth built the session around issues and experiences of introducing workplace learning into general education contexts. They introduced the SkillPlan publication, *Numeracy at Work*, a compendium of 20 case studies in workplaces across Canada. The publication is directly related to the Essential Skills Profiles produced by Human Resources Development Canada (HRDC) and is designed for educators to situate the learning of basic math skills in the broader context of numeracy in real workplaces. [See p.21]

Lynda is Executive Director of the BC Construction Industry Skills Improvement Council (known as SkillPlan). She joined the organization in 1992 as Research Director and has designed and managed a range of projects on upgrading essential skills at work, involving employers, unions, government and educators. She is on the Human Resources Development Canada Advisory Committee for the Essential Skills Research Project and has participated in research leading to the development of Essential Skills Profiles and Test of Workplace Essential Skills (TOWES).

RESOURCES RECOMMENDED

- Essential Skills Readers' Guide, HRDC website
- Essential Skills Profile, HRDC
- IALS and Quantitative Literacy
- *Numeracy at Work* (2002) SkillPlan, BC Construction Industry Skills Improvement Council, Burnaby, BC

[See Elizabeth Thompson, p.30.]

Nancy Friday

Presentation: An on-line tour of AlphaRoute

Nancy gave participants an on-line tour of AlphaRoute, managed by the AlphaPlus Centre. The AlphaPlus Centre serves practitioners and organizations in the Deaf, Native, Francophone, and Anglophone literacy field in Ontario to help users find relevant resources and information for adults in literacy programs.

Nancy has worked in adult literacy since 1985 as front line staff in four community-based literacy programs in Toronto. She has overseen research into issues around literacy and homelessness and transience, and focused on issues of access to literacy and upgrading for adults with a wide range of disabilities. She has worked at the AlphaPlus Centre since 1999. Nancy is now working on development and delivery of on-line literacy learning in her role as Coordinator of the AlphaRoute on-line learning environment.

RESOURCES RECOMMENDED

- *Level Descriptions Manual: A learning outcomes approach to describing levels of skill in communications & numeracy as well as features and example performance indicators for the domain of self-management and self-direction.* Ontario Literacy Coalition 2002.

As an Ontario practitioner, I have found this very helpful in understanding the Learning Outcomes matrix developed by the Ontario Ministry of Training, Colleges and Universities for Ontario Literacy and Basic Skills Literacy programs. This manual is available at <http://www.nald.ca/fulltext/levels/cover.htm>

Freda Hollin

Freda's presentation:

Target Skills – Developing new multimedia learning materials for adult literacy and numeracy

Freda outlined the research and development process through to commercialization of *Target Skills*, multimedia learning materials linked to the UK national standards and curricula for adult literacy and numeracy. Can adults learning literacy and numeracy benefit from computers and the web, building basic skills through ICT? She later demonstrated the numeracy software.

Freda took a maths degree from London University and taught maths in a secondary school. After other jobs, travel and children, Freda returned to teaching part-time adult numeracy and maths in adult and further education and the voluntary sector. She later studied IT in adult education, and worked on national projects on the use of IT in adult basic skills. In her MA studies, Freda specialized in post-16 education and training. Since 1999, she has worked in the private sector as an education consultant and project manager for Cambridge Training and Development Ltd. She worked on national policy development as part of the UK Government's Skills for Life strategy, and on European-funded research and development projects on use of ICT to develop basic skills.

RESOURCES RECOMMENDED

- Field J. (Ed), 1997. *Electronic pathways: Adult learning and the new communication technologies*, NIACE, Leicester
- Hoyles, C., Morgan, C. & Woodhouse G. (Eds), 1999. *Rethinking the mathematics curriculum*, Falmer Press, London, Philadelphia

Lynda Ginsburg

Presentation: Teacher Learning from Video Classes

Lynda showed a video case study of an adult numeracy instructor's class, and demonstrated how the richness and ordinariness of unrehearsed interactions between a teacher working with adult learners can provide the basis for professional development. Video case studies allow adult educators to "visit" a colleague's classroom, gain a sense of the environment, watch the interactions and ongoing decision-making, and share their observations, concerns and alternative ideas. Through examining someone else's instruction, teachers are better prepared to examine and critique their own practice

Lynda taught high school mathematics and has a doctorate in cognitive psychology and mathematics education from the University of Wisconsin-Milwaukee. She is currently a Senior Researcher, Project Director at the University of Pennsylvania, where she worked on the Professional Development Kit Project, a multimedia-based staff development project to identify best practices and incorporate these into the final product. She is an Evaluator for The Pennsylvania Workforce Investment Network, a state-funded project to empower adult literacy agencies to provide foundation skills training in the workplace. Lynda is a Senior Researcher for the Numeracy Project, informing adult education stakeholders about instruction, learning and assessment of numeracy. She has been involved in producing several multimedia projects, among them the *Captured Wisdoms*

CD-ROM Series, *Integrating Technology into the ABE/GED Curriculum and Adult Numeracy Instruction: A New Approach* (both live satellite videoconferences with PBS).

RESOURCES RECOMMENDED

- Lampert, M. & Ball, D.L. (1998). *Teaching, multimedia and mathematics: Investigations of real practice*. New York, NY: Teachers College Press.
- Lave, J., Murtaugh, M. & de la Rocha, O. (1984). The dialectic of arithmetic in grocery shopping. In B. Rogoff and J. Lave (Eds), *Everyday cognition*, pp. 9-40. Cambridge, MA: Harvard University Press.
- National Council of Teachers of Mathematics (NCTM) (1989). *Curriculum and evaluation standards for school mathematics*. & (2000). *Principles and evaluation standards for school mathematics*. Reston, VA: NCTM.
- Nunes, T., Schliemann, A.D. & Carraher, D.W. (1993). *Street mathematics and school mathematics*. Cambridge, UK: Cambridge University Press.

Robin King-Stonefish

Presentation: Exploring Numeracy Through Aboriginal Mathematics

Robin introduced Ojibway Math, a numeracy curriculum that she is developing based on an aboriginal numbers system. Many native people do not even know that there ever was such a system. She sees this as part of the challenge of developing literacy and numeracy practices grounded in aboriginal heritage, and of bridging two cultures. The curriculum will be available in 2003.

Robin is from the community of Henvey Inlet First Nation, a reserve 400 km north of Toronto. Born in Toronto, she was raised on reserve as she grew older. Robin's teachings and knowledge were passed on through family and extended family. She has attempted to apply what she understands and knows to her life; economics, development, and community development have been her foremost concerns. Robin has a diploma as a Community Addictions Counsellor from the Nechi Drug and Alcohol Institute of Alberta, and is currently studying for an undergraduate degree in Native Studies and Economics. Robin has had the opportunity to learn from elders and people of knowledge; she has ventured into the arena of numeracy as a means of applying what she's learned both culturally and academically.



Beth Marr

Presentation: Curriculum and assessment-- How they shape, and are shaped by, our visions of numeracy 'competence'

Beth described a model of Holistic Numeracy Competence that was developed from input when experienced adult numeracy teachers in Australia were asked about their notions of numeracy competence. The interlocking, or interdependent, components of this model are seen as integral to the full picture - a developing 'identity' as a more numerate person. While acknowledging that the divisions between the pieces are arbitrary, and that there is a degree of overlap, she stressed that there is a cognitive domain and an affective (feelings) domain, with confidence touching all aspects. [See Beth's Paper, pp. 12 -17]

Beth is a university teacher in Melbourne, Australia, in Teacher Education for Adult Educators, with an emphasis on adult numeracy. Her background is in TAFE (Training and Further Education) and Basic Education, specifically adult numeracy bridging courses for women needing mathematics to enter non-traditional vocational and technology courses, and higher education. Beth has produced resources for teachers of adult mathematics and numeracy, including *Mathematics: A New Beginning*; *Strength in Numbers* and *Numeracy on the Line*. She has worked on professional development with adult literacy teachers to enable them to extend their practice to numeracy. She has worked extensively in curriculum development, in particular as co-author of the Australian Certificates of General Education – Numeracy Curriculum Framework. Beth's recent research focuses on group work and language in

adult numeracy classes, on issues of holistic assessment, competence and classroom practice, and, with groups of practitioners, on developing resources through on-line communication.

