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Guides: \*Teaching Methods

IDENTIFIERS Great Britain; Ontario (Toronto)

#### **ABSTRACT**

This annotated bibliography profiles 27 print publications about and for adults whose mathematics skills are below the eighth-grade level. Entries describing the following materials are presented: 5 handbooks/guides (including an introduction to numeracy teaching, adult numeracy training pack, and manual for teaching place value); 2 publications devoted to issues in numeracy (collections of articles on the philosophical and political aspects of numeracy instruction for adults and numeracy in Great Britain); 6 function-oriented learner/facilitator materials (including materials about family math, everyday math, and math for work and home); and 20 skill-based learner/facilitator materials (including workbooks, training packages, and series of materials about working with numbers, strengthening math skills, developing strategies for computation and problem solving, basic math skills, and mathematics in daily living). Each entry contains some or all of the following: title, author, format, description of content, suggested application(s), and ordering information. (MN)



<sup>\*</sup> Reproductions supplied by EDRS are the best that can be made

# Numeracy Books for Adult Learners

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Office of Educational Research and Improvement
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An annotated bibliography

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# Numeracy Books for Adult Learners

An annotated bibliography



# NUMERACY BOOKS FOR ADULT LEARNERS An annotated bibliography

written by Thomas Ciancone

Adult Basic Education Unit
The Board of Education for the City of Toronto



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# NUMERACY BOOKS FOR ADULT LEARNERS



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# Introduction

Numeracy Books for Adult Learners is an annotated bibliography of print materials for adults who need to develop skills in mathematics up to a grade eight level. The 27 titles reviewed in this book represent materials that have been used and recommended by various literacy and numeracy facilitators working in programs of the Adult Basic Education Unit of the Toronto Board of Education.

Many learners want instruction in numeracy skills for very specific functional needs, while others may want to fill gaps in their school learning to achieve career goals. In any case, it is the responsibility of the literacy/numeracy facilitator to help the learner see the connections between arithmetic or abstract mathematical concepts and how numbers are used in the real world.

Since no ready-made numeracy package exists, the facilitators must be flexible in providing appropriate learning materials. Ideally, the facilitator will design relevant materials according to the learner's needs. To achieve this, we often use commercially published materials for ideas and support. We can use these materials most productively by carefully selecting and combining information from a variety of sources.

In selecting materials, we ask ourselves questions that can be organized into the following categories:

#### Format/Presentation

Is the layout clear with plenty of white space? Are the graphics appropriate for adults and clearly related to the text? Does the material appear in a format and typeface that is easy to read? Does it encourage further investigation?

# Content/Language

Is the material relevant and interesting to adults living in Canada? Is the literacy level appropriate? Is the information easily understood? Are the questions and directions clear? Are there numerous examples? Is the sequence of learning logical? Is it paced properly with a smooth, sequential progression? Are there frequent opportunities for self-evaluation with checklists and answer keys?



# **Applications**

Are the instructions sufficiently clear so that a learner can use the material independently? Do the guidelines stress that the learner's needs are more important than following the book from start to finish? Does the material encourage both the learners and facilitator to be creative and engage their critical and investigative abilities? Does it emphasize the application of skills and the use of concrete, everyday materials? Do workbooks present a variety of activities at each level of difficulty so that learners can reinforce a new skill by using it in different ways?

All recommended titles were in print as of April 1991. The prices are listed in Canadian dollars. They were obtained from the most recent publishers' catalogues. This information is for comparison only; current sources should be consulted for up-to-date prices.

This bibliography only begins to investigate appropriate numeracy materials for use with adult learners. We would be glad to hear critiques of the listed titles in this bibliography, suggestions of titles for a revised edition, and any other comments you may have.

All the titles in this collection are housed at the Adult Basic Education Unit and are available to learners and facilitators in programs run by the Toronto Board of Education and their co-sponsors.



# **Facilitator Resources**

These are materials that a facilitator would use as aids or background material, not directly with the learner. There are two main categories:

Handbooks or teaching guides give ideas and suggestions ranging from assessing learner's needs and planning an instructional program to specific lesson plans and concrete examples for immediate classroom use.

**Background materials** cover the theory of numeracy and acquisition of mathematical skills, the relationship between numeracy and literacy, the development of numeracy programs, and other issues such as math anxiety.



Title: An Introduction to Numeracy Teaching

Author: Keith Connor, Anne Dodd, Deryn Holland, Margaret Moss,

Janet Swinney, Janet Ward

Format: Paperback, 150 x 210 mm

64 pages

Content: This is a collection of practical ideas and information about facilitating

numeracy.

Part One considers teaching techniques, the planning and presentation of numeracy material, working with groups of students with a wide range of ability, and helping those who require an immediate solution to a specific

problem.

Part Two deals with concepts and skills (e.g. place value, operations,

percentages) that students may need to solve problems in daily living or to

pass different types of tests.

