NCCE Teach Computing

22nd October 2020 | Mark Williams
Cornwall and Plymouth Computing Hub



Session Outline

- Introduce the NCCE & Teach Computing programme
- What role do Computing Hubs play nationally & locally
- What help and support is available to primary schools
 - Bursaries
 - CPD
 - Teaching resources
 - Hardware and kit
 - Advice & support
 - Computing clubs
- Q & A



NCCE

- National Centre for Computing Education
- A DfE backed consortium:
 - STEM Learning
 - British Computer Society
 - Raspberry Pi Foundation



NCCE Aims

The NCCE aims to improve the expertise of computing teachers from primary to KS5 – so they are able to teach the new knowledge-based computing curriculum, and the new computer science content including at GCSE and A level.

https://teachcomputing.org/about



NCCE Outcomes

 Support and improve the provision of computing education in England across all key stages.

 Increase participation and attainment levels of pupils studying computer science at GCSE and A level.

Increase teacher confidence in teaching the computing curriculum.



NCCE Aims 2

 Increase take up of computer science amongst girls and in disadvantaged areas, improving the diversity of all young people studying computing.

- Improve social mobility.
- Improve economic growth from a more highly skilled workforce.



The Teach Computing Vision

- Teach Computing programme was set up to offer support for:
 - Primary schools
 - Secondary schools
 - Post-16 colleges

The need for the support...







Primary Support

- Support for primary colleagues is offered through the Cornwall and Plymouth Computing Hub.
- Will cover the role of your local Hub later.
- The general support available to primary colleagues:
 - Bursary Supported CPD (Online, Face-to-face and remote delivery)
 - KS1 & 2 Schemes of work, lesson plans and activities
 - CAS Community Support



CPD & Bursary

- CPD is available in two formats:
 - Face-to-face (and currently remote) delivery
 - Online, self-paced courses.

 A bursary is available of £220 for each school per academic year to attend a face-to-face or daytime remotely delivered course.



Face-to-face CPD Topics

- Introduction to Primary Computing
- Teaching and Leading Key Stage 1 Computing
- Teaching and Leading Key Stage 2 Computing
- Primary Programming and Algorithms
- Outstanding Primary Computing for All*



Online CPD Topics

- There are many online courses, a selection include:
 - Approaches to Supporting Learners with SEND in Computing
 - Improving Computing Classroom Practice Through Action Research
 - Programming Pedagogy in Primary Schools
 - Teaching Programming in Primary Schools



Computing Certification

- There is the opportunity to gain a nationally recognised Computing teaching qualification in primary teaching:
 - Complete 1 F2F (or remote) course
 - Complete 1 online course
 - Engage with local CAS community



KS 1 & 2 Teaching Resources

- Teaching resources have been created for both Primary key stages.
- The resources are broken down into:
 - Years
 - Units
 - Unit guide
 - Lessons
 - Lesson plans
 - Activities & resources



Resources

- Example resources
- Full selection of resources can be found at:
- https://teachcomputing.org/curriculum

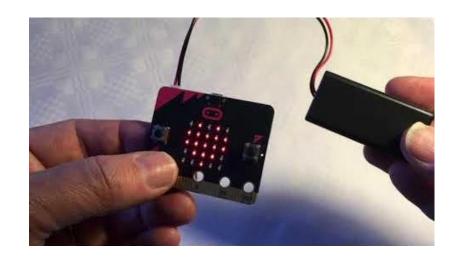


Your Local Computing Hub

- Cornwall & Plymouth Computing Hub
 - Kevin McCoag, Secondary Lead & Hub Lead
 - Mark Williams, Primary Lead
- What all hubs offer:
 - Face-to-face CPD
 - Loaning of programmable devices*
 - BBC Micro:bit
 - Crumble



BBC Micro:bit





https://www.microbit.org/lessons/



What we offer as your Computing Hub...

Advice:

- Technical concepts in curriculum
- Pedagogical advice
- Curriculum planning
 - Progression
 - Skills
 - 3 Pillars of primary computing curriculum



Cornwall & Plymouth Computing Hub

- Bespoke sessions
 - Can expand upon topics covered in CPD
 - Current example: advice on how to deliver online lessons
- Masterclasses
 - For staff or pupils
- Computing Clubs
 - Help and advice in setting up an extra-curricular computing-based club at your school



Social Media

 LinkedIn: NCCE Cornwall and Plymouth Computing Hub

Twitter: @NCCECP

Instagram: @ncce_hub_cornwall_and_Plymouth

Facebook: @CornwallPlymouthComputingHub



Any Questions

- Many thanks for listening
- Hopefully this sounds interesting to you.

- We will move to a meeting interface to have a chat about anything that you have seen today.
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