Resources to support Mathematics and numeracy

Curriculum K–12 Directorate

Cover	Title	Short synopsis of resource
developing numeracy stage 1	Developing efficient numeracy strategies: Stage 1	The book provides teachers with a resource for programming activities in number so that students can develop a powerful and flexible understanding of how numbers are used. The activities have been designed to build upon students' current methods of solving arithmetical problems. The activities support and encourage students in using increasingly efficient strategies when completing arithmetical tasks. Distributed to schools in 2000, 2 nd edition in 2005. Also available on CD-ROM. Additional copies available from DET Sales.
Developing Efficient Numeracy Strategies Stage 2	Developing efficient numeracy strategies: Stage 2	This book provides teaching activities related to the development of multiplication and division and place value (groups of groups). Students' understanding of the base-ten number system is deepened as they come to understand its multiplicative structure. The book also focuses on the role played by recordings in shared thinking. Distributed to schools in 2003. Also available on CD-ROM. Additional copies available from DET Sales.
Fractions pixeles and american	Fractions, Pikelets and lamingtons	This book provides activities for students to develop a conceptual understanding of fractions. It highlights the role of equal parts and collections of parts that form new units. <i>Fractions: Pikelets and lamingtons</i> contains teaching activities from Kindergarten to Stage 3 and also includes a CD-ROM of learning objects such as the "Pikelet cutter". Distributed to schools in 2003. Additional copies available from DET Sales.
Patterns all states of the sta	Talking about Patterns & Algebra CD-ROM	Talking about Patterns and Algebra CD-ROM The activities described on this CD-ROM are focused on developing students' capacity to generalise about number patterns and relationships, and explain their generalisations. The teaching activities cover the range from Kindergarten to Year 6 and also contain extension activities. Available as a workshop resource for Regional consultants.





Teaching measurement Early Stops 1 and Stops 1	Teaching measurement Early Stage 1 & Stage 1	Teaching Measurement: Early Stage 1 and Stage 1 is a resource designed to help teachers to plan practical, meaningful programs in the mathematics strand of measurement. The resource includes teaching activities for length, area, volume & capacity and mass. In addition to a series of lesson ideas, each section contains one complete lesson plan including the types of questions that might be asked to assess students' knowledge of key concepts. Distributed to schools in 2003. Additional copies available from DET Sales.
Teaching measurement Slage 2 and Slage 3	Teaching measurement Stage 2 & Stage 3	This book provides practical lessons for the teaching of measurement. It emphasises the knowledge of units and their structure, practical activities, recording, estimation and questioning. Activities include length, area, volume & capacity and mass. Distributed to schools in 2004. Additional copies available from DET Sales.
Teaching about angles Stage 2	Teaching about angles: Stage 2	Teaching about angles: Stage 2 features background teaching notes and 15 lessons with accompanying activity sheets. The lesson outlines have all been extensively tested and assist students to understand what we mean by angles. Distributed to schools in 2003. Additional copies available from DET Sales.
Parents count too	Parents count too (DVD)	Parents Count Too DVD describes how young children develop early mathematics skills and introduces some of the teaching activities used in Count Me In Too. Aligned with these classroom experiences is a range of simple, practical ideas on how parents can support their children in developing early number skills at home. Included is a sheet with time codes showing the different sections of the DVD and outlining the activities included in the DVD. Copies available with Regional consultants. Additional copies available from DET Sales.
Parents Count Too Helping your child with— Messuring volume and mass state of the count of the count of the first of the county of the coun	Helping your child with pamphlets	Helping your child with numeracy pamphlets are a series of pamphlets available in English and 22 different languages. The pamphlets provide practical ideas to support children's mathematical thinking in the home environment. They can be downloaded from the Curriculum website: <http: index.htm="" mathematics="" numeracy="" parents="" primary="" www.curriculumsupport.education.nsw.gov.au=""></http:>
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Count Me In Too Indigenous (DVD) The Count Me In Too Indigenous DVD describes the implementation of the Count Me In Too Indigenous project in two schools, Batemans Bay and La Perouse. It highlights the benefits that have resulted from a numeracy project that supports collaboration between teachers, students, Aboriginal Education Assistants and the local community. Relevant and culturally appropriate mathematics activities provide a sense of belonging and meaning for the Aboriginal students.

