



setsa
south essex
teaching school
alliance

London and Essex Computer Hub November Update

November 2020

Bumper edition: Keep up to date with everything happening in your region!

In this issue:

- New CPD Opportunities from Teach Computing including *NEW* Course 'Higher attainment in GCSE Computer Science'
- Support for Primary and Secondary Senior Leaders
- NCCE Secondary brochure published
- What STEM Ambassadors can do for you!
- Work experience opportunities
- News of exciting research projects
- CAS (Computing at School) active in your region

Book our Upcoming Remote Courses



The internet and cyber security

Build on knowledge of local computer networks to cover the globally connected systems forming the internet.

Dates: 4 sessions
30 November 2020
3, 11 & 14 December 4-5pm

[Book here](#)



Teaching and leading KS1 computing - module 2

The second module of this course covers digital literacy and information technology, covering the whole computing curriculum. Find out how to use software creatively, safely and responsibly for inspiring projects, and plan a rigorous and inclusive curriculum .

Dates: 2 sessions
7 & 14 December 2020
1.30-3.30pm

[Book here](#)



Teaching and leading KS2 computing - module 1

This course aims to deepen understanding of computer science, information technology and digital literacy

Dates: 2 sessions
18 & 21 January 2021
2-3.30pm

[Book here](#)



Teaching and leading KS2 computing - module 2

Skilfully combining a wide range of software applications and multimedia such as video, images and sound, you will be better



Representing algorithms using flowcharts & pseudocode

Improve your knowledge of algorithms to the level



Primary programming and algorithms

Learn essential subject knowledge to become a skilled teacher of primary computing. Be prepared to teach algorithms and programming to all ages of

able to support children in creative and engaging project work across the whole primary curriculum.

Dates: 22 February & 3 March 2021 2-3.30pm

[Book here](#)

appropriate for GCSE teaching. Become confident in using the key building blocks of sequence, selection and iteration, and learn to apply algorithmic thinking.

Dates: 3 sessions 13, 18 & 21 January between 4-5.30pm

[Book here](#)

children, helping them develop their understanding through effective pedagogy.

Dates: 3 sessions 2, 5 & 9 February 2021 4-5pm

[Book here](#)

NEW COURSE

Higher attainment in GCSE Computer Science-meeting the challenge of exams-remote

Explore how to improve attainment in GCSE Computer Science, look at how students should tackle exam questions and use key resources such as moderator reports, how retrieval and interleaving can be used and mapping progression from KS3 to KS4.

Date: 4 sessions starting 21 January 2021 4-5pm

Further dates to be announced

[Read more](#)



These courses have been organised by the London and Essex Computing Hub

How we can support you

Support for Primary Senior Leaders

Teach Computing is here to help your staff grow in confidence and build the knowledge and skills to deliver high quality, inspiring computing education.

Many schools have asked us to organise effective, cost effective Computing CPD for their whole teaching body, which can be arranged virtually or face to face in 2021.

[Read more](#)



Support for Secondary Senior Leaders

Advice on how to future proof your computing department by equipping your teachers with the skills to provide high quality delivery of the computing curriculum, including a downloadable guide

[Read more](#)



What can STEM Ambassadors do for you?

STEM Ambassadors are volunteers from a wide range of science, technology, engineering and mathematics (STEM) related jobs and disciplines across the UK. STEM Ambassadors are an important and exciting **free of charge** resource for teachers and others engaging with young people, including virtual online activities.

Suggested activities they can organise are:

Primary: Guess my job, video call with a computer game developer, practical activities ie Scratch projects, running competitions and resource creation ie worksheets, podcasts and presentations

Secondary: Computing careers webinars, curriculum mentoring, acting as role models, support with real-world problem solving challenges or tutoring of disadvantaged students working below target.

Please contact your local STEM Ambassador to find out how they can support YOU in the classroom.

[Contact London Stem Ambassadors](#)

[Contact Essex STEM Ambassadors](#)

Work Experience Opportunities



Nuffield Research Placements - Year 12

Nuffield Research Placements are engaging, real world research projects, where Year 12 students can gain valuable work experience in a host organisation while developing STEM skills, including computing and technology.

On-site placements take place over 2-3 weeks in July/August alongside independent online study.

[More information and apply here](#)

Practice Labs Virtual Work Placement Project

Finding meaningful work experience in the time of covid is a real challenge, that Practice Labs are looking to address. Would you be interested in being involved in a pilot project, working with local businesses to build programs that reflect future skills pathways in cyber, data and coding?

Initially we are looking for interested teachers to participate in a short discussion workshop to help inform the work experience pathways for a 2021 launch.

For further information contact your local Computing Hub

Get involved in research projects and help shape the future of computing education.



Help improve gender balance in computing!

Gender Balance in Computing (GBIC) is a new programme of research to investigate which interventions may be effective in school to both engage female students and to increase numbers selecting computer science at GCSE and A level.

Will you join the trials starting in March 2021 and be part of the **largest national research effort to tackle this issue to date?**

Now recruiting:
Belonging, Year 5 starting March 2021
Storytelling, Year 2 starting April 2021
Non-formal learning, Year 8 starting April 2021

Further trials for academic year 2021/22

NB All resources and lesson plans are provided by the GBIC team

[Register for more information here](#)



Queen Mary University of London Research Study

Can you help QMUL with their research to better understand how teachers engage with research and universities to support computing education. The results of the research will help improve school and university engagement.

[Join the survey here](#)

Support for A Level teachers and students

Access a range of teacher CPD events, student workshops and full curriculum support resources for the AQA and OCR Examination boards at Isaac Computer Science

[Read more](#)

Full range of curriculum teaching resources KS1-4

Find everything you need to teach the complete curriculum from KS1-KS4 including lesson plans, slides, worksheets, homework and assessment

[Click here for more information](#)



Connect with your local Computing at School (CAS) Community

There are many upcoming events, find out what's happening in YOUR region

- 25 November 4-5pm [Havering Primary Community Meeting](#)
- 1 December 4-5.15pm [CAS Inspire - Computing and History - Creating animations to bring the past to life!](#)
- 2 December 4-5pm [Wickford and Basiidon Primary Community Meeting](#)
- 2 December 5-6.15pm [North London Computing Meet and Greet](#)
- 8 December 4-5.15pm [CAS Inspire - Computing and Geography - Exploring the world on a digital journey!](#)
- 8 December 4-5pm [Braintree Primary Community Meeting](#)

[Get involved here](#)

Get in touch: **Hub Lead** David Struthers d.struthers@setsa.info
Hub Project Officer Sarah Beresford-Cole s.beresfordcole@setsa.info

Follow us on Twitter [@cs_essex](#)

These emails are sent on behalf of the National Centre for Computing Education, a consortium of STEM Learning, the Raspberry Pi Foundation and BCS, The Chartered Institute for IT.

STEM Learning Limited
University of York, Heslington, York, North Yorkshire, YO10 5DD
Company registered in England and Wales. Company Number 05081097

[Unsubscribe](#)