Application: A concise and clear handbook for numeracy facilitation, especially for new

tutors and facilitators.

Ordering Information

Publisher:

Available from:

Adult Literacy & Basic Skills Unit

London, England

ISBN 0-906509-19-X

1988

ALBSU

Kingsbourne House

229/231 High Holborn London WC1V 7DA

United Kingdom

\$1.80 Tel: 01-405-4017

Note: ALBSU materials are also available through Avanti Books.



Working on Number:

A practical approach to the teaching of numeracy

Author:

Cambridge Training & Development Group

Format:

Spiral bound, 210 x 300 mm

114 pages

Content:

The book contains four sections:

- 1. Where do you start: looks at the issues facing people who find number skills difficult and explains how to assess people's needs; gives an introduction to the basic number skills.
- 2. Reviewing progress: explains the relevance of the reviewing process and gives ideas on organizing review sessions.
- 3. Planning a program: gives guidance on planning numeracy training sessions; offers model session plans and practical ideas to support tutors.
- 4. Bits and pieces: discusses the use of exams, introduces games and puzzles as teaching aids, lists resources available (in Britain) for tutors and learners.

#### **Application:**

This book is an excellent guide, especially for tutors and facilitators who are planning a new program. Its approach is very process-based, emphasizing problem solving, estimating, and the importance of accuracy in calculation. It is also an excellent resource for trainers of tutors or facilitators.

Order	ing
Inforn	nation

Publisher:

Available from:

Careers and Occupational Information

COIC

Sheffield, England

Room W1103

1988

Moorfoot

Sheffield S1-4PQ

ISBN 0-86110-503-6

United Kingdom

\$24.00

Note: Also available

through Avanti Books.

**Adult Numeracy Training Pack** 

Author:

Judith Parker and Brendan Donovan

Format:

Ring-binder, 250 x 310 mm

206 pages

Content:

Part 1 is concerned with what numeracy is, how it is used, and how both tutors and learners can approach it. There are suggestions on starting a program and assessing learners' needs and progress.

Part 2 deals with concepts and skills, and approaches to working with learners. The topics include: understanding numbers, the four operations, decimals, percentages, measurement, ideas and resources, tests. Each unit in Part 2 includes approaches, activities, and practical tasks for each skill that is presented.

**Application:** 

An excellent manual for a numeracy tutor. In its binder format, it could be used as a course outline where the facilitator would add worksheets or materials that are relevant to his or her particular learning/teaching situation. As the manual is designed for one-to-one tutoring, a facilitator in a group setting would have to adapt the approach accordingly.

**Ordering** Information Publisher:

Available from:

Scottish Community Education Council

Edinburgh, Scotland

SCEC Atholl House 2 Canning Street

1987

Edinburgh, Scotland (UK)

EH3 8EG

ISBN 0-948213-45-0

Tel: (031) 229-2433

\$30.00



**Numeracy Training** 

Author:

Gwen Austin, Pauline Hawken, Susan Jones, Margaret Purdey

Format:

Pack of looseleaf sheets in a plastic folder, 220 x 310 mm

16 pages

**Content:** 

Section 1 deals with student profiles and offers an exercise to understand adult

learning needs.

Section 2 provides tutors with typical problems that students encounter when

learning to use basic operations.

Section 3 covers much of the practical aspects of numeracy learning such

as assessment, sample worksheets, checklists, possible order of learning,

integrating literacy and numeracy, choosing and using materials.

Application:

An excellent handbook for trainers of numeracy tutors and facilitators.

Ordering Information

Publisher:

Available from:

Adult Literacy & Basic Skills Unit

London, England

ISBN 0-906509-71-8

1986

ALBSU

l ingsbourne House

229/231 High Holborn

London WC1V 7DA

United Kingdom

\$8.25

Tel: 01-405-4017



The Place Value Connection

Author:

Diana A. D'Aboy

Format:

Paperback, 215 x 280 mm

127 pages

Content:

This is a teacher's manual that contains more than 100 activities for teaching place value and related mathematical concepts, with the goal of combining the concrete, the pictorial, and the abstract for an active, holistic learning experience. Most of the activities are planned for groups, large and small,

but also includes some individual work.

Each activity is organized under the following headings: objective, grade level, group size, materials, and procedures. Also included are 39 reproducible pages

of charts and materials used in the activities.

Application:

Although this book is designed for primary school, the mathematical concepts are the same for any learner. This area of teaching place value and the basic operations is crucial, but not easy to facilitate. Since this manual is based on concrete materials and group activity, it is an excellent aid to the numeracy facilitator who can readily adapt these activities to the adult classroom.

**Ordering** Information Publisher:

Available from:

Dale Seymour Publications

Palo Alto, California

ISBN 0-86651-269-1

1985

Spectrum Educational

Supplies Ltd.

