

Primary Reading List

The following set of resources is designed to support new teachers of Computing and Computer Science at primary level.

The [Programme of Study for Computing](#) in the [National Curriculum](#) should be the starting point and connected with this CAS has produced a number of guides to draw out more detail and practical advice for delivering these programmes of study. Additionally, this list contains some books and websites that typically ¹ appear on university reading lists.

Computing in the national curriculum: a guide for [primary](#)

Developed by Computing at School to help primary school teachers get started with the new curriculum and provides many pointers to excellent resources and ideas for building an innovative and exciting curriculum.

“I think the primary guidance is a fantastic document that will enable primary teachers to gain a better understanding of the new curriculum and I particularly love the section on assessment” (Deborah Ball, Dosthill Primary School)

NB. There is also a [secondary version](#) which may be of particular interest for teachers of Year 6 looking at transition of their pupils through to secondary.

QuickStart Computing

[QuickStart Computing](#) has been developed to support primary and secondary schools with the computing programme of study and provides all teachers with the resources needed to successfully run computing CPD for colleagues and has applicability for the classroom teacher in getting to grips with teaching the subject to their pupils. It contains the essential subject knowledge, with a framework and guidance for planning, teaching and assessing progress for all pupils.

Decoding the new computing programmes of study

[Decoding the new computing programmes of study](#) is a guide to the thinking behind the new Programme of Study for Computing in England. Written by Simon Peyton Jones (Chair, Computing At School) and designed to help teachers unpack some of the rather dense language in the Programmes of Study.

Computational thinking - A Guide for teachers

Computational thinking lies at the heart of the computing curriculum but it also supports learning and thinking in other areas of the curriculum and [this free guide](#) seeks to help develop a shared understanding of the teaching of computational thinking in schools. It presents a conceptual framework of computational thinking, describes pedagogic approaches for teaching and offers guides for assessment. It is

¹ This list is not exhaustive. Each university will have their own reading list. This list gives a flavour of what is available.



Primary Reading List

complementary to the two CAS guides published in November 2013 (Primary) and June 2014 (Secondary) in supporting the implementation of the new National Curriculum and embraces the [Barefoot Project for Primary](#) and [CAS QuickStart](#) Computing descriptions of computational thinking.

Additional resources for computational thinking can be found [here](#), a particular highlight is the [set of resources made available by Google](#)

Essential Reading

Allsop, Y. and Sedman, B. (2015) *Primary computing in action*. Woodbridge: John Catt Educational Ltd.

Bird, J. Caldwell, H. and Mayne, P. (eds.) (2017) *Lessons in teaching computing in primary schools*. London: Sage.

Caldwell, H. and Smith, N. (2016) *Teaching computing unplugged in primary schools: exploring primary computing through practical activities away from the computer*. London: Sage.

Cross, A. Borthwick, A. Chippindall, J. Board, J. and Beswick, K. (2016) *Curious learners in primary maths, science, computing and DT*. London: Sage.

Liukas, L. (2015), *Hello Ruby: adventures in coding*. London: Macmillan.

Livingstone, I. (2017), *Hacking the curriculum: creative computing and the power of play*. Woodbridge: John Catt Educational Ltd.

Morris, D. Uppal, G. and Wells, D. (2017) *Teaching computational thinking and coding in primary schools*. London: Sage.

Morris, D. Uppal, G. and Wells, D. (2017) *Teaching computational thinking and coding in primary schools*. London: Sage.

Turvey, K. Potter, J. and Burton, J. (2016) *Primary computing and digital technologies: knowledge, understanding and practice*. London: Sage.

Websites

Barefoot Computing. (2021) Available at: www.barefootcomputing.org/

Computer Science Education Research Group. (2021) *CSUnplugged*. Available at: <https://csunplugged.org/en/>

Primary Reading List

Raspberry Pi Foundation. (2021) *Hello World Magazine*. Available at: <https://helloworld.raspberrypi.org/>.

Teach Computing. (2021) Available at: <https://teachcomputing.org/>

The Reach Foundation. (2021) *Oak Academy*. Available at: <https://www.thenational.academy/>

Online Safety

Barber, D. and Cooper, L. (2012) *Using new web tools in the primary classroom: a practical guide for enhancing teaching and learning*. London: Routledge.

Poore, M. (2016) *Using social media in the classroom: a best practice guide*. London: Sage.

Savage, M. (2015) *Digital literacy for primary teachers (critical teaching)*. Northwich: Critical Publishing

UK Council for Internet Safety. (2020) *Education for a connected world (2020 Edition)*. <https://www.gov.uk/government/publications/education-for-a-connected-world>

UK Safer Internet Centre <https://www.saferinternet.org.uk/>

Reports

Furber, S. (2012) *Shut down or restart? The way forward for computing in UK schools*. London: Royal Society.
<<https://royalsociety.org/~media/education/computing-in-schools/2012-01-12-computing-in-schools.pdf>>

Royal Society. (2017) *After the reboot: computing education in UK schools*. London: Royal Society. <<https://royalsociety.org/~media/policy/projects/computing-education/computing-education-report.pdf>>

This resource has been made possible through contributions from individuals within the CAS community and also universities. Thanks to the following universities for contributing – The University of Gloucestershire, University of Hertfordshire