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: Thompson, I. (ed.) Issues in teaching numeracy in primary schools. pp. 31–44. Open University Press, Buckingham (2010).

2.

Brown, M.: Chapter 13: Debates in mathematical curriculum and assessment. In: Debates in mathematics education. Routledge, New York, NY (2013).

З.

Aldrich, R., Crook, D.: Mathematics, arithmetic and numeracy: an historical perspective. In: Why learn maths? pp. 26–47. Institute of Education, University of London, London (2000).

4.

Learning Outside the Classroom Manifesto, http://webarchive.nationalarchives.gov.uk/20130401151715/http://www.education.gov.uk/ publications/eOrderingDownload/LOtC.pdf.

5.

Ernest, P.: Why teach mathematics? In: Why learn maths? pp. 1–14. Institute of Education, University of London, London (2000).

Hansen, A., Vaukins, D.: Chapter 1: Mathematics as a Core Skill. In: Primary mathematics across the curriculum. pp. 5–29. SAGE, Los Angeles (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). https://doi.org/10.1111/j.2044-835X.1985.tb00951.x.

9.

Ofsted: Mathematics : made to measure : messages from inspection evidence, http://ucl-primo.hosted.exlibrisgroup.com/primo_library/libweb/action/display.do?tabs=det ailsTab&ct=display&fn=search&doc=UCL_IOE_DERA_DS14522&indx= 2&recIds=UCL_IOE_DERA_DS14522&recIdxs=1&elementId=1&render Mode=poppedOut&displayMode=full&frbrVersion=&vid=UCL_VU1&m ode=Basic&frbg=&srt=rank&tab=local&dscnt=0&scp.scps=scop e%3A%28UCL%29%2Cprimo_central_multiple_fe&vl(freeText0)=Mathematics%3A%2 0made%20to%20measure&dum=true&dstmp=1501166399086.

10.

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

11.

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

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. pp. 97–108. Routledge, London (2016). https://doi.org/10.4324/9781315667256.

14.

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

15.

Barmby, P., Bolden, D., Thompson, L.: Chapter 5: Reasoning with problems. In: Understanding and enriching problem solving in primary mathematics. pp. 46–61. Critical Publishing, Northwich (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). https://doi.org/10.1080/14794800008520147.

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).

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

20.

Barnes, J.: Chapter 5: What does neuro-science tell us about cross-curricular learning? In: Cross-curricular learning 3-14. SAGE, London (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. pp. 171–208. Jossey-Bass & Pfeiffer Imprints, San Francisco, CA (2016).

22.

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

23.

Hansen, A., Vaukins, D.: Primary mathematics across the curriculum. SAGE, Los Angeles (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. pp. 119–124.

25.

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

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. Critical Publishing, Northwich (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, London (2010).

31.

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

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. pp. 1–10. London, Los Angeles (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, Maidenhead (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). https://doi.org/10.1080/10986060802229675.

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. pp. 41–66. SAGE, London (2009).

38.

Ell, F.: Strategies and thinking about number in children aged 9-11 Years, https://e-asttle.tki.org.nz/content/download/1473/5952/version/1/file/17.+Strategies+and+thinking+about+number+2001.pdf.

39.

Delaney, K.: Making connections: teachers and children using resources effectively. In:

Issues in teaching numeracy in primary schools. pp. 72–83. Open University Press, Maidenhead (2010).

40.

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

http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Bruce.pdf, (2007).

41.

Brosnan, P., Schmidlin, A., Grant, M.R.: Successful mathematics achievement is attainable. In: International guide to student achievement. Routledge, New York (2013).

42.

Barmby, P., Bolden, D., Thompson, L.: Chapter 6: Assessing Problem Solving. In: Understanding and enriching problem solving in primary mathematics. pp. 74–88. Critical Publishing, Northwich (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, London (2016). https://doi.org/10.4324/9781315667256.

Askew, M.: Chapter 10: Teaching Tripod: Tools. In: Transforming primary mathematics: understanding classroom tasks, tools and talk. pp. 109–127. Routledge, London (2016). https://doi.org/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 (2007).

48.

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

49.

Wickham, L.: Generating mathematical talk in the key stage 2 classroom. (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). https://doi.org/10.1080/01411920903447423.

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). https://doi.org/10.1007/s10649-008-9145-1.

52.

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

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, Laughton (2012).

56.

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

57.

Biggs, J.B., Collis, K.F.: Evaluating the quality of learning: the SOLO taxonomy [Structure of the Observed Learning Outcome]. Academic Press, New York (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. pp. 171–208. Jossey-Bass & Pfeiffer Imprints, San Francisco, CA (2016).

59.

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

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. pp. 121–138. Kogan Page Limited, London (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. pp. 126–135. Routledge, London (2014).

62.

British Educational Research Association (BERA): Ethical guidelines, https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-2011.pdf?nor edirect=1.

63.

DfES: Access and engagement in mathematics: guidance for teaching EAL learners maths (KS3 National Strategy), https://www.naldic.org.uk/Resources/NALDIC/Teaching%20and%20Learning/ma_eal.pdf, (2002).

64.

Drews, D., Hansen, A.: Using resources to support mathematical thinking: primary and early years. Learning Matters, Exeter (2007).

