

Numeracy (& some Literacy) Resources with a real life/applied learning approach

Please find below Dave's list of numeracy resources, materials and websites. The list has been built up and collected over many years of working in the numeracy (and literacy area), mainly with adults, but recently also with young people in the post-compulsory years of schooling. It is a biased, personal list, not meant to be an all inclusive list, but hopefully includes a range of resources and materials that teachers will find useful.

Dave is always happy to be sent information about other resources to add to the list.

Integrated Literacy and Numeracy Resources

Vic Roads

Vic Roads have published a set of FREE VCAL (Victorian Certificate of Applied Learning) literacy, numeracy and PDS units all around road safety issues. Suitable for any literacy or numeracy course though. There are 11 different units covering different levels. They provide activity outlines and suggestions with comprehensive guidance to teachers, including Worksheets and Assessment record proformas. To access the free pdf files and Word versions of the Assessment proformas (and to ask for a hard copy of it all too) go to:

<http://www.vicroads.vic.gov.au/vcal>

Also recommended:

VicRoads CrashStats site at: <http://crashstat1.roads.vic.gov.au/crashstats/crash.htm>

The Transport Accident Commission Crash Database: <http://www.tacsafety.com.au/>

Consumer Affairs Victoria, Consumer Stuff

Consumer Affairs Victoria has produced a number of FREE resources called *Consumer Stuff* that have an applied learning focus using real-life scenarios. There are free teacher resources in the areas of Maths, English and Commerce alongside Health and Wellbeing and Consuming Planet Earth. All are already mapped against VELS and VCAL. Go to: www.consumer.vic.gov.au And follow the links to the **Publications** page and then to the **Teachers** page where you will be able to download the pdfs or order hard copies. Note: If you are a numeracy teacher, don't just look at the Maths book, look at Commerce, Health and Wellbeing and Consuming Planet Earth as they have great, real life based activities. **Note:** there is a revised Maths book due out in early 2011.

NCVER Research papers

A direct link to the NCVER website where it lists all their adult literacy and numeracy reports:

<http://www.ncver.edu.au/teaching/31035.html>

Numeracy Resources

Having Fun with Maths: Activities and Games for Developing Maths Language and Skills

By Dave Tout, published by Multifangled P/L, Yarraville, 2007 [available from: Multifangled, CAE, MAV, AAMT and elsewhere – see contacts elsewhere] The games and activities in this book focus on the development of fundamental maths skills through co-operative group work and the use of hands-on materials, as well as on enjoyment and having fun in order to build confidence and overcome maths anxiety. The photocopiable activities are designed to encourage students to work together and talk about mathematics and share their understanding. There are four sections: co-operative logic problems, dice games, calculator games and word games. Skill areas covered include: numbers and calculations, shape, location and direction and introductory algebra.

Car Costs

A workbook on the topic of cars and road safety, this numeracy book was partly funded by the RACV, called Car Costs II: a numeracy workbook. Written by Dave Tout it is available from the CAE or the MAV. See

<http://www.mav.vic.edu.au/mav-resources/mav-shop.html>

Teaching Maths in Context

And another numeracy book (more a reference book) published by ACER Press, written by Dave Tout and Gary Motteram - it argues the case for teaching maths in context and outlines different options and strategies for teaching maths and numeracy in real life contexts. Go to this web address for further information and ordering details: <http://shop.acer.edu.au/acer-shop/locate?group=MATHSWORKS>

Some other suitable new(ish) numeracy/maths books

Aspire Learning Resources, *Work it Out!* - covers 10 essential maths life skills. Each booklet addresses a different numeracy topic and is written in a clear and easy-to-understand style -

<http://www.aspirelearningresources.com.au/WIO/vproduct-628/>

Forster, Ian, et al, *Hands-on Maths in Practice*, Pearson Education Australia, Melbourne, 1997

Gunningham, Sue, 2006, *Cambridge Numeracy Workbook for VCAL*, CUP, Melbourne
 Thomson, Sue & Forster, Ian, 2006 *Access to Prevocational Maths*, Pearson Education Australia, Melbourne
 Thomson, Sue & Forster, Ian, 2007 *Access to Prevocational Maths 2*, Pearson Education Australia, Melbourne
 Vize, Anne, 2005, *Maths Skills for Living, & Maths Skills for Working*, Phoenix Education, Putney, NSW
 Weber, Lauris, 2003, *The Language of Maths (Secondary Level)*, AEE Publishing, Queensland