125 Mary Street

Aurora, Ontario

L4G 1G3

\$12.75

Tel: (416) 841-0600



**Viewpoints 1: Numeracy** 

Author:

Several authors

Format:

Periodical, 210 x 300 mm

28 pages

**Content:** 

This book comprises six articles by experienced practitioners on conceptual

philosophical and political aspects of numeracy work with adults.

The titles are:

Functional Numeracy

The Language of Numeracy Computers in Basic Education Numeracy, Publicity and Outreach

Who are Those People with Numeracy Problems? Numeracy as a Communication and Coping Skill

**Application:** 

Excellent for administrators and program coordinators in looking at numeracy

work from different perspectives.

Excellent for numeracy facilitators looking for a theoretical base for numeracy

instruction.

**Ordering** Information

Publisher:

Available from:

Adult Literacy & Basic Skills Unit

**ALBSU** 

London, England

Kingsbourne House

1984

229/231 High Holborn

London WC1V 7DA

United Kingdom

ISSN 0-266-20989

\$2.50

Tel: 01-405-4017

The Numbers Game

**Author:** 

Alison Tomlin (Ed.)

Format:

Paperback, 150 x 210 mm

70 pages

**Content:** 

This book consists of eight papers on numeracy in Britain. These range from personal experience to theoretical analysis, and are written by adult numeracy

workers.

One article that is particularly outstanding is "Numeracy: Literacy's Mirror Image?" by Diana Cobon, as it discusses adult numeracy work within the

literacy context.

Application:

For both practitioners and program coordinators, this book is a good resource

for theoretical content based on practice.

Ordering Information

Publisher:

Available from:

Hammersmith and Fulham Council

for Racial Equality London, England

1985

for Pagial Equality

\$6.00

National Federation of Voluntary

Literacy Schemes
Cambridge House
131 Camberwell Road

London SE5 OHF United Kingdom

Tel: (01) 7038083



# Learner/Facilitator Materials

These are numeracy materials that learners and facilitators can use together. Since there is no "numeracy curriculum" or "numeracy learning package," we need to be selective when using these materials. The workbooks are usually strictly graded and may be inappropriate for adults who have individual needs. Ideally they can serve as back-up material to practical concrete materials and worksheets designed by the facilitator for the learner's particular needs. The British materials (ALBSU), written by practising numeracy facilitators, are most helpful in the design of worksheets.

In the titles reviewed in this section, there are two main categories:

#### **Function-oriented**

Although they involve mathematical skills, the starting point of these materials is the function, such as telling time, making change, paying bills, and having confidence with numbers.

#### Skill-based

Usually these materials are in the form of workbooks, which give instruction and practice in mathematical skills according to a logical sequence. Some of them also include practical applications.

If any of these materials are used directly in the classroom, care must be taken to screen the material for American or British terminology and currency. Similar precautions must be taken when using materials that have been designed primarily for elementary school children.



A New Start - Canada (series)

Author:

Mary Selman, Linda Mrowicki

Format:

Paperback, 210 x 275 mm, 210 x 295 mm

Four books, 112-256 pages each

**Content:** 

This series provides a functional English course, suitable for learners with low literacy skills. In focusing on language functions needed in everyday life, it deals with such skills as identifying and writing numbers, counting money, requesting change, telling time, reading the calendar, using maps, reading medicine labels, using cheques, and paying bills.

There are four books in the series. The Student Book covers the same material as the Literacy Workbook 1 And 2; however, the two literacy workbooks break skills into small steps, and thus are more suitable to a basic literacy learner. The Teacher Book gives comprehensive support for each lesson.

Application:

Some numeracy is integrated into the language development program. The lessons and exercises may be used as presented or a facilitator may extract the numeracy component to suit the needs of his or her own program.

The numeracy lessons are especially appropriate for beginning readers because the language component is integrated in a natural way.

Ordering Information

Publisher:

Available from:

Dominie Press Ltd.

Agincourt, Ontario

1984

Dominie Press Ltd.

1361 Huntingwood Drive

Unit 7

Agincourt, Ontario

M1S 3J1

**ISBN** 

0-435-08107-1 (Student) \$9.95

0-435-08108-X (Teacher) \$7.50

0-435-08109-9 (Literacy 1) \$7.50

0-435-08110-1 (Literacy 2) \$13.95

Tel: (416) 291-5857

 $\epsilon 0$ 



**Numbers in Our Lives** 

Author:

Betty Dondertman, Tom Ciancone

Format:

Binder, 250 x 300 mm

3-hole looseleaf

Content:

Numbers in Our Lives is an attempt to look at numbers in a non-threatening way so that the learner begins to feel confident with numbers in everyday life.

