Primary_SP: Primary PGCE - Specialism Mathematics for Maths Route Students

Course start date: 29/08/2017



1.

Askew, M. Chapter 2: It ain't (just) what you do: effective teachers of numeracy. in Issues in teaching numeracy in primary schools (ed. Thompson, I.) 31–44 (Open University Press, 2010).

2.

Brown, M. Chapter 13: Debates in mathematical curriculum and assessment. in Debates in mathematics education vol. Debates in subject teaching series (Routledge, 2013).

З.

Aldrich, R. & Crook, D. Mathematics, arithmetic and numeracy: an historical perspective. in Why learn maths? vol. Bedford Way papers 26–47 (Institute of Education, University of London, 2000).

4.

Learning Outside the Classroom Manifesto.

5.

Ernest, P. Why teach mathematics? in Why learn maths? vol. Bedford Way papers 1–14 (Institute of Education, University of London, 2000).

6.

Hansen, A. & Vaukins, D. Chapter 1: Mathematics as a Core Skill. in Primary mathematics across the curriculum vol. Transforming primary QTS 5–29 (SAGE, 2012).

7.

Noyes, A. Mathematics counts... for what? Rethinking the mathematics curriculum in England. Philosophy of Mathematics Education Journal **21**,.

8.

Carraher, T. N., Carraher, D. W. & Schliemann, A. D. Mathematics in the streets and in schools. British Journal of Developmental Psychology **3**, 21–29 (1985).

9.

Ofsted. Mathematics : made to measure : messages from inspection evidence.

10.

Reynolds, D. & Muijs, D. Numeracy matters: contemporary policy issues in the teaching of mathematics. in Issues in teaching numeracy in primary schools 17–26 (Open University Press, 2010).

11.

Pitt, A. Mathematical thinking? Mathematics teaching 181, 3-5.

12.

David W Stinson. Mathematics as 'Gate-Keeper' (?): Three Theoretical Perspectives that Aim Toward Empowering All Children With a Key to the Gate. The Mathematics Educator **14**, (2004).

13.

Askew, M. Chapter 9: Teaching tripod: tasks. in Transforming primary mathematics: understanding classroom tasks, tools and talk 97–108 (Routledge, 2016).

doi:10.4324/9781315667256.

14.

Sriraman, B. & English, L. Problem solving for the 21st Century. in Theories of mathematics education: seeking new frontiers vol. Advances in mathematics education (Springer, 2010).

15.

Barmby, P., Bolden, D. & Thompson, L. Chapter 5: Reasoning with problems. in Understanding and enriching problem solving in primary mathematics vol. Critical teaching 46–61 (Critical Publishing, 2014).

16.

Monaghan, F. 'Don't think in your head, think aloud': ICT and exploratory talk in the primary mathematics classroom. Research in Mathematics Education **7**, 83–100 (2005).

17.

Pope, S. The use of origami in the teaching of geometry. Proceedings of the British Society for Research into Learning Mathematics **22**, 67–73 (2002).

18.

Back, J. Creative Approaches to Mathematics Across the Curriculum : nrich.maths.org. (2005).

19.

Barnes, J. Cross-curricular learning 3-14. (SAGE, 2015).

20.

Barnes, J. Chapter 5: What does neuro-science tell us about cross-curricular learning? in

Cross-curricular learning 3-14 (SAGE, 2015).

21.

Boaler, J. Chapter 9: What does neuro-science tell us about cross-cultural learning? in Mathematical mindsets: unleashing students' potential through creative math, inspiring messages, and innovative teaching 171–208 (Jossey-Bass & Pfeiffer Imprints, 2016).

22.

Fox, S. & Surtees, L. Mathematics across the curriculum: problem-solving, reasoning, and numeracy in primary schools. (Continuum, 2010).

23.

Hansen, A. & Vaukins, D. Primary mathematics across the curriculum. vol. Transforming primary QTS (SAGE, 2012).

24.

NicMhuirí, S. Teacher, do you know the answer? Initial attempts at the facilitation of a discourse community. in Proceedings of the British Society for Research into Learning Mathematics vol. 31 119–124.

25.

