

## EP905: PGCE Secondary Subject Studies: Computer Science

[View Online](#)

Abbott, I., Huddleston, P., & Middlewood, D. (Eds.). (2019). Preparing to teach in secondary schools: a student teacher's guide to professional issues in secondary education (Fourth edition). McGraw-Hill Education. <https://go.exlibris.link/FR1cwz1X>

Abell, S. K. (2008). Twenty Years Later: Does pedagogical content knowledge remain a useful idea? *International Journal of Science Education*, 30(10), 1405–1416.  
<http://0-www.tandfonline.com.pugwash.lib.warwick.ac.uk/doi/abs/10.1080/09500690802187041>

Atkinson, T., & Claxton, G. (2000). *The Intuitive practitioner: on the value of not always knowing what one is doing*. Open University Press.

Beard, C., Wilson, J. P., & Beard, C. (2006). *Experiential learning: a best practice handbook for educators and trainers* (2nd ed). Kogan Page. <https://go.exlibris.link/fjCHmcgl>

Beijaard Douwe; Meijer Pauline C.; Morine-Dershimer Greta; Harm Tillema. (2005). *Teacher Professional Development in Changing Conditions* (Softcover reprint of hardcover 1st ed. 2005). Springer-Verlag. <https://go.exlibris.link/F4DZx3Jl>

Bennedsen, J., Caspersen, M. E., & Kölling, M. (2008). Reflections on the teaching of programming: methods and implementations: Vol. LNCS sublibrary. SL 2, Programming and software engineering. Springer. <https://go.exlibris.link/6pvhSxj5>

Berry, A., Loughran, J., & van Driel, J. H. (2008). Revisiting the Roots of Pedagogical Content Knowledge. *International Journal of Science Education*, 30(10), 1271–1279.  
<http://0-www.tandfonline.com.pugwash.lib.warwick.ac.uk/doi/abs/10.1080/09500690801998885>

Bolton, G., & Delderfield, R. (2018). *Reflective practice: writing and professional development* (Fifth edition). SAGE. <https://go.exlibris.link/PwJm4hpz>

Buckingham, D. (2007). *Beyond technology: children's learning in the age of digital culture*. Polity. [http://encore.lib.warwick.ac.uk/iii/encore/record/C\\_\\_Rb2870385](http://encore.lib.warwick.ac.uk/iii/encore/record/C__Rb2870385)

Bullough, R. V. (2001). Pedagogical content knowledge circa 1907 and 1987: a study in the history of an idea. *Teaching and Teacher Education*, 17(6), 655–666.  
<http://0-www.sciencedirect.com.pugwash.lib.warwick.ac.uk/science/article/pii/S0742051X01000221?via%3Dihub>

Calderhead, J. (1988). *Teachers' professional learning*. Falmer.

Cochran, K. F., DeRuiter, J. A., & King, R. A. (1993). Pedagogical Content Knowing: An Integrative Model for Teacher Preparation. *Journal of Teacher Education*, 44(4), 263–272. <http://0-journals.sagepub.com.pugwash.lib.warwick.ac.uk/doi/10.1177/0022487193044004004>

Cremin, T. (2012). Literature review of creativity in education. <http://www.creative-little-scientists.eu/sites/default/files/Addendum%20%20Creativity%20in%20Ed%20FINAL.pdf>

CS Education Research Group. (2019). Computer Science Unplugged. <https://classic.csunplugged.org/>

Davies, J., & Merchant, G. (2009). Web 2.0 for schools: learning and social participation: Vol. New literacies and digital epistemologies. Peter Lang.

Department of Education. (2012). Subject knowledge requirements for entry into computer science teacher training. <http://www.computingschool.org.uk/data/uploads/CSSubjectKnowledgeRequirements.pdf>

Dewdney, A. K. (2001). The (new) Turing omnibus: 66 excursions in computer science (1st Holt paperback ed). Henry Holt.