It is divided into two main sections. The first section begins with a discussion of numbers used to identify people and things, and then goes on to dates and time. This section involves counting and place value, but no calculations. The second section deals with the four basic operations using a spiral approach. It starts with adding and subtracting with one-digit numbers, multiplying and dividing with one digit numbers, and then moves on to operations with larger numbers. Operations at each lever are placed in the context of a practical

situation, with applications following skill practice.

Application:

This book is designed for learners at a basic level of literacy and numeracy. It is ideal for individual or group work with a facilitator's aid. It especially lends itself to group discussions about math. For in-depth practice of newly learned skills, the facilitator is advised to find supplementary exercises from other sources.

**Ordering** Information Publisher:

Available from:

Toronto Board of Education

Toronto, Ontario

1991

Adult Basic Education Unit

777 Bloor Street West

Toronto, Ontario

M6G 1L6

ISBN 1-895282-01-2

Tel: (416) 393-1995

Price unavailable



**Family Math** 

Author:

Jean Kerr Stenmark, Virginia Thompson, Ruth Cossey

Format:

Paperback, 215 x 280 mm

320 pages

**Content:** 

Family Math is a course designed for parents and children working together to improve their mathematical skills and gain appreciation for mathematics. It is activity-based, providing opportunities to develop problem-solving skills and to build an understanding of mathematics with "hands-on" materials.

The topics fall into the general categories of arithmetic, geometry, probability and statistics, measurement, estimation, calculators, logical thinking, and careers.

**Application:** 

The book impresses on the reader that mathematics can be fun and interesting, and that the tools for doing it are all around us. It also emphasizes group problem solving.

Although this is clearly a program for children, its fresh approach to learning mathematics and excellent ideas and activities can be adapted to an adult numeracy program.

Ordering Information

Publisher:

Available from:

University of California

Berkeley 1986 Addison-Wesley Publishers 26 Prince Andrew Place

Don Mills, Ontario

M3C 2T8

ISBN 0-912511-06-0

Tel: (416) 447-5101

\$21.35

**Working with Numbers:** Title:

**Ideas and Examples for Numeracy Worksheets** 

Author:

Bernard Gabony, John Traxler

Format:

Ring-binder, 230 x 310 mm

104 pages

Content:

This is a selection of 92 worksheets on various topics, including basic operations, estimating, fractions, decimals, percentages, measurement,

personal finance, and graphs.

A 12-page introduction considers various issues in numeracy and how they

relate to the worksheet material, including some ground rules for teaching

numeracy.

**Application:** 

This pack is a reservoir of ideas, models for worksheets, and approaches to

wider curricular issues.

Many worksheets may be used as is, provided the British terms and currency

are adjusted accordingly.

**Ordering** Information

Publisher:

Available from:

ALBSU and Friends Centre

Brighton, England

ISBN 0-906509-12-2

1982

**ALBSU** 

Kingsbourne House

229/231 High Holborn

London WC1V 7DA

United Kingdom

\$8.25

Tel: 01-405 4017



Everyday Math 1, 2

Author:

Lorna Wiggan, Janette Musson, Gunter Hartwig, Gordon Barry

Format:

Paperback, 210 x 280 mm

Book 1, 156 pages Book 2, 116 pages

Content:

These two books are activity-based and rely on diagrams, charts, and practical

situations to elicit responses to questions.

Book 1 is organized around basic skills, such as counting, ordering, fractions,

decimals, ratio, and rate.

Book 2 deals with measurement using only metric.

**Application:** 

Although these books were designed for elementary school, the content is suitable for adults. A tutor or facilitator may use the many exercises and

activities to supplement a numeracy program. The books are especially effective in their use of diagrams, charts, and floor plans. Almost every

exercise is connected to a visual representation.

Ordering Information

Publisher:

Available from:

Toronto Board of Education

Toronto, Ontario

1980

Learnxs Press

155 College Street

Toronto, Ontario

M5T 1P6

ISBN 0-920020-12-7

0-920020-13-5

Tel: (416) 591-8178

\$6.00 each

Title: Math for Work and Home (series)

Author: Trevor Brown, Ray Thomas, Jerry Scherer, Elizabeth Schnarr

Format: Stapled Booklets, 215 x 275 mm

3-hole punched

Six books, 29-34 pages each

Content: This series contains worksheets on practical everyday situations that involve

mathematical skills. Most applications require a knowledge of operations with

decimals and many also involve percentages.

Following are the topics included:

wages, buying and selling, your money and banking, life insurance, comparative shopping, personal loans, saving money, renting, budgeting,

roofing, credit cards and credit purchasing, travelling costs.

Most topics begin with discussion questions before entering into numerical

calculations.

Application: For learners who are confident with decimals, and ideally percentages, these

workbooks are very good for individual or group work. For an independent learner, his or her literacy level must be adequate to decode the language involved in each situation. A facilitator can readily adapt these lessons for

individual learner needs.