RESOURCES RECOMMENDED

- Pimm, D. (1987). *Speaking mathematically* (1st ed), London: Routledge and Kegan Paul.
- Veal, R. (1999) Language, knowledge and authority in school mathematics. In F. Christie (Ed), *Pedagogy and the shaping of consciousness*. London: Cassell.
- Cobb, P. & Bauersfeld, H. (Eds), (1995). The emergence of mathematical meaning: Interaction, *classroom cultures*. New Jersey: Lawrence Erlbaum Associates.
- Brown, J.S., Collins, A. & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18 (1), 32-42.



Ellen McDevitt

Presentation: Making Math Real for Adult Practitioners

Ellen gave an overview of what happened and what was learned from a 3-day institute for adult numeracy practitioners in Pennsylvania. Their focus was making math real, i.e., finding math in everyday situations, and they hoped that participants would take the message back to their programs and use the information to change their practices.

Ellen has an MA in adult education, and is a training consultant from Pittsburgh, Pennsylvania, with more than 20 years experience in the field. She has served as editor

of *The Math Practitioner*, the newsletter of the Adult Numeracy Network, for 8 years and is President elect for AN2. Ellen is an organizer of the Making Math Real Professional Development Institute in Pennsylvania. She is particularly interested in how to help adult instructors who are not math teachers but who inherited math classes.

RESOURCES RECOMMENDED

- Cromley, J. (2000). *Learning to think, learning to learn*. National Institute for Literacy Leadership Fellowship Program Report, Vol. VI, No. 1. Washington, D.C.
- *Themes for adult numeracy*. Adult Numeracy Practitioners Network.



Elizabeth Thompson

Elizabeth is a Workplace Educator with SkillPlan, BC Construction Industry Skills Improvement Council. She is part of a team that developed *Numeracy at Work*, TOWES (Test of Workplace Essential Skills), and the website essential skills resource *How Do Your Skills Measure Up?*, which is accessed through www.towes.com.

Elizabeth has been with SkillPlan for ten years and spent several years as a literacy instructor and coordinator in college and school district settings. Her early careers were in public education and agriculture where she became aware of the ongoing need for mutual respect and connections between work and formal education.

[SEE LYNDIA FOWNES, p.28.]



Dave Tout

Presentation:

What is Numeracy?

What is Mathematics?

In Australia, a period (or the only period) of heightened activity in the adult numeracy development started in the late 1980s, and now at the start of a new century they have a comprehensive range of teaching resources, training and professional development materials and courses, and accredited adult numeracy curricula. The questions of what is numeracy and what is its relationship with mathematics are questions that we have been trying to answer over this period. In this presentation, Dave outlined some of the significant influences, debates and outcomes that have helped to shape the answers to the question: What is numeracy? [See Dave's paper, p. 9]

Dave is Regional Manager and numeracy consultant for Language Australia: The National Languages and Literacy Institute of Australia. Initially a secondary school

mathematics and science teacher, Dave has specialized in numeracy and basic math in adult education since 1978, working in Technical and Further Education Colleges, Universities, Community Education Programs, Adult Multicultural Education Services and industry. He has experience at the state and national levels in research, assessment, curriculum and materials development, management and policy development. Dave has worked as a writer on most of Australia's significant adult numeracy curriculum and assessment tools, such as the National Reporting System, and the numeracy and math modules of the Certificates in General Education for Adults. He helped produce materials, including *Measuring up: An interactive multimedia computer resource for numeracy learners, I can do that, Numeracy on the line* and *Adult numeracy teaching: Making meaning in mathematics*. Dave is a consultant for the numeracy component of the International Adult Literacy and Lifeskills Survey (ALLS) being developed by Statistics Canada, to be

conducted in a number of countries in late 2002.

RESOURCES RECOMMENDED
Too many to really restrict to such a list, but here are a few key ones:

- Boomer, G. (1986). From catechism to communication: Language, learning and mathematics. In Bell, D. and Guthrie, S. (Eds.), (1994). *An integrated approach to teaching literacy and numeracy*. Sydney: NSW TAFE Commission.
- Benn, R. (1997). *Adults count too: Mathematics for empowerment*, Leicester, UK: National Institute of Adult Continuing Education (NIACE).
- Johnston, B. and Tout, D. (1995). *Adult numeracy teaching: Making meaning in mathematics*, Melbourne: National Staff Development Committee.
- Marr, B. & Helme, S. (1987). *Mathematics: A New Beginning*, Victoria: State Training Board.
- Marr, B. and Helme, S. (1991). *Breaking the maths barrier*, Canberra: Department of Employment, Education and Training.

RESOURCES: SELECTED NUMERACY MATERIALS

[These annotations have been selected from *Math for Learning, Math for Life: An Annotated Bibliography*, prepared for the Summer Institute. Some of the selections have been written by the presenters at the Institutes; some have been recommended by participants. The Bibliography can be ordered from The Centre in print format, or downloaded from our web site. All materials can be borrowed from The Centre. Check our catalogue on-line for holdings and for borrowing guidelines.]

Brover, C., Deagan, D. & Farina, S. (2000). The New York City Math Exchange Group: Helping teachers change the way they teach mathematics. *Focus on Basics* 4(B), 11-17.

Discusses the origins and aims of the MEG, and describes its efforts to change the way mathematics is taught by providing educators with professional development opportunities and a forum for exchanging ideas and strategies for implementing math standards in the classroom.

Cowles, S.K. (1998). Using Internet-based resources in math instruction. *Adult Learning* 9(2), 20-21, 24.

Provides examples of how Internet-

based materials are being used to teach adults number sense, data analysis, graphing and measurement as well as to provide practice in computation and estimation. [Author]

Cumming, J., Gal, I. & Ginsburg, L. (1998). *Assessing mathematical knowledge of adult learners: Are we looking at what counts?* NCAL Technical Report TR98 05. [Electronic version]. Philadelphia, PA: National Center on Adult Literacy.

Offers a set of principles for evaluating the appropriateness and effectiveness of numeracy assessment instruments used with adult learners. Identifies the general

inadequacy of available tools when held against these principles, and discusses alternative strategies and emerging trends in numeracy assessment.

Curry, D., Schmitt, M.J. & Waldron, S. (1996). *A framework for adult numeracy standards: The mathematical skills and abilities adults need to be equipped for the future*. Retrieved June 9, 2002, from <http://www.std.com/anpn/frame1.html>.

Identifies seven numeracy themes designed to serve as the basis for any Adult Numeracy Standards developed through the National Institute for Literacy's Equipped For the Future project. The themes, developed in consultation with adult math learners, educators, and researchers, relate directly to the skills and knowledge adults need to function in today's society.

Department for Education and Employment. (2001). *Skills for life: The national strategy for improving adult literacy and numeracy skills*. Retrieved June 9, 2002, from http://www.dfes.gov.uk/readwriteplus/bank/ABS_Strategy_Doc_Final.pdf.

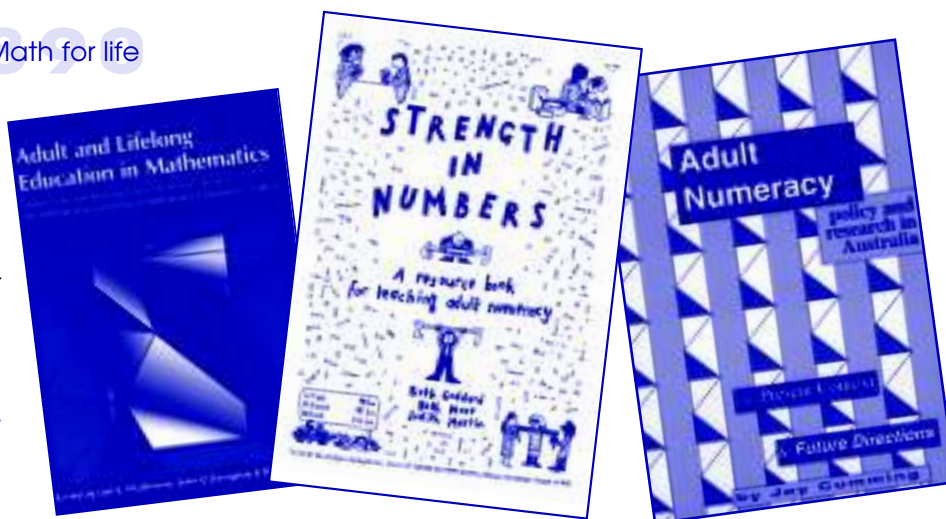
Describes England's national strategy for the funding and delivery of basic adult literacy, numeracy and ESOL instruction. Recommendations are given for the development of program infrastructure, teacher certification and standards, and national curricula.

Dingwall, J. (2000). *Improving numeracy in Canada*. Retrieved June 12, 2002, from <http://www.nald.ca/nls/inpub/numeracy/improve/improve.PDF>.