Digital Skills For Tomorrow's World. (2014). <http://www.ukdigitalskills.com/wp-content/uploads/2014/07/Binder7-REDUCED2.pdf>

Dymoke, S., & Harrison, J. (2008). Reflective teaching and learning: a guide to professional issues for beginning secondary teachers. SAGE.

EPPI. (2004). What pedagogical practices do teacher educators use in Higher Education based elements of their courses? [http://epi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/TTA\\_Learning\\_protocol1.pdf?ver=2006-03-06-105329-870](http://epi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/TTA_Learning_protocol1.pdf?ver=2006-03-06-105329-870)

EPPI. (2006). A systematic map into approaches to making initial teacher training flexible and responsive to the needs of trainee teachers. <http://epi.ioe.ac.uk/cms/Default.aspx?tabid=780>

Eynon, R. (2010). Supporting the "'Digital Natives'": what is the role of schools? *Proceedings of the 7th International Conference on Networked Learning*, 851–858. <http://www.lancaster.ac.uk/fss/organisations/netlc/past/nlc2010/abstracts/PDFs/Eynon.pdf>

Facer, K. (2011). Learning futures: education, technology and social change (1st ed). Routledge. <https://go.exlibris.link/hc5J4ZZY>

Feiman-Nemser, S. (2001). From Preparation to Practice: Designing a Continuum to Strengthen and Sustain Teaching. *Teachers College Record*, 103(6), 1013–1055. <https://0-journals-sagepub-com.pugwash.lib.warwick.ac.uk/doi/abs/10.1111/0161-4681.00141>

- Gal-Ezer, J., & Harel, D. (1998). What (else) should CS educators know? *Communications of the ACM*, 41(9), 77–84.  
<http://0-dl.acm.org.pugwash.lib.warwick.ac.uk/citation.cfm?doid=285070.285085>
- Graham, C. R. (2011). Theoretical considerations for understanding technological pedagogical content knowledge (TPACK). *Computers & Education*, 57(3), 1953–1960.  
<http://0-www.sciencedirect.com.pugwash.lib.warwick.ac.uk/science/article/pii/S0360131511000911?via%3Dihub>
- Graham, R. L., Knuth, D. E., & Patashnik, O. (1994). *Concrete mathematics: a foundation for computer science* (2nd ed). Addison-Wesley. <https://go.exlibris.link/2jW0FW9R>
- Grossman, P. L. (1990). *The making of a teacher: teacher knowledge and teacher education: Vol. Professional development and practice series*. Teachers College Press, Teachers College, Columbia University.
- Guzdial, M. (2016). *Learner-centered design of computing education: research on computing for everyone: Vol. Synthesis lectures on human-centered informatics*. Morgan & Claypool Publishers. <https://go.exlibris.link/D8h7kls8>
- Halpin, D. (2007). *Romanticism and education: love, heroism and imagination in pedagogy: Vol. Continuum studies in education*. Continuum. <https://go.exlibris.link/zDNcw17j>
- Harel, D. (2003). *Computers Ltd: what they really can't do*. Oxford University Press.
- Harel, D., & Feldman, Y. A. (2004). *Algorithmics: the spirit of computing* (3rd ed). Addison Wesley. [http://encore.lib.warwick.ac.uk/iii/encore/record/C\\_\\_Rb2522778](http://encore.lib.warwick.ac.uk/iii/encore/record/C__Rb2522778)
- Hattie, J. (2009). *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*. Routledge. <https://go.exlibris.link/5xxHDw5j>
- Hazzan, O. (2008). A model for high school computer science education. *Proceedings of the 39th SIGCSE Technical Symposium on Computer Science Education - SIGCSE '08*. <http://portal.acm.org/citation.cfm?doid=1352135.1352233>
- Hazzan, O., Lapidot, T., & Ragonis, N. (2014). *Guide to teaching computer science: an activity-based approach* (Second edition). Springer-Verlag London Limited.  
<https://go.exlibris.link/pZB91QwH>
- Helsper, E. J., & Eynon, R. (2010). Digital natives: where is the evidence? *British Educational Research Journal*, 36(3), 503–520.  
<http://0-onlinelibrary.wiley.com.pugwash.lib.warwick.ac.uk/doi/10.1080/01411920902989227/abstract>
- Hey, A. J. G., & Pápay, G. (2015). *The computing universe: a journey through a revolution*. Cambridge University Press. <https://go.exlibris.link/K2LRyls0>
- Hirst, P. H., & Peters, R. S. (1970). *The logic of education: Vol. Students library of education*. Routledge & Kegan Paul. <https://go.exlibris.link/Zwx175wB>
- Howland, J. L., Jonassen, D. H., & Marra, R. M. (2013). *Meaningful learning with technology:*