And some golden oldies

(All still available from CAE – see pamphlet downloadable at:

<http://www.thinkwest.org/files/CAE%20Publication%20Resources.pdf>):

Goddard, R., Marr, B., Martin, J., 1996, *Strength in Numbers: A resource book for teaching adult numeracy*, Holmesglen College of TAFE, Holmesglen, Vic
 Goddard, Ruth and Regan, Margaret, 1995, *The Value of Time: Numeracy for workers in manufacturing*, Council of Adult Education, Melbourne
 Marr, Beth; Anderson, Chris; Tout, Dave, 1994, *Numeracy on the Line: Language Based Numeracy Activities for Adults*, National Automotive Industry Training Board, Victoria
 Marr, B. & Helme, S., 1987, *Mathematics: a new beginning*, State Training Board, Victoria
 Marr, B. & Helme, S., 1995, *Some Beginnings in Algebra*, Northern Metropolitan College of TAFE, Preston, Vic.
 Marr, B., Helme, S. and Tout, D., 2003, *Rethinking Assessment. Strategies for holistic adult numeracy assessment*, Language Australia, Melbourne

CD ROMs and multimedia

Tout, Dave and Marr, Beth, *Measuring up: an interactive multimedia computer resource for numeracy learners*, Protea Textware, Melbourne, 1997 [available from: Protea Textware software: www.proteatextware.com.au]
 Lowe, Ian, 2001, *Mathematics at Work*, (CD-ROM), AAMT, Adelaide [available from MAV at: <http://www.mav.vic.edu.au/mav-resources/mav-shop.html>]
 Lowe, Ian, 2003, *People Count: Numeracy for Adults*, (CD-ROM), Ian Lowe, Melbourne [available from MAV]
 Hagston, Jan and Tout, Dave, 2001, *Brush up on your skills*, (CDROM), TAFE Frontiers, Victoria [available from <http://www.atpl.net.au/itemdetail.aspx?piid=10506>]
 Sharp Tack Productions, *Maths & Soccer* (Video with resource CD) - DVD or VHS versions), Sharp Tack Productions, Melbourne, 2002
 Sharp Tack Productions, *Maths & Cricket* (Video with resource CD) - DVD or VHS versions), Sharp Tack Productions, 2003
 Video Education Australasia (<http://www.vea.com.au/>) have a range of DVDs available, including: *ALGEBRA: A Piece of Cake!*, *Algebraic Notation - Maths as a Foreign Language*, *Into the Negative Zone! Working with Integers*, *Let's Get Straight: Linear Equations and Their Graphs*, *Life by the Numbers series*, *Making Sense of Percentages*, *That's a Bit Steep*

Other sources of resources

There is a wide range of other resources and suitable games and activities that you can use to support your mathematics and numeracy teaching. Whilst not being able to list them all individually, here are some key sources of suitable materials and resources.

1. The Mathematical Association of Victoria

Cliveden, 61 Blyth Street, Brunswick, Victoria 3056

Phone: (03) 9380 2399 Fax: (03) 9389 0399

WWW: <http://www.mav.vic.edu.au/mav-resources/mav-shop.html>

2. The Australian Association of Mathematics Teachers

GPO Box 1729, Adelaide SA 5001

Phone: (08) 8363 0288 Fax: (08) 8362 9288

WWW: <http://www.aamt.edu.au/Webshop>

3. Objective Learning Materials

PO Box 377, Berwick, Victoria 3806

Phone: (03) 9796 1177 Fax: (03) 9796 1832

WWW: <http://www.lat-olm.com.au/> (for applied learning resources see: <http://www.lat-olm.com.au/downloads/Applied-Learning-Catalogue-for-web.pdf>)

4. Education Services Australia (formerly Curriculum Corporation)

PO Box 177, Carlton South, Victoria 3053

Phone: (03) 9207 9600 Fax: (03) 9910 9800

WWW: <http://www.curriculum.edu.au/>

Curriculum Press website: <http://www.curriculumpress.edu.au/>

Maths 300 website: <http://www1.curriculum.edu.au/maths300/index.htm>

Some suitable (adult) numeracy teaching websites

Electrotechnology: <http://www.ulmitb.com.au/PreApprenticeshipPracticeTest/HomeState.do>

The EE-Oz pre-apprenticeship self assessment site, with support links at the end of the test.