Williams, Helen. To What Extent Might Role Play Be a Useful Tool for Learning Mathematics? Mathematics Teaching 17–20 (2012).

26.

Cai, J. & Lester, F. Why is teaching with problem solving important to student learning? Problem Solving Research Brief.

27.

Cai, J. What research tells us about teaching mathematics through problem solving.

Research and issues in teaching mathematics through problem solving 241–254 (2003).

28.

Barmby, P., Bolden, D. & Thompson, L. Understanding and enriching problem solving in primary mathematics. vol. Critical teaching (Critical Publishing, 2014).

29.

Burkhardt, H. & Bell, A. Problem Solving in the United Kingdon. ZDM-International Journal on Mathematics Education **39**, (2007).

30.

Fox, S. & Surtees, L. Mathematics across the curriculum: problem-solving, reasoning, and numeracy in primary schools. (Continuum, 2010).

31.

Pratt, N. Chapter 5: Thinking, talking and acting mathematically. in Interactive maths teaching in the primary school 48–67 (Paul Chapman, 2006). doi:10.4135/9781446213384.

32.

Sangster, M. The rise and fall of an investigative approach to mathematics in primary education. in Proceedings of the British Society for Research into Learning Mathematics vol. 32.

33.

Susan J. Lamon, 1949-. Teaching fractions and ratios for understanding essential content knowledge and instructional strategies for teachers / Susan J. Lamon.

34.

Wilson, E. Introduction: Why should teachers do school-based research? in School-based research: a guide for education students 1–10 (London, 2012).

35.

Biggs, J. B., Tang, C. S., & Society for Research into Higher Education. Teaching for quality learning at university: what the student does. (McGraw-Hill/Society for Research into Higher Education & Open University Press, 2011).

36.

Stein, M. K., Engle, R. A., Smith, M. S. & Hughes, E. K. Orchestrating Productive Mathematical Discussions: Five Practices for Helping Teachers Move Beyond Show and Tell. Mathematical Thinking and Learning **10**, 313–340 (2008).

37.

Rowland, T., Turner, F., Thwaites, A. & Huckstep, P. Chapter 3: Transformation: using and understanding representations in mathematics teaching. in Developing primary mathematics teaching: reflecting on practice with the Knowledge Quartet 41–66 (SAGE, 2009).

38.

Ell, F. Strategies and thinking about number in children aged 9-11 Years.

39.

Delaney, K. Making connections: teachers and children using resources effectively. in Issues in teaching numeracy in primary schools 72–83 (Open University Press, 2010).

40.

Bruse, C. D. Student Interaction in the Math Classroom: Stealing Ideas or Building Understanding? (2007).

Brosnan, P., Schmidlin, A. & Grant, M. R. Successful mathematics achievement is attainable. in International guide to student achievement vol. Educational psychology handbook series (Routledge, 2013).

42.

Barmby, P., Bolden, D. & Thompson, L. Chapter 6: Assessing Problem Solving. in Understanding and enriching problem solving in primary mathematics vol. Critical teaching 74–88 (Critical Publishing, 2014).

43.

Scaffolding Students' Thinking in Mathematical Investigations. Australian Primary Mathematics Classroom 14, 27–32 (2009).

44.

Wheeldon, Irene. Peer Talk. Mathematics Teaching Incorporating Micromath **199**, 39–41 (2006).

45.

Askew, M. Chapter 11: Teaching tripod: talk. in Transforming primary mathematics (Routledge, 2016). doi:10.4324/9781315667256.

46.

Askew, M. Chapter 10: Teaching Tripod: Tools. in Transforming primary mathematics: understanding classroom tasks, tools and talk 109–127 (Routledge, 2016). doi:10.4324/9781315667256.

47.

Kyriacou, C. & Issitt, J. Teacher-pupil dialogue in mathematics lessons. in Proceedings of the British Society for Research into Learning Mathematics vol. 27 (2007).

Beishuizen, M. The empty number line. in Issues in teaching numeracy in primary schools (ed. Thompson, I.) 174–187 (OUP, 2010).

49.

Wickham, L. Generating mathematical talk in the key stage 2 classroom. Proceedings of the British Society for Research into Learning mathematics vol. (2) 115–120 (2008).

50.