Vol. Pearson custom library (Pearson New international fourth edition). Pearson.  
<https://go.exlibris.link/P85HN6HP>

Hunt, A. (2008). Pragmatic thinking and learning: refactor your 'wetware': Vol. Pragmatic programmers series. Pragmatic. <https://go.exlibris.link/rpX94YGw>

ICT in schools: 2008 to 2011. (2013). Department for Education.  
<https://www.gov.uk/government/publications/ict-in-schools-2008-to-2011>

Jenkins, H. (2009). Confronting the challenges of participatory culture: media education for the 21st century: Vol. The John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning. The MIT Press. <https://go.exlibris.link/KZxbsxmG>

Kadijevich, D. M., Angeli, C., & Schulte, C. (2013). Improving computer science education. Routledge. <https://go.exlibris.link/fnYGYZj8>

Kemp, P. (n.d.). Computing in the national curriculum: A guide for secondary teachers. Computing At School.  
<https://www.shropshirelg.net/media/189239/CAS-booklet-for-secondary-schools.pdf>

Koehler, M. J., Mishra, P., & Cain, W. (2013). What Is Technological Pedagogical Content Knowledge (TPACK)? Journal of Education, 193(3), 13–19.  
<https://0-journals-sagepub-com.pugwash.lib.warwick.ac.uk/doi/abs/10.1177/002205741319300303>

Kölling, M. (2016). Introduction to programming with greenfoot object-oriented programming in java with games and simulations (Second edition). Pearson.

Korthagen, F. A. J., & Kessels, J. P. A. M. (1999). Linking Theory and Practice: Changing the Pedagogy of Teacher Education. Educational Researcher, 28(4), 4–17.  
[http://0-www.jstor.org.pugwash.lib.warwick.ac.uk/stable/1176444?seq=1#page\\_scan\\_tab\\_contents](http://0-www.jstor.org.pugwash.lib.warwick.ac.uk/stable/1176444?seq=1#page_scan_tab_contents)

Korthagen, F., & Vasalos, A. (2005). Levels in reflection: core reflection as a means to enhance professional growth. Teachers and Teaching: Theory and Practice, 11(1), 47–71.  
<http://0-www.tandfonline.com.pugwash.lib.warwick.ac.uk/doi/abs/10.1080/1354060042000337093>

Kubica, J. (2012). Computational fairy tales (Version 1.1). Jeremy Kubica.

Kubica, J. (2013). Best practices of spell design: a computational fairy tale. [CreateSpace].

Langfield, S., & Bond, K. R. (2008). AQA computing: AS : exclusively endorsed by AQA. Nelson Thornes.

Langfield, S., & Bond, K. R. (2009). AQA A2 computing: Student's book. Nelson Thornes.

Lawson, T., & Harrison, J. K. (1999). Individual Action Planning in Initial Teacher Training: Empowerment or Discipline? British Journal of Sociology of Education, 20(1), 89–105.  
<http://0-www.tandfonline.com.pugwash.lib.warwick.ac.uk/doi/abs/10.1080/0142569999552>

Leadbetter, C., Greig, P., & Rouse, G. (2008). OCR computing for A level. Hodder Murray.  
<https://go.exlibris.link/gQsd8wlk>

Marland, M. (2002). The craft of the classroom: a survival guide: Vol. Heinemann school management (3rd ed). Heinemann Educational.