Discusses the role and importance of numeracy concepts in today's society, and presents a comprehensive review of international numeracy practices, policies, and research. Identifies best practices, and makes recommendations for the development and delivery of programs and services in Canada.

Gal, I. (2002). *Systemic needs in adult numeracy education*. *Adult Basic Education* 12(1), 20-33.

Discusses the nature and future of adult numeracy education, and analyzes gaps in skill levels, reporting and assessment schemes, and professional development within the system, with implications for practice and program planning.



Marr, B. & Helme, S. (1991). *Breaking the maths barrier*. Canberra, Australia: Department of Employment, Education and Training.

Presents a participatory workshop approach to the professional development of trained mathematics teachers in Australia. Contains detailed theoretical and background information, as well as structured activities and guidelines for program development and overcoming barriers to learning.

Meader, P. (2000). The effects of continuing goal-setting on persistence in a math classroom. *Focus on Basics* 4(A), 7-10.

Describes a practitioner research project that tested the effect of goal-setting techniques on learners' participation and success rates in an adult math class. The techniques under investigation were drawn from a prior study, and research was conducted within a larger, ten-project framework. Goal-setting was seen to have a positive impact on rates of continued participation.

O'Rourke, U. & O'Donoghue, J. (1998). Guidelines for the development of adult numeracy materials. In **D. Coben & J. O'Donoghue** (Eds.), *Adults learning mathematics-4: Proceedings of ALM 4: The fourth international conference at the University of Limerick, Ireland. July 4-6, 1997*. London, UK: Goldsmiths College.

Examines the nature and scope of numeracy and the characteristics of adult learners, identifying factors that hinder and those that help the learning process. Presents guidelines for developing numeracy materials based on evaluative research, and identifies sample materials that adhere to the authors' recommendations.

Schmitt, M.J. (2000). Developing adults' numerate thinking: Getting out from under the workbooks. *Focus on Basics* 4(B), 1, 3-5.

Argues the remoteness to lived experience of the prevalent, workbook approach to adult numeracy instruction. Reviews seven key research and policy documents from which a new educational framework, centred on real life applications and known elements of mathematical development, is set to emerge.

Tout, D. & Schmitt, M.J. (2002). The inclusion of numeracy in adult basic education. In **J. Comings, B. Garner & C. Smith** (Eds.), *Annual review of adult learning and literacy: Volume III* (pp. 152-202). San Francisco, CA: Jossey-Bass.

Offers an extensive exploration of "numeracy" concepts, policies, practices, and research in the US and abroad. Argues for recognition, by policymakers, of numeracy as a core basic skill, and for the widespread incorporation of numeracy concepts into adult basic education curricula and programs.

GRASSROOTS:

COMMUNITY WRITING

THE ARCHITECTURE OF LITERACY

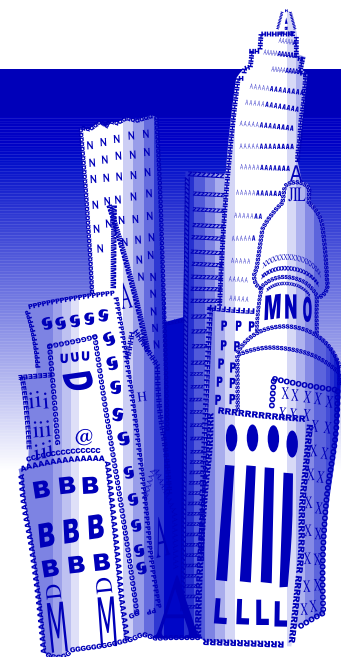
The Grassroots: Community Writing event, held on April 5 and 6, 2002, was once again part of the Blue Metropolis Literary Festival, and was built around the festival theme of the architecture of language. The Centre for Literacy brought together storytellers and writers who have written and published in community-based settings rather than inside institutions, and who have built bridges among verbal, oral, and visual literacies. They included an accomplished writer/musician who collects alphabet songs and oral stories from rural Newfoundland, and a community poet who writes her life; an urban group of young men and women who have experienced and used violence but now write poetry and take photographs that move them in a new direction; two writers who have been homeless and publish a 'zine to reach their brothers on the street to tell their stories from the inside; and a native survivor of residential schooling who writes his way out of despair and tries to bring community members with him. He won the 2001 Canada Post Literacy Award as a learner who has joined the ranks of published writers. Several of them have been adult learners, and all of them are involved in some way with literacy

communities in their own settings. In these different contexts, literacy provides the building blocks for further learning and for community engagement.



Association. This brought more than thirty participants from across Canada to discuss the possible ways in which the arts could work collaboratively with literacy organizations to strengthen their respective goals and engage more community-based involvement. The participants attended Grassroots as an example of this type of linking; some of the readers joined the Museum symposium for part of the weekend discussions.

For the Blue Metropolis reading, we asked the storytellers and writers to choose some selections that reflected the theme of the architecture of language.



Readers and participants in Grassroots 2002



- Larry Loyie, and Constance Brissenden, Living Traditions Writing Circle, B.C.

(Larry won the 2001 Canada Post Literacy Learner Award)



- Michael Paul Martin and Robert Payne, Toronto (St. Christopher House Meeting Point)



Readers and participants in Grassroots 2002 Cont'd



Jim Payne

• Carmelita McGrath, poet-storyteller, and Jim Payne, poet-song writer, Newfoundland

- A group of writers from Leave Out Violence (LOVE), Montreal.



Photo: Beth Babinchak

Source: ONE L.O.V.E. Vol.3 No. 2

- Jennifer Ottaway, whose homeless woman's diary was produced on CBC Radio as "Jennifer's Story," in May 2001. It won a Commonwealth Broadcast Award.
- Open City Productions 2002, a community arts program on the street.



They brought canvas and brushes with an open invitation to attendees to record their presence.

All the sketches in this section were done by Jennifer Ottaway during the Community Writing event.

All readings reprinted with permission.



Leave Out ViolenceE (L.O.V.E.) is a national not-for-profit organization dedicated to reducing violence in our communities by building a team of youth spokespeople to communicate a message of non-violence. They offer a photojournalism program, facilitated by professional journalists and photographers, a Leadership Training Program, and publications.

Their educational tools, include "ONE LOVE," a bi-annual newspaper with a circulation of 50,000, that publishes the work of LOVE youth and is distributed through schools

and community networks. *The Courage to Change: A Teen Survival Guide*, their second book, is a teen-to-teen guide on how to deal with the stresses that can lead to violence. The Leadership Training Program helps youth use their experiences to teach others that there are alternatives to violence. They lead workshops and discussions in schools across Canada, creating awareness of youth violence through exhibits of their writing and photographs.

Web: www.leaveoutviolence.com

Powerlessness

by Kimberly Flynn

My arms weak from the fight
Standing
Shallow breaths in my chest
Restless
Wanting to move, take action
Say brave words
But instead I stand in silence
Exhausted
From the fears, the emotions
The thoughts
Of tears that have left me
Drained
Of all the power which I
contained
Meek, frail
A shadow, an outline of
Strength
Useless, swaying idly
With nothing left to say
Nothing of what I used to be
Remains
Taken swiftly by your words,
Your body, your hate
Every memory of that night
Leaves me standing
My arms weak from the fight
I sway.



Alyssa Kuzmarov is the Regional Program Director at Leave Out ViolenceE (LOVE) in Montreal. A social worker and

writer, Alyssa is completing her first manuscript entitled *True Power Within*, a memoir depicting her own healing journey.

Kimberly Flynn, 18, is a talented writer and poet. As a youth leader at Leave Out ViolenceE, Kimberly uses her ability to express herself to encourage other youth, in the after-school programs as well as in classrooms, to find their voices. Kimberly's own voice is powerful in its realness and its delicate probing into the workings of the heart.

Gary Joseph, 21, has been writing poetry since the age of 12. Gary has learned to release his emotions on paper with a dynamic style and rhythm. At Leave Out Violence, Gary provides an excellent role model for the youth he talks to in classrooms across the city. He openly explores his own issues and is constantly seeking to learn more about himself and others. His poetry reveals his sensitivity as well as his willingness to take risks, face his fears and triumph!