Algebra resource – online: <http://www.mitac.org.au/trig/index.htm>

An Algebra resource that now also includes a trigonometry section.

Vocational numeracy: <http://www.dest.gov.au/archive/ty/litnet/numeracy/default.htm>

A vocational numeracy site, with pdfs and online navigation.

Some Numeracy toolboxes

The Cybercentre:

http://toolboxes.flexiblelearning.net.au/demosites/series4/424/enter_cybercentre/index.htm

Where's the party at?:

http://toolbox.vetonline.vic.edu.au/519/entry_page.htm

Your Online Learning Assistant (YOLA):

<http://www.flexiblelearning.net.au/products/yola.htm>

Indigenous toolboxes – worth looking at (most have literacy activities and some include numeracy too):

Certificate II in Horticulture:

<http://toolboxes.flexiblelearning.net.au/demosites/series4/422/index.html>

Certificate II in Music Industry - Deadly Jam Music Festival

<http://toolboxes.flexiblelearning.net.au/demosites/series5/516/default.htm>

Certificate I in Construction and Certificate II in General Construction

<http://toolboxes.flexiblelearning.net.au/demosites/series5/517/default.htm>

Indigenous Cultural Awareness

http://toolboxes.flexiblelearning.net.au/demosites/series9/907_demo/907/index.htm

Financial literacy & banking:

<http://www.understandingmoney.gov.au/>

<http://www.dollarsandsense.com.au/>

<http://www.financialliteracy.edu.au/>

EssiMoney: www.essimoney.com.au

<http://www.onlinebanking.org.au/>

Gambling:

http://www.responsiblegambling.qld.gov.au/education-services/resource_kit/index.shtml

<http://www.powerhousemuseum.com/gambling/>

Others: Numeracy, literacy and games websites

Skillswise

Literacy, numeracy, games, learner's stories and much more: <http://www.bbc.co.uk/skillswise/>

Funbrain

Designed for kids – but worth a quick look: <http://www.funbrain.com/cashreg/index.html>

<http://www.counton.org/games/>

<http://www.shodor.org/interactivate/activities/index.html#geo>

<http://www.mathsnet.net/geometry/solid/guessview.html>

<http://www.topmarks.co.uk/Interactive.aspx> lots of whiteboard activities

<http://www.mathsnet.net/index.html> lots of maths activities.

Worldometer: <http://www.worldometers.info/>

Rainforest maths: <http://www.rainforestmaths.com/>

KidsZone: <http://nces.ed.gov/nceskids/createagraph/default.aspx>

Mathletics: www.mathletics.com.au.

Youthcentral: <http://www.youthcentral.vic.gov.au>

This site is a valuable resource for young people wanting information about jobs and careers, services and events in their local area, studying, travel, money and more.

Comic strips: <http://www.makebeliefscomix.com/comix.php>

Hot Potatoes: <http://hotpot.uvic.ca/>

Create interactive multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering and gap-fill exercises.

Spelling: <http://www.crick.northants.sch.uk/Flash%20Studio/cfsplit/Spellings/spellings.html>

A range of activities – although some are more appropriate for primary school children.

<http://facstaff.uww.edu/jonesd/games/>

<http://www.eastoftheweb.com/games/>

<http://www.shockwave.com/wordgames.jsp>

<http://www.wordplays.com/p/index>

<http://www.millionairetv.com/>

<http://school.discovery.com/puzzlemaker/wordlists/>

<http://www.thiagi.com/freebies-and-goodies.html>

www.blackstump.com.au/puzzle.htm

<http://www.gamegecko.com/>

<http://www.teachnet.com/lesson/misc/winnergame022500.html>

For further information or feedback about numeracy resources please feel free to contact Dave Tout at ACER on tout@acer.edu.au or phone 0418 526 586.