65.

Fielker, D.: Chapter 3: Another approach. In: Extending mathematical ability through whole class teaching. Hodder & Stoughton, London (1997).

66.

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

Watson, A., Mason, J.: Mathematics as a constructive activity: learners generating examples. Lawrence Erlbaum Associates, Mahwah, N.J. (2005).

68.

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

69.

NCETM: Developing mathematics in Primary Schools, https://www.ncetm.org.uk/public/files/651170/Developing+mathematics+in+Primary+Sch ools.pdf.

70.

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. pp. 123–134. Routledge, London (2016). https://doi.org/10.4324/9781315731636.

71.

Ashby, B.: Exploring children's attitudes towards mathematics, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.530.8962&rep=rep1& type=pdf.

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. pp. 18–40. https://doi.org/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).

Boylan, M., Povey, H.: Ability Thinking. In: Debates in mathematics education. Routledge, New York, NY (2013). https://doi.org/10.4324/9780203762585.

75.

Brown, T.: Coordinating mathematics across the primary school. Falmer P., London (1998).

76.

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

77.

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. pp. 11–26. Open University Press, Maidenhead (2008).

78.

Lorenz, J.H.: On some psychological aspects of mathematics achievement assessment and classroom interaction. Educational Studies in Mathematics. 13, 1–19 (1982). https://doi.org/10.1007/BF00305495.

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).

Marks, R.: 'Ability' in primary mathematics education: patterns and implications. Research in Mathematics Education. 13, 305–306 (2011). https://doi.org/10.1080/14794802.2011.624753.

82.

NCETM: Mathematics Matters Final Report, https://oggiconsulting.com/wp-content/uploads/2018/05-Further-Reading/Mathematics-Matt ers-Final-Report.pdf.

83.

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

https://www.gov.uk/government/publications/beyond-levels-alternative-assessment-approa ches-developed-by-teaching-schools.

84.

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). https://doi.org/10.1007/BF00386197.

86.

WATSON, A.: Paradigmatic Conflicts in Informal Mathematics Assessment as Sources of Social Inequity. Educational Review. 51, 105–115 (1999). https://doi.org/10.1080/00131919997551.

87.

Whitehorn, Tara: School support staff topic paper, http://ucl-primo.hosted.exlibrisgroup.com/primo_library/libweb/action/display.do?tabs=det ailsTab&ct=display&fn=search&doc=UCL_IOE_DERA_DS84&indx=1&a mp;recIds=UCL_IOE_DERA_DS84&recIdxs=0&elementId=0&renderMode=p oppedOut&displayMode=full&frbrVersion=&frbg=&&dscnt=0&a mp;scp.scps=scope%3A%28UCL%29%2Cprimo_central_multiple_fe&tb=t&mode =Basic&vid=UCL_VU1&srt=rank&tab=local&dum=true&vl(freeTe xt0)=School%20Support%20Staff%20Topic%20Paper&dstmp=1501183009430.

88.

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

89.

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

90.

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

91.

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

92.

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

93.

Burton, L.: Children learning mathematics: patterns and relationships. Simon & Schuster Education, Hemel Hempstead (1994).

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

95.

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

96.

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

97.

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

98.

Leslie, D., Mendick, H.: Debates in mathematics education. Routledge, New York, NY (2013).

99.

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

100.

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

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, Maidenhead (2008).

107.

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

108.

Bonnett, A.: How to argue. Pearson Education, Harlow (2011).

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

110.

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

111.

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

112.

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

113.

Godfrey, J.: How to use your reading in your essays. Palgrave Macmillan, Basingstoke (2013).

114.

McMillan, K., Weyers, J.D.B.: How to cite, reference & avoid plagiarism at university. Pearson Education, Harlow (2013).

115.

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

Pears, R., Shields, G.J.: Cite them right: the essential referencing guide. Palgrave, London (2016).

117.

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

118.

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

119.

Wallace, M., Wray, A.: Critical reading and writing for postgraduates. SAGE, Los Angeles (2016).

120.

Wyse, D.: The good writing guide for education students. SAGE, Thousand Oaks, Calif (2012).

121.

Aubrey, K., Riley, A.: Understanding and using educational theories. SAGE, Los Angeles (2016).

122.

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

123.

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

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

125.

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

126.

Colwell, J., Pollard, A.: Readings for reflective teaching in early education. Bloomsbury Academic, London (2015).

127.

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

128.

Dewey, J.: Experience and education. Kappa Delta Pi, West Lafayette, Ind (1998).

129.

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

130.

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

131.

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

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

133.

Gray, C., MacBlain, S.: Learning theories in childhood. SAGE, Los Angeles (2015).

134.

Hansen, A.: Primary professional studies. Learning Matters, London (2015).

135.

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

136.

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

137.

Maslow, Abraham H: The farther reaches of human nature. The Journal of Transpersonal Psychology. 1,.

138.

Miller, L., Pound, L.: Theories and approaches to learning in the early years. SAGE, Los Angeles (2011).

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

140.

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

141.

Pollard, A.: Readings for reflective teaching in schools. Bloomsbury Academic, London (2014).

142.

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

143.

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

144.

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

145.

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

146.

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