Source: ONE L.O.V.E. Vol.3 No. 2

Jennifer Ottaway says: Born in Toronto in 1954 of publisher (plumbing and heating catalogue) father and secretary, homemaker mother, I was the third of four children and enjoyed a happy childhood in Etobicoke, with extended family as neighbours. As the most hyper of the bunch I endured/went to school and continued to a BA in Phys. Ed. I wanted to teach outdoor education but worked as a group leader for Katimavik (federal youth volunteer program), then raised a family and operated two small businesses, house rental and translation. I am still owner (but frozen-out operator) of a Holdings Corporation which owns 3 houses. I have been a massage therapist and hope to continue. I currently live on Ile-D'Orleans and survive (well) as a Frontier College farm labourer-literacy teacher and artist (watercolourist). The future? The sky is the limit... I have started writing a book on my adventures as a homeless person...I know I will be doing some kind of 'mission' work for the rest of my life.

Loss by a bullet

by Gary Joseph

I am trying to hold on to some understanding because I know the pain, the sadness, the grave.

I know it hurts inside to know that the one you cared for, lived with, dreamed about, thought about, promised things to, isn't there anymore. You want the person to be there with you all the way and then they're gone, just by a bullet.

Heartache. Just by a pin drop, they are gone and we will have that pain in us because it is hard to forget, it is hard to leave it alone. You can't expect us to just lie a baby in a box and go ok?

It's sad with me. I still cry about it, waking up at night crying tears remembering those days we had laughing, smiling, crying, hanging out. Even on the bad days, we'd talk about and solve it or just leave it.

Right now I am writing this and inside is my unhappiness. I laugh and talk, but behind that it's all sadness. I know I can't stay sad all life long, but all I have to do is bless you and others that keep me going. I always wondered how come I still have the emotions to go on day by day. I have to close by saying I know you are smiling down on me saying it's ok. I know I will see you someday, but I wonder why life goes this way.



Michael Paul-Martin is a Cree poet originally from James Bay in North Ontario. He speaks Cree, and reads /writes Cree syllabics.

His first collection of poetry, *She Said Sometimes I Hear Things*, came out in 1996. He is currently illustrating three children's books, slated for publication soon. For a number of years, Michael has been one of the writers/editors of *Street Post* newsletter of Toronto West. He has also worked on scripts for theatre of the oppressed and for a movie. Michael volunteers mainly for the poor. In June 2001, he graduated from the Community Leadership Training program at St. Christopher House of West Toronto where the program dealt with Anti-oppression and Communication (and Critical Thinking), and Conflict Resolution and Negotiation. In the fall of 2002, after open-heart surgery, Michael returned to the North to teach.

Robert Thomas Payne was a sailor for ten years. Then he was an actor. At one point he found himself homeless and in need. What he saw and heard in the drop-ins and soup kitchens of Toronto confirmed his belief that all human beings are subject to the same frailties, aspirations and realities, though not the same opportunities. And he saw art all around him. Since 1997, he has volunteered with St. Christopher House/The Meeting Place Drop-In as editor and one of the writers of *The Street Post*. He thinks a solution to homelessness is opening the lines of communication. He can be found wandering the streets of Toronto, or sitting here and there, listening more than talking.



COMMUNITY WRITING



Jim Payne, from Notre Dame Bay, Newfoundland, He has been a professional performing artist and writer for 22 years. A leading

performer and collector of Newfoundland traditional music, he is one of the province's most prolific songwriters, working in several genres to create musical mosaics of local life. Jim has directed, composed and performed music for theatre productions, as well as soundtracks for plays, documentaries and videos. He has performed on radio and television in Canada and abroad, and has toured in North America and abroad. Jim has many recording credits. He also owns and operates his own recording label, SingSong Inc., which has fifteen currently available titles, and produces concerts and special events featuring traditional and contemporary music, song, story and dance that reflect the Newfoundland



experience.

Jim plays guitar, accordion, mandolin, tin whistle and violin, and is a singer, storyteller, actor, writer, stepdancer, and teacher of traditional Newfoundland set and square dances.

Web: www.singsong.nfld.com

Carmelita McGrath is a writer, editor, researcher and educator. She has authored books of poetry, fiction, children's literature, and social history for adult learners. As a member of the Writers Alliance of Newfoundland and Labrador/ABE Social History Project writing team, she combined family stories, interviews and archival research to explore the links between oral narratives and documented history. As a workshop facilitator with Educational Planning and Design, she brought creative writing workshop techniques to displaced fishery workers in adult education programs. As contributing co-editor of *Wayfaring*, *Journeys in Language*, *Learning and Culture*, she has co-led workshops in which both learners and educators recast themselves as writers to explore their personal experience of language and education. She recently developed *Voice2Voice*, a course for Mount St. Vincent University's Distance Education Program, which

MARK THESE DATES April 4-5, 2003

GRASSROOTS: COMMUNITY WRITING READING THE WORLD, READING THE WORD

-- "I believe theatre can speak to the whole population. The role of theatre is to give the community an image of itself. I think of our task as being a kind of 'thinking in public', and thinking in public works most effectively when the whole public, the hoi polloi, is really there. That's why we do our theatre in parks and on the street. We save the best seats for the groundlings."

– David Anderson, Clay and Paper Theatre

Paolo Freire believed that adult literacy could only be built on a conscious awareness of the social and political realities of the world. For him, there was no separate set of skills to be mastered. Once an

awareness or "conscientization" was aroused, he believed, the struggle for social justice would motivate adults to become literate. This concept is not a mainstream practice in North America where literacy is too often reduced to a commodity. Nevertheless, there are a surprising number of programs and organizations that foster innovative ways of connecting the world and the word, through community theatre, photography, music and writing.

This year's Grassroots: Community Writing event will bring writers and performers from street theatre in

Friday, April 4, 2003,
reading/performing at Blue
Metropolis

Saturday, April 5, 2003,
workshop at The Centre
for Literacy Watch our
web site for details

Vancouver and Toronto, from adult new writers' programs, from neighborhood writing alliances, from youth anti-violence programs, and from rural literacy programs to read and share their perspectives on writing and performing as ways of creating and reshaping their worlds.

explores the intersections of oral and written culture and the ownership of narrative. Her most recent book, a chapbook called *Ghost Poems* (Running the Goat Books & BroadSides), 2001, delves into the ghost stories of her childhood through the medium of poetry.

Her short story collection *Stranger Things Have Happened* (Killick Press), 1999, won the Writers' Alliance/Bennington Gate Newfoundland Book Award for fiction and was shortlisted for the Thomas Raddall Atlantic Fiction Award.



Cree writer **Larry Loyie** is a playwright and children's book author. *Ora Pro Nobis* (Pray for Us), a play about his experiences in residential school in Alberta, has been performed in B.C., Alberta and Ontario. His new book, *As Long as the Rivers Flow*, the story of a boy's summer learning First Nations traditions, was written with his partner, Constance Brissenden. It became available in the fall of 2002 from Groundwood Books in Toronto. In 1993 Larry started Living Traditions Writers Group with Constance, encouraging and teaching creative writing in First Nations Communities.

Constance Brissenden (BA, MA) is a longtime freelance writer and creative writing instructor. She has written 8 non-fiction books and hundreds of magazine articles. She teaches creative writing across Canada with Larry.

Web:

www.firstnationswriter.com

[See excerpt from *As Long as the Rivers Flow* page 38]

Reclining

by Carmelita McGrath

When you are young and learn a word
you want to lie down in it
Reclining—its languid shape
suggests to me chaise
and other things we didn't have to sit on.
I had an arm tanned and curved
that ended in a thin brown hand
that wanted to drape it self, reclining
on the curve of the old settee
in the house where I lived briefly as comfort child,
antidote to my grandfather's lingering death.
Horsehair, that settee, or straw;
leather its cover or oilcloth
and the curve of its back a harp or heart.
First nights in the house
the present did not seem
so distant from the past.
Granda regaled us with storms and
squirting and squid,
dories tossed in the air on the big water, a great
sea-drama where a boy tore out and ate a live fish's heart
and was cured of seasickness forever. Then the salt,
the gales, misleading fog played treachery.
Words mangled; my grandfather's stories dissolved
into a storm that went on and on.
In the back room his bed tossed like a skiff
And he called for an end
even if it meant going under.
Those nights of pain I was away upstairs
in jungles where jaguars hid in emerald trees,
where a Pope expired relentlessly in a painting
and the weird sisters, hag and hag, laid
their bodies against mine and sucked my breath.
I was twelve then; one night I ran away
to home. They sent my younger sister in my stead.
After I thought of reclining in the parlour
on the old settee but felt
the weight of my grandfather's death press on me.
It was there they waked him, in that corner
Where I'd imagined myself sprawled
Reading stories in leafy light.
But this afterimage clung there, as if the air
had photographed him reclining, chill and quiet.