Ordering Information Publisher:

Available from:

Toronto Board of Education

Toronto, Ontario

1988

Learnxs Press

155 College Street

Toronto, Ontario

Tel: (416) 591-8178

M5T 1P6

Order No. 8-0670 (Book 1)

8-0671 (Book 2)

8-0672 (Book 3)

0072 (2001.2)

8-0673 (Book 4)

8-0674 (Book 5)

8-0675 (Book 6)

\$1.20 each



Easy Math (series) Title:

Author: Alison Dewsbury

Format: Paperback, 210 x 300 mm

Eight books, 24-68 pages each

Content: The series consists of the following booklets:

Teacher's Guide

Activity Book 1: Counting to Ten

Activity Book 2: Addition & Subtraction (Under Ten) Activity Book 3: Addition & Subtraction (Tens & Units)

Activity Book 4: Multiplication & Division

Activity Book 5: Money Activity Book 6: Time

Activity Book 7: Equivalents & Fractions

Application:

Although the series was designed for primary school, the content is suitable for adults (aside from a few graphics in Activity Book 1).

The numerals in the activity books are very large and clear; they are excellent for learners who are learning to form numbers or for learners who may have difficulty with regular-size print. The books should not be used with adults who will find the large print offensive.

For learners at the level of counting or basic adding and subtracting, this series is a great resource in conjunction with functional or applied problems.

The program is based on the isolation of each skill. The skills are broken down into their component parts and rebuilt with small, sequential steps.

Ordering
Information

Publisher:

Available from:

Ontario Institute for Studies in

Education

Toronto, Ontario

1983

OISE Press

252 Bloor Street West

Toronto, Ontario

M5S 1V6

Order No. 1296 (Teacher's) \$9.95 1291 (Book 4) \$2.35 Tel: (416) 926-4723 1294 (Book 1) \$2.35 1289 (Book 5) \$2.35

1288 (Book 6) \$2.35 1292 (Book 2) \$3.75 1293 (Book 3) \$2.35 1290 (Book 7) \$2.35



**Numbers Start Here** 

Author:

Hazel Glassfield, Gil Owen, Kay Parr-Burman, Brenda McVey, David Morgan, Liz Delaney, Bili Russell, George Webster

Format:

Pack of looseleaf sheets in a plastic folder, 220 x 310 mm

35 pages

Content:

This pack contains ideas, charts, games involving pre-number work, number concepts up to 10, and the beginning of telling time and handling money. The

games and charts are designed for reproducing and cutting out.

There is an initial assessment for recognition of colour and shape

(pre-number), number, place value, and symbol.

**Application:** 

The assessment and worksheets are useful for readers at the pre-counting level.

All the materials are visual and generally require physical manipulation.

Ordering Information

Publisher:

Available from:

Adult Literacy & Basic Skills Unit

London, England

ISBN 0-906509-38-6

1983

**ALBSU** 

Kingsbourne House 229/231 High Holborn

London WC1V 7DA

United Kingdom

\$5.50

Tel: 01-405-4017



Title: Begin Here: A Maths Pack

Author: Kay Parr-Burman, David Morgan, Brenda McVey, Bill Russell,

George Webster

Format: Pack of looseleaf worksheets in a plastic folder 220 x 310 mm

72 pages

Content: The pack contains worksheets on subtraction, multiplication, and division.

There are also puzzles that emphasize the learning of multiplication and

division facts up to 10.

There are worksheets that introduce basic concepts in fractions and

percentages, with an excellent summary of the relationship between fractions,

decimals, and percentages. A domino game also helps to reinforce these

relationships.

Application: This pack offers the facilitator excellent ideas in terms of games and drills to

reinforce timetables and the relationship between fractions, decimals, and percentages. The puzzles and games can be easily adapted, even though much

of the subtraction and percentages worksheets use British currency.

Ordering Information

Publisher:

Available from:

Adult Literacy and Basic Skills Unit

London, England

1983

**ALBSU** 

Kingsbourne House

229/231 High Holborn

London WC1V 7DA

United Kingdom

ISBN 0-906509-39-4

Tel: 01-405-4017

\$9.00

Title: Working With Numbers (series)

Author:

James T. Shea

Format:

Paperback, 210 x 275 mm

Four books, 124-138 pages each

**Content:** 

Working With Numbers is a series of eight books ranging in topics from number recognition to algebra. Only the first four books are reviewed here:

- 1. The Point Book begins with number recognition and counting, and progresses to addition and subtraction up to 10.
- 2. The Line Book expands to adding and subtracting with regrouping, emphasizing place value.
- 3. The Triangle Book covers the four operations with whole numbers, with emphasis on multiplication skills. Division only by one-digit numbers is covered. Fractions are also introduced.
- 4. The Rectangle Book emphasizes word problems and multiplication and division with larger numbers.