Murphy, C. Comparing the use of the empty number line in England and the Netherlands. British Educational Research Journal **37**, 147–161 (2011).

51.

Barmby, P., Harries, T., Higgins, S. & Suggate, J. The array representation and primary children's understanding and reasoning in multiplication. Educational Studies in Mathematics **70**, 217–241 (2009).

52.

Mathematical Association. Maths talk. (The Mathematical Association and Stanley Thornes, 1992).

53.

Victoria R. Jacobs, Lisa L. C. Lamb and Randolph A. Philipp. Professional Noticing of Children's Mathematical Thinking. Journal for Research in Mathematics Education **41**, 169–202 (2010).

54.

RICHARD R. SKEMP. Relational Understanding and Instrumental Understanding. Mathematics Teaching in the Middle School **12**, 88–95 (2006).

55.

Hook, P. & Mills, J. SOLO taxonomy: a guide for schools: Book 1. A common language of learning. (Essential Resources Ltd, 2012).

56.

Hook, P. & Mills, J. SOLO taxonomy: a guide for schools: Book 2. Planning for differentiation. (Essential Resources Ltd, 2012).

57.

Biggs, J. B. & Collis, K. F. Evaluating the quality of learning: the SOLO taxonomy [Structure of the Observed Learning Outcome]. vol. Educational psychology (Academic Press, 1982).

58.

Boaler, J. Chapter 9: Teaching mathematics for a growth mindset. in Mathematical mindsets: unleashing students' potential through creative math, inspiring messages, and innovative teaching 171–208 (Jossey-Bass & Pfeiffer Imprints, 2016).

59.

Hattie, J. Visible learning for teachers: maximizing impact on learning. (Routledge, 2012). doi:10.4324/9780203181522.

60.

Collins, S. Chapter 8: Making learning meaningful and valuing intelligence. in Neuroscience for learning and development: how to apply neuroscience and psychology for improved learning and training 121–138 (Kogan Page Limited, 2016).

61.

Hattie, J. & Yates, G. C. R. Chapter 14: How knowledge is stored in the mind. in Visible learning and the science of how we learn 126–135 (Routledge, 2014).

British Educational Research Association (BERA). Ethical guidelines.

63.

DfES. Access and engagement in mathematics: guidance for teaching EAL learners maths (KS3 National Strategy). (2002).

64.

Drews, D. & Hansen, A. Using resources to support mathematical thinking: primary and early years. vol. Achieving QTS. Practical handbooks (Learning Matters, 2007).

65.

Fielker, D. Chapter 3: Another approach. in Extending mathematical ability through whole class teaching vol. Managing primary mathematics (Hodder & Stoughton, 1997).

66.

Higgs, S. Chapter 5: Parlez-vous mathematics? in Enhancing primary mathematics teaching 54–64 (Open University Press, 2003).

67.

Watson, A. & Mason, J. Mathematics as a constructive activity: learners generating examples. vol. Studies in mathematical thinking and learning (Lawrence Erlbaum Associates, 2005).

68.

Donaldson, G. Becoming a primary mathematics specialist teacher. (Routledge, 2012).

69.

NCETM. Developing mathematics in Primary Schools.

Tarrant, P. & Holt, D. Chapter 10: Becoming better learners. in Metacognition in the primary classroom: a practical guide to helping children understand how they learn best 123–134 (Routledge, 2016). doi:10.4324/9781315731636.

71.

Ashby, B. Exploring children's attitudes towards mathematics. Proceedings of the British Society for Research into Learning Mathematics vol. 29 7–12 http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.530.8962&rep=rep1& type=pdf (2009).

72.

Rowland, T., Turner, F., Thwaites, A. E. & Huckstep, P. Chapter 2: Knowledge for Teaching Mathematics: introducing the knowledge quartet framework. in Developing Primary Mathematics Teaching: Reflecting on Practice with the Knowledge Quartet 18–40 doi:10.4135/9781446279571.

73.

Boaler, J. The 'Psychological Prisons' from which They Never Escaped: the role of ability grouping in reproducing social class inequalities. FORUM **47**, (2005).

74.

Boylan, M. & Povey, H. Ability Thinking. in Debates in mathematics education vol. Debates in subject teaching series (Routledge, 2013).