Excerpt from:

As Long as the Rivers Flow

by Larry Loyie with Constance Brissenden

All day long, good smells came from the house as the family prepared for the gathering. As the guests arrived, Lawrence was surprised that he had so many aunts and uncles and cousins.

"Tell us about the grizzly bear," his cousins begged.

Finally the feast was ready. The table was covered with pots of moose stew and piles of fresh-baked breads. Special foods like smoked fish and duck soup were cooked in honor of the elders and storytellers. Lawrence ate until he was stuffed.

After supper, family and guests settled comfortably outside on blankets around the fire. The storytelling began.

Uncle Louis stood up. He was tall and handsome. Everyone knew that he was the best storyteller around. Even the youngest children were quiet.

Uncle Louis stroked his bushy moustache before speaking.

"Once there was a man who walked in the four directions. He went north, south, east and west. He was a brave and seeking person who went from village to village learning all there was to know.

"He learned about new foods and how to cook them. In the prairies, he lived in tepees. In the cold lands, he lived in igloos.

"He saw waves of grass where the buffalo roamed. He tasted salty water where the sun rises and the sun sets. He came to

dry lands where the sands were hot."

Lawrence saw himself in Uncle Louis's story, walking every step of the way.

Now it was Auntie Rose's turn. She told about three hunters who surprised a grizzly bear eating their moose.

"The hunters climbed high into the only tree around. It wasn't very big or very strong. It started sagging until they were over the grizzly's head. The bear took a swipe at them, but the hunters were just out of reach. They hung down from that tree like berries thick on a branch. They looked tasty, too."

Auntie Rose turned to Uncle Dave. "Weren't you one of those hunters?" she asked.

"Oh, I was too skinny to tempt the bear," Uncle Dave replied. "But you should have seen my cousin Otamuwin. He was sorry he had eaten so much. The bear was drooling at the sight of him." Everyone laughed.

Grandpa rose and called Lawrence to his side. "This is my grandson. Not many boys his age meet a grizzly bear or care for an owl. From now on, we will call him Oskiniko."

The name meant Young Man. Lawrence stood proudly beside his grandpa.

The firelight flickered on Grandpa's gentle face. "This land has always given us what we need to live," he said gravely. "Like they told us long ago, as long as the rivers flow, this land is ours. It is up to all of us to care for it. Now it's your turn, grandchildren. The future is in your hands."

The stories continued long into the night. Lawrence's eyes

began to droop. Soon he fell asleep listening to the familiar voices.

...

The day finally arrived. After breakfast, the children dressed in their best clothes. They stood close to Mama and Grandma. Grandpa put his arm around Grandma's shoulders.

A big brown truck with high sides pulled up. Two men got out. They both wore black and looked like giant crows.

"Hurry up," one of them said to the children loudly in English. "It's time to get on the truck."

The children pulled back, terrified of the stranger. Maruk clung to Mama's skirt.

Papa spoke to Lawrence in their own language.

"Be brave, Oskiniko. Take care of your younger sister and brothers."

The strange men lifted the crying children one by one on to the truck. Papa watched, his face angry, his fists clenched.

As the men closed up the back of the truck, Lawrence began to cry, too.

The sides of the truck were high. He couldn't see his family. He couldn't see Ooh-Hoo sitting in a tree. As the truck pulled away, all Lawrence could see was the sky.

As Long as the Rivers Flow, by Larry Loyie with Constance Brissenden. Illustrations by Heather D. Holmlund. Available from Groundwood Books, 2002. www.groundwoodbooks.com



COLORS

By Sharon F. Warner

The flag of a country is called its colors.
The uniform of a group or gang
is sometimes referred to as colors.
Our skins in varying shades
of darker than white
are colors.

I have some thoughts about colors.

People are showing their colors now,
Raising, waving, wearing the flag,
Painting their houses, their cars, their lawns,
Dressing up and even dyeing their pets
Red, white, and blue.
Some of these citizens seem to be saying,
"I'm more American than you are."
Of course I always knew,
even before they showed their true colors,
that a lot of people thought
they were more American than me.

So now, in this time of ultra-conspicuous patriotism,
I will salute the flag,
I will pledge allegiance,
I will even sing "The Star-Spangled Banner" –
I can actually hit most of the notes –
But I will not display the colors.
Because I am haunted by the shades of other colors.

The first flag had 13 stars,
the one that was flying when this nation came to be,
the one that waved when the Constitution was
written.
The Constitution said that
Non-white men were equal to 3/5 of a man.
Women, white or non-,
were not equal to anything.
Color me invisible.

I think of later colors:
The stars and bars of the Confederate flag,
The flag that represented the states that wanted
to keep people of color as a source of free labor.
The Confederacy lost the Civil War,
but the colors still fly –
even at government buildings
in various parts of the South.
I don't understand that.
No government buildings
fly the flags of Germany or Japan
or any other conquered nation.
Who really lost the Civil War?
I know. We did.

The 20th Century saw colors of change.
The flag of our country was transformed

From 48 stars to 49, then 50.
More people of color in Alaska and Hawaii
became official Americans.
There are other changes that could be made.
Puerto Rico could be – some say should be – 51st state.
But how would we arrange the stars?
And wouldn't an entire country of brown people
be maybe too much color for America?

America, America....
So many wars, so many colors.
Vietnam-agent orange. The Gulf war – black gold.
This year, as autumn was approaching,
men wearing the protective coloration or passengers
and packing a hidden agenda
boarded four planes
and turned them into guided missiles.
Three of the planes found their mark.
One was diverted when ordinary people
showed their true colors as heroes.
The calendar still said summer,
but fall is what happened
to the tallest twin towers in our nation.
The September colors of yellow and red
were the colors of fire and blood.
The stars and stripes were flown at half-mast.

Now we are at war,
not full-scale yet, but war nevertheless,
with terrorists of color.
I abhor what these people have done,
And I know that the President does not want
us to be seen as pale cowards.
So now "the rocket's red glare,
the bombs bursting in air"
will be seen in far – distant places.
Now untold numbers of men and women
are wearing the colors of camouflage,
the colors of sand and earth and foliage.
They are being deployed to places
where terrorists may be.

The terrorists who wounded our country
are people of color,
but they are not like me.
Many Americans are eager for war,
for payback, for revenge,
but I am not like them.
I love my color,
I will honor my country's colors.
But I want myself and my nation to be known
for more than the color of blood.

10/8/01

Sharon Warner is a dynamic community poet and teacher in Chicago. She read this poem at a public session given by the Neighborhood Writing Alliance during the 2001 Conference of the National Council of Teachers of English held in Chicago. Sharon did not participate in Grassroots 2002 but has been invited for the 2003 event. The Neighborhood Writing Alliance has collaborated with The Centre for Literacy in other community writing events.

CHRONOLOGICAL CONFERENCE LISTING

Media Education Conferences Quicklist

ED-MEDIA 2003

World Conference on Educational Multimedia, Hypermedia & Telecommunications
June 23 - 28, 2003
Honolulu, Hawaii, USA
Information: Tel.: 757-623-7588
Fax: 703-997-8760
Web site: www.aece.org; Email: AACE Conference Services

National Media Education Conference 2003 Literacy and Liberty: Rights, Roles and Responsibilities in a Media Age

June 28 - July 1, 2003
Baltimore, MD
Web Site: www.AMLAinfo.org

Chronological Conference Listing Quebec events

The Western Quebec School Board The All-Canadian Conference on Teaching and Learning

January 16 -18, 2003
Hull, QC
Information: Tel.: 1-800-531-0082;
Fax (toll-free): 1-866-465-2325;
Email: info@twblearn.com
Web site: www.twblearn.com

Learning Disabilities Association of Quebec (LDAQ) 28th Annual Conference

March 20 - 23, 2003
Hilton Bonaventure, Montreal, QC
Information: LDAQ Tel.: (514)847-1324; Fax: (514) 281-5187;
Email: aqeta@sympatico.ca
Web site: www.aqeta.qc.ca

Springboards 2003 Association of Teachers of English of Quebec (ATEQ) April 2003

National & International

Centre on Education and Work 2003 Careers Conference

January 27 - 29, 2003
Madison, Wisconsin
Information: Tel.: (608) 831-2000;
Fax: (608) 831 2040

East York-Scarborough Reading Association 27th Annual Language Arts Conference

February 6 - 7, 2003
Toronto, ON
Information: Tel.: (416) 444 7473;
Fax: (416) 444 9282;
Web site: www.readingfortheLoveofit.com

2003 National Reading Recovery and Early Literacy Conference

February 8 -11, 2003
Columbus, Ohio
Information: Tel.: (614) 292 7111;
Fax: (614) 292 4044

4th International IRA Literacy Conference

February 19 - 21, 2003
Guatemala City, Guatemala
Information: Tel.: (302) 731-1600.
Email: Marcia Mondschein at mgnond@aol.com, or Cynthia Martinez at cynmartinez@usa.net

ASCD 58th Annual Conference & Exhibit

March 8 -10, 2003
San Francisco, California
Information: Tel.: (703)578-9600, then press 2 or toll free 1-800-933-ASCD (2723);
Fax: (703)575-5400
Web site: www.ascd.org

The Education Show

March 13 -15, 2003
Birmingham, UK
Information: Tel.: 0870 429 4580
Web site: www.education-net.co.uk

12th Annual National Conference on Family Literacy National and State Conference on Family Literacy—Together!