Separate answer keys are provided with each book.

# Application:

These books offer a slow-paced approach to basic skills. Whereas most available books at the level of counting and basic adding and subtracting are clearly children's material, *The Point Book* and *The Line Book* offer a minimum of juvenile content. The facilitator may use these books as a resource, selecting appropriate exercises for his or her learner. An excellent feature is that one lesson is presented per page.

Ordering	
Information	

Publisher:

Available from:

Steck-Vaughn Company

Austin, Texas

1982

Educational Resources Ltd. #109-8475 Ontario Street Vancouver, British Columbia

V5X 3E8

ISBN 0-8114-1825-1 (Point)

0-8114-1827-8 (Line)

0-8114-1828-6 (Triangle)

0-8114-1829-4 (Rectangle)

Tel: (604) 324-9717

\$8.25 each





**Steps to Mathematics: Books 1 and 2** Title:

Author: Steck-Vaughn Company

Format: Paperback, 210 x 275 mm

60 pages each

**Content:** These two books deal with only whole numbers. Book 1 introduces basic operations without regrouping, including the writing and counting of numbers

up to 100. Book 2 builds on these basic skills to include operations with regrouping and concludes with problems involving measurement.

Each page is devoted to a specific skill and constitutes an independent lesson. The sequence of skills is logical and consistent and progresses at a reasonable pace. Along with regular whole numbers, simple money figures are included

in the drills and word problems.

This series provides an excellent resource for a facilitator to extract specific Application:

> lessons based on a skill needed by a learner. If one follows the order, the learner will not be surprised by a hidden skill not previously covered.

The introduction of money values is an excellent feature of this material. The pictures of U.S. coins can easily be avoided or replaced with Canadian currency. Also, there is a small amount of children's content that should by

avoided.

**Ordering** Information Publisher:

Available from:

Steck-Vaughn Company

Austin, Texas

1980

Educational Resources Ltd. #109-8475 Ontario Street Vancouver, British Columbia

V5X 3E8

ISBN 0-8114-0772-1 (Book 1)

C-8114-0774-8 (Book 2)

Tel: (604) 324-9717

\$6.75

The Numeracy Pack

Author:

Diana Coben, Sandy Black

Format:

Set of four booklets in a plastic folder, 220 x 310 mm

158 pages

**Content:** 

The pack consists of four booklets:

- 1. Numbers, signs, place value...
- 2. The four basic operations
- 3. Fractions, decimals, percentages
- 4. Measurement

The booklets explain how to do calculations and also different ways of finding the right answers.

Application:

This pack establishes a rough framework for a numeracy course for adults needing to brush up on basic math. While most pages may be adapted as worksheets, some pages are best used by the facilitator as an aid to explaining abstract concepts. This pack has the advantages of providing a "course" without being a "textbook."

Ordering
<b>Information</b>

Publisher:

Available from:

Adult Literacy and Basic Skills Unit

1984

**ALBSU** 

London, England Kingsbourne House

229-231 High Holborn

London WC1V 7DA

United Kingdom

\$16.50

ISBN 0-906509-53-X

Tel: 01-405-4017



Title: Strengthening Math Skills (series)

Author: Trevor Brown, Richard Lyttle, Sandra Suatos

Format: Paperback, 215 x 275 mm

Five books, 74-132 pages each

Content: The five volumes deal with the following topics:

1. Place value, addition, subtraction

2. Multiplication, division, order of operation

3. Fractions, decimals

4. Ratio and percentages, integers

5. Measurement

These exercises are a supplement to a regular math program using interesting and novel ways to practise the skills involved.

**Application:** 

Since this series was designed for supplementing an elementary school program, it contains some exercises and graphics that are juvenile. However, a facilitator may select appropriate exercises or activities. *The Measurement Book* (vol. 5), for example, has excellent diagrams from which the learner can understand the concept of area.

Ordering
Information

Publisher:

Available from:

Toronto Board of Education

Toronto, Ontario

1984

Learnxs Press
155 College Street
Toronto, Ontario

M5T 1P6

ISBN 0-920020-25-9 (vol. 1)

0-920020-26-7 (vol. 2)

0-920020-27-5 (vol. 3)

0 000000 00 0 ( 1 1

0-920020-28-3 (vol. 4)

0 920020-29-1 (vol. 5)

Tel: (416) 591-8178

\$3.00 each



**ABE Mathematics 2: Workbook** 

Author:

Mollie Enns

Format:

Paperback, 210 x 275 mm

394 pages

Content:

This workbook is divided into 10 units, including Whole Numbers, Fractions, Decimals, and Percent. Each unit is subdivided into topics (e.g. multiplying by two-digit numbers), which contain explanations, exercises, a self-test, and a checklist. The last two topics of each unit involve estimation and problem solving. Metric units are used in word problems. Answers to all exercises are

included at the back of the book.