75.

Brown, T. Coordinating mathematics across the primary school. vol. Subject leader's handbooks (Falmer P., 1998).

76.

Dweck, C. S. Mindset. (Robinson, 2012).

Elton-Chalcraft, S., Hansen, A. & Twiselton, S. Chapter 2: Moving from Reflective Practitioner to Practitioner Researcher. in Doing classroom research: a step-by-step guide for student teachers 11–26 (Open University Press, 2008).

78.

Lorenz, J. H. On some psychological aspects of mathematics achievement assessment and classroom interaction. Educational Studies in Mathematics 13, 1–19 (1982).

79.

What We Can Do about Achievement Disparities. Educational Leadership 65, 54-59 (2007).

80.

Scaffolding Students' Thinking in Mathematical Investigations. Australian Primary Mathematics Classroom 14, 27–32 (2009).

81.

Marks, R. 'Ability' in primary mathematics education: patterns and implications. Research in Mathematics Education **13**, 305–306 (2011).

82.

NCETM. Mathematics Matters Final Report.

83.

Beyond levels: alternative assessment approaches developed by teaching schools - GOV.UK.

Radford, J., Blatchford, P. & Webster, R. Opening up and closing down: comparing teacher and TA talk in mathematics lessons.

85.

Ruthven, K. Ability stereotyping in mathematics. Educational Studies in Mathematics **18**, 243–253 (1987).

86.

WATSON, A. Paradigmatic Conflicts in Informal Mathematics Assessment as Sources of Social Inequity. Educational Review **51**, 105–115 (1999).

87.

Whitehorn, Tara. School support staff topic paper.

88.

Anghileri, J. Teaching number sense. (Continuum, 2006).

89.

Askew, M. Transforming primary mathematics: understanding classroom tasks, tools and talk. (Routledge, 2016).

90.

Boaler, J. The Elephant in the Classroom: Helping Children Learn and Love Maths. (Souvenir Press, 2015).

91.

Boaler, J. Mathematical mindsets: unleashing students' potential through creative math, inspiring messages, and innovative teaching. (Jossey-Bass & Pfeiffer Imprints, 2016).

Briggs, S. Meeting special educational needs in primary classrooms: inclusion and how to do it. (Routledge, 2016).

93.

Burton, L. Children learning mathematics: patterns and relationships. vol. Primary matters (Simon & Schuster Education, 1994).

94.

Donaldson, G. Becoming a primary mathematics specialist teacher. (Routledge, 2012).

95.

Haylock, D. & Manning, R. Mathematics explained for primary teachers. (SAGE Publications, 2014).

96.

Hook, P., Gravett, C., Howard, M. & John, E. SOLO taxonomy in mathematics: strategies for thinking like a mathematician. (Essential Resources, 2014).

97.

Hughes, M. Children and number: difficulties in learning mathematics. (Basil Blackwell, 1986).

98.

Leslie, D. & Mendick, H. Debates in mathematics education. vol. Debates in subject teaching series (Routledge, 2013).

Pratt, N. Interactive maths teaching in the primary school. (Paul Chapman, 2006).

100.

Sutherland, R. Teaching for learning mathematics. (Open University P., 2007).

101.

Proceedings of the British Society for Research into Learning Mathematics (BSRLM). http://www.bsrlm.org.uk/.

102.

Association of Teachers of Mathematics - ATM. https://www.atm.org.uk/.

103.

British Society for Research into Learning Mathematics. Research in mathematics education.

104.

Educational studies in mathematics.

105.

National Council of Teachers of Mathematics. Journal for research in mathematics education. (1970).

106.

Denby, N. Masters level study in education. (Open University Press, 2008).

107.

Bell, J. & Waters, S. Doing your research project: a guide for first-time researchers. (Open University Press, 2014).

108.

Bonnett, A. How to argue. vol. Smarter study skills (Pearson Education, 2011).

109.

Bryan, H., Carpenter, C. & Hoult, S. Learning and teaching at M-level: a guide for student teachers. (SAGE, 2010).

110.

Cohen, L., Bell, R., Manion, L., McCulloch, G. & Morrison, K. Research methods in education . (Routledge, 2011).