March 16 -18, 2003
Long Beach Convention Centre, California
Information: Tel.: Family Literacy

Info Line: 1-877-FAMILIT-1
Web site: www.familit.org ;
Email: ncfl@familit.org

National Association for Adults with Special Learning Needs (NAASLN)

March 16 - 18, 2003
Columbus, OH.
Information: Tel.:1 (800)496.9222
or Web site: www.NAASLN.com

CSUN 18th Annual International Conference on Technology and Persons with Disabilities

March 17 - 22, 2003
Los Angeles, CA, USA
Information: Tel.: (818)677-2578;
Fax: (818) 677-4929
Web site: www.csun.edu/cod/
Email: ctrdis@csun.edu

54th Annual Conference on College Composition & Communication (CCCC)

March 19 - 22, 2003
New York City
Information: Tel.: (800)369-6283
Fax: (217) 328-9645
Web site: www.ncte.org

14th International Conference of the Society for Information Technology and Teacher Education (SITE) and the Association for the Advancement of Computing in Education

March 24 - 29, 2003
Albuquerque, New Mexico
Information: Tel.: 757-623-7588;
Fax: 703-997-8760
Email: AACE Conference Services
Web site: www.aace.org

TESOL 2003 37th Annual International Convention and Exposition

March 25 - 29, 2003
Baltimore, Maryland, USA
Information: Tel.: (703) 836-0774;
Fax: (703) 836-7864
Web site: www.tesol.org
Email: info@telsol.org

National Science Teachers Association NSTA National Conference

March 27 - 30, 2003
Philadelphia, PA
Information: Tel.: (703) 243 7100
Web site: www.nsta.org

84th Annual Meeting of the American Educational Research Association

CONFERENCE LISTING

April 21 - 25, 2003
Chicago, Illinois
Information: Tel.: (202) 223-9485;
Fax: (202)775-1824
Web site: www.aera.net

International Reading Association (IRA) 48th Annual Convention:

May 4 - 8, 2003
Orlando, Florida, USA
Information: Tel.: (302)731-1600
Fax: (302)731-1057
Web site: www.reading.org

YAI 24th Annual International Conference Successful Outcomes in Mental Retardation and Developmental/Learning Disabilities

May 5 - 8, 2003
New York City
Information: Ben Nivin,
Conference Director at
(212) 273-6203 or
Abbe Wittenberg, Conference
Manager at (212) 273-6193;
Email: awittenberg@yai.org

22nd Annual Conference of the Canadian Association for the Study of Adult Education (CASAE)

May 29 - 31, 2003
Dalhousie University/
University of Kings College
Halifax, Nova Scotia
Information: Andre P. Grace, Ph.
D., Department of Educational
Policy Studies,
7-104 Education North, University
of Alberta, Edmonton, AB,
T6G-2G5 Web site:
www.oise.utoronto.ca/CASAE

20th Anniversary Annual Conference of Canadian Association for Distance Education (CADE-ACED)

June 7 - 8, 2003
St. Johns, Newfoundland &
Labrador
Information: Tel.: (613) 241 0018;
Fax: (613) 241 0019
Web site: www.cade-aced.ca
Email: cade@csse.ca

Editors' Association of Canada 2003 Conference

June 13 - 15, 2003
University of Ottawa
Information:
<http://www.editors.ca/conference2003/index.htm>

Research in Practice in Adult Literacy (RiPAL)

June 18 - 21, 2003
St. John's, NF
Information: Web site:
www.nald.ca/ripal

American Library Association (ALA) 27th Annual Conference

June 19 - 25, 2003
Toronto, ON
Information: ALA,
Tel.: 1-800-545-2433

Fun or Reading: International Forum on Canadian Children's Literature

June 26 - 29, 2003
Ottawa, ON
Information: Tel.: (613) 992-2501;
E-mail: forum@nlc-bnc.ca

Voice for Adult Literacy United for Education (VALUE)

Adult Leadership Institute
June 26 - 28, 2003
Tampa, FL
Information: VALUE,
Tel.: (610)876-7625

ALM10 (Adults Learning Mathematics) Conference "Learning Mathematics to live and work in our world"

June 29 - July 2, 2003
Strobl, Austria
Information: Web site:
<http://www.alm-online.org/ALM10/alm10.htm>

13th European IRA Conference on Reading

July 6 - 9, 2003
Tallinn, Estonia
Fax: 372 6 979 201
Information: Web site
www.konverents.ee/reading/
Email: conference@frens.ee

The Tenth International Literacy and Education Research Conference on Learning

July 15 - 18, 2003
London, England
Web Site:
www.LearningConference.com

International conference on Imagination and Education

July 16 - 19, 2003
Vancouver, B.C.
Sponsored by the Imaginative

Education Research Group, Simon
Fraser University, British
Columbia, Canada
Information: Tel.: (604) 291 4479;
Web sites:
www.sfu.ca/conferences/ierg2003.
Or www.ierg.net.

4th IAIMTE International Conference (International Association for the Improvement of Mother Tongue Education) Lisbon, Portugal

July 28 - 30, 2003
Information: Graduate School on
Teaching and Learning,
Wibautstraat 2-4
Tel.: 31 20 52 51288
Email: iaimte@ilo.uva.nl

14th National Conference on Learning Disabilities

October 2 - 4, 2003
Calgary, Alberta
Information: Tel.: (780)448-0360;
Fax: 780-438-0665;
Email: Idaa@telusplanet.net

International Conference on Language, Education and Diversity

November 26 - 29, 2003
University of Waikato, Hamilton,
New Zealand
Information: Web site
www.led2003.ac.nz

Summer Institutes 2003 11th Summer Program of the Institute in Management and Community Development

June 16 - 20, 2003
Concordia University
Montreal, QC
Information: Tel.: (514) 848-3956;
Fax: (514) 848-4598

Literacy and Health: Prescription for Learning The Centre for Literacy

June 26 - 28, 2003
Montreal, QC
Information: Tel.: (514) 931-8731,
Fax: (514) 931-5181;
Web site: www.nald.ca/litcent.htm
Email:
literacycntr@dawsoncollege.qc.ca

Institute For Writing and Thinking

July 6 - 11, 2003
Bard College, Annandale-on-
Hudson, NY
Information: Judi Smith,
Tel.: 845-758-7484;
Email: jsmith@bard.edu

ANNOUNCEMENTS: HAPPENING AT THE CENTRE

The Centre for Literacy won three awards in 2002 for excellence and for community leadership

ATEQ Award for Leadership and Innovation

Linda Shohet, Executive Director of The Centre for Literacy, was given the 2002 ATEQ Award for outstanding leadership and innovation in English Language Arts in the province of Quebec. Given annually by the Association of Teachers of English in Quebec, this year's award, recognizing Shohet's work at The Centre, was made on Thursday, April 25, at the McGill University Faculty Club during the opening of the annual Springboards conference.

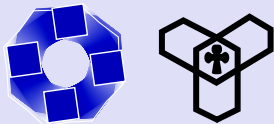


L-R: Alain Bouvier, Canada Post, Linda Shohet, Centre for Literacy, Louis Lavoie, Actor, Jean Marie Martin, National Literacy Secretariat, and Sylvie Bergeron, Salon du livre de l'Estrie

Canada Post Award

In October 2002, The Centre was presented with the Canada Post Literacy Award for Community Leadership for the province of Quebec at a ceremony at L'Universite de Sherbrooke. [See photo above.]