Copies available with Regional consultants. Additional copies available from Curriculum K–12 Directorate on request.

In development



Space & geometry CD-ROM

Due to be completed in 2008

This CD contains units of work for Early Stage One to Stage Three which support students' understanding of key concepts within the Space and Geometry strand of the K-6 Mathematics syllabus. Each unit contains fully developed sequential lesson plans which focus on the substrands of 3D and 2D space. The CD also includes video clips, photographs, work samples, black-line masters and digital learning objects which support teaching and learning. A key feature of this resource is the inclusion with each lesson of suggested professional learning discussions that are aligned to the Quality Teaching framework.

Professional development programs

Cover	Title	Short synopsis of resource
Count Me In Too	Count Me In Too	The Count Me In Too professional learning program is supported by trained facilitators (under the Early Literacy and Numeracy Initiative) and through an online program. In each case a school coordinator leads the project within the school and facilitates implementation. [Count Me In Too School facilitator course: 151CUK005]
		Count Me In Too Online (NSW Institute of Teachers 151CUK002) For the online program, the schools are provided with copies of the 123 Count with me CD-ROM and a booklet outlining tasks to support the teachers in implementing and maintaining CMIT in their schools. In addition, a Count Me In Too Beginners course (NSW Institute of Teachers 151CUK001) is registered for regional delivery.
Taching and Learning about Decimals by Voll Stories, Vos Server, and Charles the Clark Charles and Charles Cha	Counting On	The <i>Counting On</i> professional learning program is supported by school-based facilitators (under AGQTP). The facilitator's role (151CUK007) supports the implementation of the program within the school (151CUK008). Teachers develop the professional knowledge needed to analyse students' solution strategies, including Newman's error analysis, and to support the learning of using more efficient strategies.

Disability Programs

Cover	Title	Short synopsis of resource
Supporting Numeracy Supporting Numeracy umeracy umeracy	Supporting Numeracy CD-ROM	The Effective Numeracy Practices CD-ROM Supporting Numeracy provides information that will help teachers implement the teaching and learning cycle as it applies to all students but with a particular emphasis on research based teaching practices shown to be effective for students with learning difficulties. The focus of the CD-ROM is effective teaching of number sense, conceptual understanding and procedural proficiency within the Number Strand of mathematics. It contains assessments of counting, place value and addition, detailed lesson plans, video clips of lessons, PowerPoint
		presentations, useful websites and a reference list.
	Linking BST to the Curriculum 2006 and 2007	Teaching strategies to support students with difficulties in learning. These strategies relate to specific Basic Skills Test questions and are included in the Linkages Documents produced by EMSAD.

Equity Programs and Distance Education

Cover	Title	Short synopsis of resource
Linking SNAP 2006 to the Curriculum	Linking SNAP 2006 to the Curriculum: Linking SNAP to ESL	This document explores the English language demands encountered in many numeracy tasks and outlines a number of teaching strategies to assist ESL students to engage with the English language features in order to successfully complete the numeracy tasks. Available at: <https: detwww.det.nsw.edu.au="" directorates="" emd="" pubs="" schoimpro="" snap="" snapcurrlinks06_esl.pdf=""></https:>
The second state of the se	Support Sheet #8 Numeracy in Low Socio- Economic Status (SES) School Communities	Support sheets provide theoretical underpinnings and practical strategies for improving numeracy in Priority Schools. Downloadable from http://www.psp.nsw.edu.au >
	Aboriginal Literacy and Numeracy Project 2002–2004	This document shares case studies of six PSFP schools involved in an Aboriginal Literacy and Numeracy Project conducted by the PSFP in partnership with the Aboriginal Programs Unit from 2002 to 2004.
Maths On The Net <http: index.htm="" motn="" www.cap.nsw.edu.au=""></http:>		This website is part of a suite of teaching resources designed to support math teaching in isolated rural schools that are eligible for the NSW Country Areas Programme (CAP). This resource is moderated and aims to provide fortnightly arithmetical challenges appropriate for Kindergarten to Stage 3 with stage 4 to be added in 2008. Additionally the site has ongoing maths challenges that are updated on a term basis.