Application:

This is an excellent basic textbook that goes beyond the counting level. The pages are well laid out with clear print. The facilitator can easily pull out sections for a learner who wants in-depth work on a particular topic. An important aspect of the ABE Mathematics 2 design is the emphasis on estimation in problem solving.

A final consideration in using this program is its Canadian content.

(See next page for Instructor's Guide & Student Test Pad)

Ordering Information Publisher:

Available from:

Ministry of Education

ISBN 0-7719-9226-2

Province of British Columbia Victoria, British Columbia Open Learning Agency Marketing Department

P.O. Box 94000

Richmond, British Columbia

V6Y 2A2

\$18.45

Tel: (604) 860-2221



ABE Mathematics 2: Instructor's Guide and Test Answer Key (and Student Test Pad)

Author:

Mollie Enns

Format:

Instructor's Guide: Paperback, 210 x 275 mm

128 pages

Test Pad: 3-hole looseleaf, 210 x 275 mm

105 pages

**Content:** 

The Instructor's Guide contains brief comments about each unit and

bibliographical references for additional practice.

The Test Pad contains one pre-test and two post-tests for each topic from the

workbook (see preceding page).

The Test Answer Key has answers typed in bold on identical pages to the

original Test Pad pages.

**Application:** 

The Instructor's Guide component is not very extensive, although the

bibliographical references may be useful. The Test Answer Key is excellent because its format is identical to the original question pages; the student can easily check his or her own answers with solutions worked out on the page.

If a learner and facilitator are looking for a ready-made course,

ABE Mathematics 2 (Workbook, Test Pad, and Instructor's Guide) offers a

comprehensive program with its pre-tests, post-tests and checklists.

Ordering Information

Publisher:

Available from:

Ministry of Education

Province of British Columbia

Victoria, British Columbia

Open Learning Agency

Marketing Department

P.O. Box 9400

Richmond, British Columbia

ISBN 0-7719-9227-0 V6Y 2A2

\$9.00

Tel: (604) 860-2221



Math Master: Strategies for Computation and Problem Solving (2 volumes)

Author:

Jerry Howett

Format:

Paperback, 210 x 275 mm Math Master 1, 205 pages Math Master 2, 215 pages

Content:

Math Master 1 covers whole number skills and, building on that base, moves directly into decimal skills. Fractions and percentages are covered in Math Master 2.

The books move from step-to-step instruction in arithmetic skills to exercises that simulate real-life computation. There is a stress on problem-solving as well as on calculation. An excellent feature of these books is that word problems have mixed operations as they increase in difficulty. Answers to problems are included in the books.

Application:

These two books are a good resource to the facilitator who needs ideas and examples of problem solving to build on skills that a learner wishes to develop.

# Ordering Information

Publisher:

Available from:

Cambridge Adult Education Englewood Cliffs, New Jersey 1990

Prentice-Hall Canada 1870 Birchmount Road Scarborough, Ontario

2770

M1P 2J7

ISBN 0-13-943960-9 0-13-943978-1

Tel: (416) 293-3621

\$7.67 each



Title: Basic Skills with Math (series)

Author: Jerry Howett

Format: Paperback, 210 x 275 mm

Four books, 110-176 pages each

Content: This is a series of three books plus a review:

1. Basic Skills with Whole Numbers

2. Basic Skills with Fractions

3. Basic Skills with Decimals and Percent

4. Basic Skills with Math: A General Review

This program has a step-by-step approach to skill building. The skills are developed in clear, concise instructional segments followed by numerical and word problems. Each book has a pre-test and a final review, and each unit has a review and a checklist. Answers to all problems are in the books.

Application:

These books are best used by a facilitator whose learner needs instruction and practice in one specific skill (e.g. dividing a whole number by a decimal) because the skills are broken down step-by-step with plenty of practice problems.

A disadvantage to this series, as in most math textbooks, is that the skills are never integrated to allow the student to develop the analytical skill of determining a strategy for problem solving.

# Ordering Information

Publisher:

Available from:

Cambridge Book Company

New York 1980 Prentice-Hall Canada 1870 Birchmount Road Scarborough, Ontario

M1P 2J7

**ISBN** 

0-8428-2116-3 (book 1) \$8.00

0-8428-2117-1 (book 2) \$8.00

0-8428-2118-7 (book 3) \$8.00

0-8428-2119-8 (book 4) \$9.00

Tel: (416) 293-3621



**Building Basic Skills in Math** 

Author:

Jerry Howett

Format:

Paperback, 210 x 275 mm

226 pages

Content:

This workbook reviews basic arithmetic functions with whole numbers, fractions, decimals, and percentages. It includes step-by-step instructions, pre-tests, post-tests, and practice problems. The language is clearly written

and not too detailed.

Answers with solutions are in the book.