TWO WORKSHOPS



The Centre for Literacy of Quebec and Tyndale-St. George's Community Centre is offering

ESL for Literacy Learners

Tuesday, February 4, and
Tuesday, February 11, 2003
5:00 – 9:00 p.m.
Dawson College, 4001 De
Maisonnette West, Montreal

1. What is ESL Literacy and How Should a Teacher Teach?

2. An Overview of ESL Literacy Methods

The sessions will work with the Canadian ESL Literacy Benchmarks materials.
Facilitator: Larry Iveson, Adult ESL Literacy Instructor, Ottawa-Carlton School board
To register: See brochure on www.nald.ca/litcent.htm or Tel.: (514) 931-8731, ext 1415 to request a registration form.



**QWF
AWARDS**

Quebec Writers' Federation COMMUNITY AWARD 2002

In November 2002, The Centre won the Quebec Writer's Federation Community Award. This prize was created in 1995 to honour outstanding involvement in, and contributions to Quebec's English-language literary life.

The text in the Awards Ceremony booklet read:

This year's Community Award goes to The Centre for Literacy of Quebec and its director, Linda Shohet. Literature by definition requires a literate audience. But anyone who has watched a child learn to read knows that this audience is created by hard work and perseverance. For some children learning to read is a task so difficult that its consequences haunt them throughout life. This is where The Centre for Literacy comes in. Through its support for educators, conferences, readings and community programs, The Centre for Literacy helps people learn to read – building and maintaining the audience for literature that is so critical to our own community. Our thanks and our congratulations go out to them.

More than Plain Language: Adapting Health Communication for Hard-to-Reach Patients

Health Literacy Project Report available

The Report and a bilingual Executive Summary on Phase 2 of the Health Literacy Project at the Montreal General Hospital are now available in print or on our web site. Entitled *More than Plain Language: Adapting Health Communication for Hard-to-Reach Patients*, the report documents the creation of three hospital-based participatory education committees with patients, family and professional members, under the guidance of a Project Steering Committee.

The education committees decided on one priority health message in each of the three units to be developed in different formats and media designed to reach hard-to-reach patients. Using principles of plain language and design and translating some materials into languages other than English or French, the Project ended up with multiple versions of the messages. Although there was no formal assessment of the materials at this stage, selected patients gave informal feedback in each unit. This seemed to indicate that patients who were considered "hard-to-reach" still had difficulty even with simplified materials. However, many mainstream patients were very pleased with the clear and appealing materials.

An independent evaluator worked with the Steering Committee throughout the project. He focused on the development process – the function of the Steering Committee and the creation and function of the participatory education committees. One of his most encouraging findings was that staff on all three units now have a high level of awareness of literacy as a barrier to understanding and take it into account when they communicate with patients.

The Montreal General Hospital currently has a Health Literacy web page on its intranet describing the project and outlining the concept with links to resources chosen by the librarian at The Centre. Now the entire McGill University Health Centre has access to the background, materials, and findings from this project, as well as to general research on health literacy.

The Report describes the project model, the materials, and outlines the evaluation findings and recommendations for the next stage.

The Centre's web site also has links to web-based health literacy resources accessible from the front page.



Health Literacy Project, Phase 2 More than Plain Language: Adapting Health Communication for Hard-to-Reach Patients

The Centre for Literacy
of Quebec
© 2002
ISBN 0-9689593-6-9

Production of this document was made possible by a financial contribution from the Population Health Fund, Health Canada, and from Heritage Canada.

To order: Send \$10 each for the Report and Executive Summary, or \$15 for both documents, to The Centre for Literacy. Or visit the website and link from the front page.

On numeracy and health

One of the things concerning medical statisticians in the last couple of years is how to best present information about risk. The way we talk to each other is in terms of odds-ratios, but no one imagines that that is in any way informative or useful to the public. For example, in comparing the change in risk by adopting a new procedure (a new drug or even a new medical procedure or policy) one can:

- Compare risk in the old versus risk in the new (relative risk)
- Compare the change in risk to the old risk (relative risk reduction)
- Determine the difference in risk (absolute risk reduction)

These always produce very different numbers. For example in a study of the change in risk of perforation during an operation with single or double gloves, the following values were obtained:

- Relative risk - 43%
- Relative risk reduction - 57%
- Absolute risk reduction - 4%

Differences of this sort are common when the risk was low even in the old condition (as it is for a surprising number of hot illnesses, such as breast and prostate cancer).

More recently, medical statisticians have become enamored of NNT (number needed to treat) as a way of communicating risk information. Here what is measured is the number of cases that would need to be moved to the new treatment to reduce the number of new cases by one. In the glove perforation study, that would be the number of operations that would have to be done with double gloves instead of single gloves to reduce the number of perforations by one (the answer is 25). My position is that this doesn't help individuals make informed decisions because it is a population-based number and people don't make population-based decisions.

There is a recent book on this (and other risks, such as gambling): *Calculated Risks* by Gerd Gigerenzer. (I like it even though he is a proponent of NNT.)

I thought you might be able to include something on this in your Summer Institute.

Stan Jones, Research and Evaluation Coordinator
Yarmouth Stroke Project
Office of Rural Health
Office 301, SON Building
58 Vancouver St., Yarmouth, NS, B5A 2P5
stroke2@swndha.nshealth.ca

Egan's exciting paper

To: The Director of
The Centre for Literacy

I am the manager of the adult literacy service in Co. Clare, Ireland

I am writing enquiring about an article printed off your web-site: Working Paper No. 5: Cognitive tools and the acquisition of literacy by Kieran Egan, Simon Fraser University, British Columbia.

It was one of the most stimulating articles I've read on literacy; we have already incorporated some of his ideas into our tutor training course. But it was of particular interest because Prof. Egan reinforces conclusions that we had reached following a research project into the history of literacy which we had undertaken to raise awareness about the historical basis for many of the assumed 'givens' in literacy.

Thank you for providing us with this exciting article.

Best regards
Moirá Greene
Adult Literacy Organiser
Adult & Community Education Centre
Clonroad Business Park, Ennis,
Co. Clare, Ireland

National Literacy and Health Research Project



The Canadian Public Health Association (CPHA) and the University of Toronto's Centre for Health

Promotion are involved in a three-year project to develop a national program for literacy and health research, funded by the Social Sciences and Humanities Research Council (SSHRC). A team of five experienced researchers from four Canadian universities is carrying out the research guided by a multi-disciplinary, multi-professional, multi-organizational advisory committee. The principal researcher is Dr. Irving Rootman, Professor in the Department of Public Health Sciences at the University of Victoria and former Director of the Centre for Health Promotion at the University of Toronto. A key focus will be developing a national agenda for research on literacy and health.

The objectives of the Literacy and Health Research project are to:

- Stimulate cross-disciplinary research on adult literacy and health in Canada
- Increase Canadian capacity to do effective research on literacy and health
- Promote cooperation between researchers and health practitioners
- Expand opportunities for sharing knowledge and applying research findings

- Encourage training of future researchers in literacy and health
- Explore ways of using research in policy development in literacy and health

National Workshop on Literacy and Health Research

This National Workshop, one of the activities of the National Literacy and Health Research Project, met in Ottawa from October 27 - 29, 2002. About 30 researchers, practitioners and policy makers from across Canada discussed priority areas for policy and research related to literacy and health. The Institute of Population and Public Health (IPPH) of the Canadian Institutes for Health Research (CIHR) provided funding for the workshop whose objectives were:

- to develop a consensus on policy issues and research questions about literacy and health in Canada;
- to develop funding proposals related to literacy and health for the Canadian Institute for Health Research (CIHR);
- to develop a proposal for a future project on literacy and health for the Institute on Population and Public Health (IPPH).

Information: www.cpha.ca



Literacy Decade

The General Assembly of the United Nations has proclaimed the Literacy Decade: January 1, 2003-December 31, 2012 by a resolution adopted on December 19, 2001.

The resolution grew from the Draft Proposal and Plan entitled "Education for All: Meeting our Collective Commitments," a Framework for Action created in April 2000 at the World Education Forum in Dakar, Senegal, attended by more than 1,100 teachers, academics, policy makers, non-governmental bodies, and heads of major international organizations from 164 countries. "Education for All" commits governments to achieving quality basic education for all by 2015 or earlier. It emphasizes girls' education, and includes a pledge from donor countries and institutions that "no country seriously committed to basic education will be thwarted in the achievement of this goal by lack of resources."