Norvig, P. (2001). Teach Yourself Programming in Ten Years.  
<http://norvig.com/21-days.html>

Noss, R. (2012). System Upgrade: Realising the vision for UK education.  
<http://discovery.ucl.ac.uk/1475950/>

O'Byrne, S., & Rouse, G. (2012). OCR Computing for GCSE. Hodder Education.  
<https://go.exlibris.link/Pt0tfTBy>

Papert, S. (1993). Mindstorms: children, computers and powerful ideas (2nd ed). Harvester Wheatsheaf. <https://go.exlibris.link/27hvHBWj>

Papert, S. (1994). The children's machine: rethinking school in the age of the computer. Harvester Wheatsheaf.

Petty, G. (2009). Evidence-based teaching: a practical approach (2nd ed). Nelson Thornes.  
<https://go.exlibris.link/xydf3KX6>

Petzold, C. (2000). Code: the hidden language of computer hardware and software (Paperback edition). Microsoft Press. <https://go.exlibris.link/ZC3xNd26>

Petzold, C. (2008). The annotated Turing: a guided tour through Alan Turing's historic paper on computability and the Turing machine. Wiley Pub.

Prensky, M. (2010). Teaching digital natives: partnering for real learning. Corwin.  
<https://go.exlibris.link/zxg4KD60>

Pritchard, A., & Woollard, J. (2010). Psychology for the classroom: constructivism and social learning: Vol. Psychology for the classroom series. Routledge.  
<https://go.exlibris.link/WYDLp1rC>

Royal Society. (2012). Shut down or restart? | Royal Society (Video).  
<https://royalsociety.org/topics-policy/projects/computing-in-schools/report/>

Saeli, M., Perrenet, J., Jochems, W. M. G., & Zwaneveld, B. (2011). Teaching Programming in Secondary School: A Pedagogical Content Knowledge P... Informatics in Education, 10 (1), 73-88.  
<http://0-search.ebscohost.com.pugwash.lib.warwick.ac.uk/login.aspx?direct=true&db=ehh&AN=67257653&site=eds-live&group=trial>

Selwyn, N. (2011a). Education and technology: key issues and debates. Continuum International Pub. Group. <https://go.exlibris.link/KQD30P2T>

Selwyn, N. (2011b). *Schools and schooling in the digital age: a critical analysis* (1st ed). Routledge. <https://go.exlibris.link/2TGwK8C4>

Selwyn, N. (2014). *Distrusting educational technology: critical questions for changing times*. Routledge. <https://go.exlibris.link/hPHr77Wb>

Shulman, L. S. (1986). Those Who Understand: Knowledge Growth in Teaching. *Educational Researcher*, 15(2), 4–14. <https://go.exlibris.link/q3sKNXxf>

Somekh, B. (2007). *Pedagogy and learning with ICT: researching the art of innovation* (1st ed). Routledge. <https://go.exlibris.link/Jkmz5CK0>

Wallace, M., & Wray, A. (2021). *Critical reading and writing for postgraduates* (4th edition). SAGE. [https://encore.lib.warwick.ac.uk/iii/encore/record/C\\_\\_Rb3685508](https://encore.lib.warwick.ac.uk/iii/encore/record/C__Rb3685508)

Webb, M., Cox, M., & King's College London. Department of Education and Professional Studies. (2007). *Information and communication technology inside the black box: assessment for learning in the ICT classroom: Vol. Black box assessment for learning series*. nferNelson.

Wenger, E. (1999). *Communities of practice: learning, meaning, and identity: Vol. Learning in doing* (1st pbk. ed). Cambridge University Press.

Wrigley, T. (2003). *Schools of hope: a new agenda for school improvement*. Trentham.