111.

Cottrell, S. Critical thinking skills: developing effective analysis and argument. vol. Palgrave study skills (Palgrave Macmillan, 2017).

112.

Denscombe, M. The good research guide: for small-scale social research projects. vol. Open UP study skills (Open University Press, 2017).

113.

Godfrey, J. How to use your reading in your essays. vol. Palgrave study skills (Palgrave Macmillan, 2013).

114.

McMillan, K. & Weyers, J. D. B. How to cite, reference & avoid plagiarism at university. vol. Smarter study skills (Pearson Education, 2013).

McMillan, K. & Weyers, J. D. B. How to Write for University. (Pearson, 2014).

116.

Pears, R. & Shields, G. J. Cite them right: the essential referencing guide. vol. Palgrave study skills (Palgrave, 2016).

117.

Sewell, K. Doing your PGCE at M-level: a guide for students. (SAGE, 2012).

118.

Swatridge, C. The Oxford guide to effective argument and critical thinking. (Oxford University Press, 2014).

119.

Wallace, M. & Wray, A. Critical reading and writing for postgraduates. vol. SAGE study skills (SAGE, 2016).

120.

Wyse, D. The good writing guide for education students. vol. Sage study skills (SAGE, 2012).

121.

Aubrey, K. & Riley, A. Understanding and using educational theories. (SAGE, 2016).

122.

Bates, B. Learning theories simplified: - and how to apply them to teaching. (SAGE, 2016).

Collins, S. Neuroscience for learning and development: how to apply neuroscience and psychology for improved learning and training. (Kogan Page Limited, 2016).

124.

Bruner, J. S. Toward a theory of instruction. (Belknap Press, 1966).

125.

Cozolino, L. J. The social neuroscience of education: optimizing attachment and learning in the classroom. vol. Norton books in education (Norton, 2013).

126.

Colwell, J. & Pollard, A. Readings for reflective teaching in early education. vol. Reflective teaching series (Bloomsbury Academic, 2015).

127.

Arthur, J. & Cremin, T. Learning to teach in the primary school. (Routledge, 2014).

128.

Dewey, J. Experience and education. (Kappa Delta Pi, 1998).

129.

Carol Dweck. Mindset: Changing the way you think to fulfil your potential. (Robinson, 2017).

Gagné, R. M. The conditions of learning and theory of instruction. (Holt, Rinehart and Winston, 1986).

131.

Gardner, H. Multiple intelligences: new horizons in theory and practice. (BasicBooks, 2006).

132.

Geake, J. G. The brain at school: educational neuroscience in the classroom. (Open University Press, 2009).

133.

Gray, C. & MacBlain, S. Learning theories in childhood. (SAGE, 2015).

134.

Hansen, A. Primary professional studies. vol. Transforming primary QTS (Learning Matters, 2015).

135.

Hattie, J. & Yates, G. C. R. Visible learning and the science of how we learn. (Routledge, 2014).

136.

Illeris, K. Contemporary theories of learning: learning theorists - in their own words. (Routledge, 2009).

137.

Maslow, Abraham H. The farther reaches of human nature. The Journal of Transpersonal Psychology ${f 1}$,.

Miller, L. & Pound, L. Theories and approaches to learning in the early years. vol. Critical issues in the early years series (SAGE, 2011).

139.

Moore, A. Teaching and learning: pedagogy, curriculum and culture. (Routledge, 2012).

140.

Piaget, J. The construction of reality in the child. (Basic Books, 1954).

141.

Pollard, A. Readings for reflective teaching in schools. vol. Reflective teaching series (Bloomsbury Academic, 2014).

142.

Agbah, F. Ways of learning. (Printing and Publishing Unit for Continuing Education, 1987).

143.

Sancisi, L. & Edgington, M. Developing high quality observation, assessment and planning in the early years: made to measure. (Routledge, 2015).

144.

Sousa, D. A. Mind, brain, and education: neuroscience implications for the classroom. (Solution Tree Press, 2010).

145.

Vygotsky, L. Thought and language. (MIT Press, 1962).

Vygotskii, L. S., Cole, M. & Luriia, A. R. Mind in society: the development of higher psychological processes. (Harvard University Press, 1978).