The text of the resolution is on pages 17-20 of the document, "Draft Resolution IV United Nations Literacy Decade: Education for All":

<http://www.un.org/documents/ga/docs/56/a56572.pdf>

RiPAL: A Canadian website for literacy research in practice

The Research in Practice in Adult Literacy (RiPAL) Network launched a new web site in 2002 at www.nald.ca/ripal. RiPAL was initiated in 2000 to support adult literacy educators to link research and practice and to do research about practice. The site offers resources, information on events and links to other research in practice networks.



The US Council for the Advancement of Adult Literacy (CAAL)

has published MAKING THE CASE: Adult Education & Literacy: Key to America's Future, in pdf form.

This 33-page advocacy tool is a collection of essays by fourteen well-known American adult educators. CAAL has a number of excellent documents available free of charge on their web site,

<http://www.caalusa.org>

ANNOUNCEMENTS

NALD receives UNESCO Award



(L to R) Terry Ann Boyles Vice-President of the Association of Canadian Community Colleges (ACCC) with Charles Ramsey, Executive Director of NALD, and Linda Shohet, NALD Board member. ACCC initiated NALD as an International Literacy Year project in 1989. Terry-Ann and Linda, both on the original Steering Committee, were present at the award ceremony.

The National Adult Literacy Database (NALD) received an Honourable Mention in 2002 for the International Reading Association Literacy Prize awarded annually by UNESCO. The citation was "for producing high-quality literacy teaching materials which can be accessed over the Internet." NALD was the only organization in the developed world to receive this recognition. The presentation to Charles Ramsey, NALD Executive Director, was made in October at the National Best Practices Workshop sponsored by the Conference Board of Canada.

In accepting the award, Charles recognized the Canadian literacy community, the board and staff of NALD, the continuing support of the NLS and the initial backing of Senator Joyce Fairbairn.

In his acceptance remarks, Charles said,

"...This is indeed a reflection on the maturity of the literacy community in Canada and on the excellence of the resources that it creates. NALD is merely a platform, a delivery system and a showcase for the accomplishments of this community.

A Position Paper on Aboriginal Literacy, put out by The National Aboriginal Design Committee in October, presents a rationale to create a national aboriginal literacy organization and a federally-funded coordinated Aboriginal literacy strategy, separate from the national literacy strategy suggested at the National Best Practices Workshop held in early October.

The full paper and an Executive Summary are available on NALD.

Information: Ningwakwe/Priscilla George, Coordinator, National Aboriginal Design Committee, 26 Carluke Cres., # 409

Toronto, Ontario M2L 2J2;

Tel.: (416) 250-7428;

Fax: (416) 225-2905;

E-mail: priscilla.george@sympatico.ca

Without the long-term vision of the Board and the annual direction that it provides, there would be no NALD and for this I am grateful.

And certainly without the staff whose dedication, creativity and the determination to resolve issues in the face of a technological landscape that changes with startling speed, NALD would not have achieved the degree of acceptance that it has from the field that it serves."

PUBLICATIONS:



'Choose to Change' - Booklet Available

This publication was created by Aboriginal inmates in the Literacy Program at Brandon Correctional Institution after following the Twelve Steps to Sobriety program through Alcoholics Anonymous. They produced a booklet for those who have problems with alcohol and/or drugs. The illustrations reflect Aboriginal culture and are appropriate for youth. This printing was supported by a grant from the Retail Technology Group of CIBC.

Cost: in Canada, \$5.00 per copy, including postage

Outside Canada, \$5.00 per copy plus postage, (U.S. funds)

\$4.00 from each sale will go to the Inmates' Fund at the Brandon Correctional Institution; \$1.00 will be retained by NALD for future printing.

Contact: National Adult Literacy Database (NALD), Tel.: (506) 457-6900 or in

Canada: Toll Free 1-800-720-6253; Fax (506) 457-6910 ; E-mail: info@nald.ca
(<http://www.nald.ca/CLR/choose/cover.htm>)

ANNOUNCEMENTS



A Canadian journal of adult literacy research and practice

Since 2000, a small group of people across Canada has been working to develop a literacy journal. We want to connect people working in literacy and people who do research about literacy. We also want more people to know about all of the exciting adult literacy research happening across the country!

Our first issue will be published in November 2003. We need your help! We are looking for people to:

- help us choose a theme for the first issue
- write articles, opinion pieces, reflections, and book reviews
- write in-depth pieces about research connected to literacy work
- sit on editorial committees

Interested? Contact us at:
journal@literacy.ca

Want to know more?
Visit our website:
www.literacyjournal.ca

International conference on Imagination and Education

Vancouver, B.C.
July 16 – 19, 2003
Sponsored by the Imaginative Education Research Group,
Simon Fraser University, British Columbia,

Proposals invited on any aspect of the connection between education

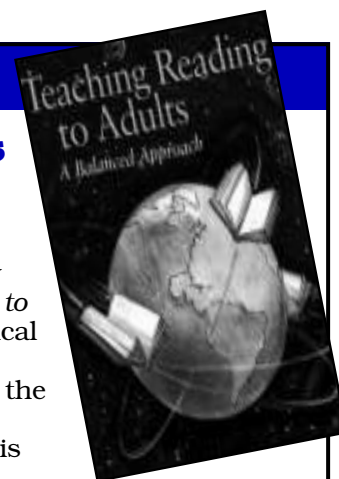
REVIEWS IN BRIEF

Teaching Reading to Adults

by Pat Campbell

Commenting as a librarian with no formal education in reading theory, I was struck by Pat Campbell's new book, *Teaching Reading to Adults*, as one of the most complete and logical training resources I have seen. Her uncomplicated (and unbiased) discussion of the two methodologies that dominate in reading instruction – whole language and phonics – is demystifying, and lays a clear theoretical foundation for the balanced approach she then puts forth. For the purposes of assessment, Campbell presents tutors with four, observable reading patterns – print-based, meaning-based, non-integrative, and integrative – that identify the cognitive strengths and weaknesses of a learner engaged in drawing meaning from a text. For each reading pattern, she offers specific strategies for developing those skills that are weaker and bringing them into balance with a learner's existing strengths. The approach is highly accessible, relying as it does on a shared understanding, between learner and tutor, of the basic concepts and strategies upon which the method is based. When, in future, I am asked by borrowers for a training resource on reading, this manual and the accompanying videos will be among the first I recommend.

Reviewed by Claire Elliott, Librarian,
The Centre for Literacy



Festival of Literacies

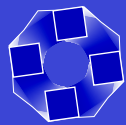
OISE/University of Toronto is planning a Festival of Literacies from May 2003 to August 2004 that will focus on social and cultural approaches to literacy and support multiple literacies in a diversity of communities. Plans include research in practice; graduate studies; credit and non-credit courses; conferences; national and international speakers; and community events

Information: Sheila Stewart or Nancy Jackson, Festival of Literacies, c/o Adult Literacy Working Group, Department of Adult Education and Counselling Psychology, Ontario Institute for Studies in Education of the University of Toronto (OISE/UT), 252 Bloor Street West, Toronto, ON M5S 1V6; Tel.: 416-923-6641, ext. 6084; E-mail: sswtart@oise.utoronto.ca or njackson@oise.utoronto.ca

and imagination. Formats: traditional papers, panels, and workshops, roundtable sessions, informal presentations and discussions, posters, etc. Please include title, 250-word abstract, and a brief C/V, including institutional affiliation, degrees, publications, etc. Choose format and time requirement: Papers: 50 minutes; panels and workshop: up to 80 minutes. Efforts will be made to accommodate shorter or longer sessions. Please note other ways of participating.

Send proposals to: ierg, Faculty of Education, Simon Fraser University, Burnaby, B.C. V5A 1S6, Canada; Fax: (604) 291 3203; e-mail: ierg-ed@sfu.ca
Information: Tel.: (604) 291 4479;
Conference web site:
www.sfu.ca/conferences/ierg2003.
Additional information :
www.ierg.net.

Deadline for proposals:
January 25, 2003



**The Centre
for Literacy**



**Canadian
Public Health
Association
(CPHA)**



WORLD EDUCATION

In partnership with Canadian Public Health Association (CPHA) and World Education in Boston, The Centre for Literacy is sponsoring

Summer Institute 2003

June 26 - 28, 2003, Montreal, Quebec

Health & Literacy

Prescription for progress

PLEASE NOTE: in the original Summer Institute 2003 brochure, the Institute dates were incorrectly published as "June 27-29, 2003."

The correct dates are "June 26-28, 2003."

We apologize for any confusion this may have caused.

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The Centre for Literacy,

3040 Sherbrooke Street West, Montreal, Quebec, Canada H3Z 1A4

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