**Application:** 

This series can be used as either a basic textbook for an independent learner or as a resource for a facilitator. The major feature of this book is that answers to problems have complete solutions. A disadvantage, as in most math textbooks, is that the skills are treated in isolation and not integrated in a systematic way.

**Ordering** Information Publisher:

Available from:

Contemporary Books

Chicago, Illinois

1984

Fitzhenry & Whiteside Ltd.

195 Allstate Parkway

Markham, Ontario

L3R 4T8

ISBN 0-8092-5877-3

Tel: (416) 477-0030

\$10.00



Essential Mathematics for Life (series)

Author:

Mary Charuhas, Valjean Mclenighan, Dorothy Davis McMurtry

Format:

Paperback, 210 x 275 mm

Four books, 124-188 pages each

#### Content:

This series of four workbooks builds skills systematically with opportunities to apply these skills in practical situations. Each unit contains a pre-test, post-test, and special lessons called "life skill," which provide a comprehensive problem from everyday life or work setting. Each book includes practice tests and answers to all problems.

#### The titles are:

- Whole Numbers
- 2. Decimals and Fractions
- 3. Percents, Graphs, and Measurement
- 4. Basic Review, Geometry, and Algebra

## Application:

These workbooks are a program in themselves, but a facilitator may easily use particular exercises or problems as necessary.

The most valuable feature of this series is the introduction of word problems and life skills application immediately after an abstract math skill is learned and practised.

Two interesting approaches used in Book 2 are the introduction of decimals before common fractions and the teaching of multiplication and division of fractions before addition and subtraction.

Ordering
Information

#### Publisher:

# Available from:

Scott, Foresman & Co. Glenview, Illinois

Canada Publishing Corporation

1990

164 Commander Blvd.

Agincourt, Ontario

M1S 3C7

**ISBN** 

0-673-24023-9 (book 1) \$7.85 Tel: (416) 293-8141

0-673-24024-X (book 2) \$7.85

\$7.85

0-673-24025-8 (book 3) 0-673-24026-6 (book 4)

\$9.85



Mathematics in Daily Living (series)

Author:

Nerissa Bell Bryant, Loy Hedgepeth

Format:

Paperback, 210 x 275 mm

Four books, 92-140 pages each

**Content:** 

This series presupposes a solid understanding of basic operations with whole numbers.

The series consists of the four books:

- 1. Fractions
- 2. Decimals and Percent
- 3. Measurement and Geometry
- 4. Fundamental Algebra

Each skill is broken down step-by-step with most lessons contained on one or two pages. There are answer keys in each book.

Application:

Clearly, these materials are for learners who have basic number skills. It does not use an integrated approach between skills and problem solving, although there are word problems at the end of each unit.

The format of each page is very clear and well laid-out. Facilitators can make the best use of these materials by selecting lessons to practise a particular skill, such as changing percentages to decimals.

# Ordering Information

Publisher:

Available from:

Steck-Vaughn Company

Austin, Texas

1985

Educational Resources Ltd. #109-8475 Ontario Street Vancouver, British Columbia

V5X 3E8

ISBN 0-8114-1513-9 (book 1)

0-8114-1514-7 (bcok 2)

0-8114-1515-5 (book 3)

0-8114-1516-3 (book 4)

Tel: (604) 324-9717

\$7.75 each



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Mathematics in Daily Living 1,2,3,4	
A New Start - Canada: Literacy Book 1,2	
A New Start - Canada: Student Book	
A New Start - Canada: Teacher Book	
The Numbers Game	
Numbers Start Here	
The Numeracy Pack	
Numeracy Training	
The Place Value Connection	
Steps to Mathematics 1,2	
Strengthening Math Skills: Books 1-5	
Viewpoints 1: Numeracy	
Working with Numbers: Ideas and Examples for Numeracy Worksheets	
Working with Numbers: The Point Book	2
Working with Numbers: The Line Book	2
Working with Numbers: The Triangle Book	
Working with Numbers: The Rectangle Book	
Working on Number: A practical approach to the teaching of numeracy	(

# References

AUSTIN, G., HAWKEN, P. and PURDEY, M. Numeracy Training. London: ALBSU and Dorset Local Education Authority, 1986.

GABER-KATZ, E. and McLEAN, F. Where to Buy Adult Literacy Materials. Toronto: Metropolitan Toronto Movement for Literacy, 1988.

PURSELL, F.J. and O'BRIEN, R.L. Books for Adult New Readers. Cleveland, Ohio: Project: LEARN, 1986.



# Other books available from the Adult Basic Education Unit:

☐ Numbers in Our Lives: Numeracy methods and materials
☐ Planning Numeracy Lessons for an ESL-Literacy Classroom: A beginning
☐ A Sequencing Guide for Numeracy: Whole numbers



# The Toronto Board of Education Adult Basic Education Unit



