



Odyssey Computing Hub

Teach

Computing

June Newsletter

ABOUT ODYSSEY COMPUTING HUB

The National Centre for Computing Education (NCCE) was set up in November 2018 by the Department of Education to increase the number of pupils in schools and colleges who study computer science at GCSE, AS and A level, particularly girls and those in disadvantaged areas, and to ensure that there is a strong pipeline of digital skills in England.

Pates Grammar, in association with Adfecto, was awarded official Computing Hub status by the NCCE and is now one of 34 across England who are part of the Teach Computing project. We support both primary and secondary teachers through training, advice, facilitating networks of teachers, professionals and subject leaders as well as signposting resources and other professional bodies who can help.

Our area includes:

- Gloucestershire
- Wiltshire
- Swindon
- City of Bristol
- North Somerset
- Bath

We would be delighted to hear from you if you are looking for advice or guidance or even if you want to share what is going on in your school; our contact details can be found at the end of this newsletter.

REMOTE CPD

Remotely Delivered Courses

The remote CPD opportunities which started at the end of April have been very well received both at primary and secondary level. Since the 18th March, there have been 107 remotely delivered CPD (rCPD) activities delivered to 1,614 participants, with a further 219 rCPD scheduled this term with 1,040 bookings.

If you haven't yet signed up for a course and would like to, there are still places available during June and July. Go to [Teach Computing](#) to find out more and to sign up. Please remember to use the same email address for all log ons to ensure that your attendance counts towards a nationally recognised qualification:

[Teach primary computing certificate awarded by BCS, The Chartered Institute for IT.](#)

[Teach GCSE computer science certificate awarded by BCS, The Chartered Institute for IT.](#)

Online courses

[Teach Computing online courses](#) differ from those that are remotely delivered in that they are not live or facilitator led, instead you are guided through the training by watching videos and completing practical tasks. There are several online courses at both primary and secondary level.

LIFE IN LOCKDOWN – EXPERIENCES OF ONE OF OUR CPD FACILITATORS

Mary-Ann has been delivering one of the Secondary units 'Representing Algorithms using Flowcharts and Pseudo Code' which forms part of the Computer Science accelerator program. The course has three facilitator led sessions with two participant sessions in between.



“During this interesting period of lockdown, I have been getting to grips with the transition from face to face to online delivery in a number of different scenarios including online lessons for pupils, team meetings, delivering the STEM courses for the NCCE and holding the Swindon CAS community meeting. It has been a challenge but has given me a whole new set of skills and has made me reflect on how we can best utilise the technology in the ‘new normal’.

I have realised how much I rely on verbal and non-verbal feedback and how important it is to use the tools in the software to get the feedback needed. I have found the text chat facility works well when participants need to have their camera and microphone off and polls can be easily used to find out their views and confidence levels. I have learnt though awkward silences that is difficult to have a flowing group discussion and some people are much more reluctant to contribute in a virtual room than they would in a real one.

It has been great to virtually meet participants from all corners of the country, in the most recent course there were teachers from Devon and Salford and lots of towns in between. Recently we invited Pete Marshman to deliver a session on ‘Computing Curriculum Deep Dive’ to the Swindon CAS community meeting which would have been difficult for an after-school session held locally which was a real benefit. It meant we were also joined by other CAS members from different parts of the country and it became much more collaborative.”

HOME TEACHING PROGRAMME

If you are a primary or secondary teacher looking for opportunities to support your children with computing, Teach Computing are offering high-quality computing activities for students of all ages, which can be scheduled by teachers and parents as part of the school day. A timetable of sequential, topic-led activities and live Q&A sessions with our subject experts will be available during the summer term. [Find out more here.](#)

TRAINEE TEACHERS

The current lockdown presents many challenges in schools but for trainee teachers, who should be consolidating their teaching skills in a school this term, this has created a uniquely stressful situation. Many who have jobs starting in September may be feeling under-equipped having missed out on a significant proportion of their teaching practice.

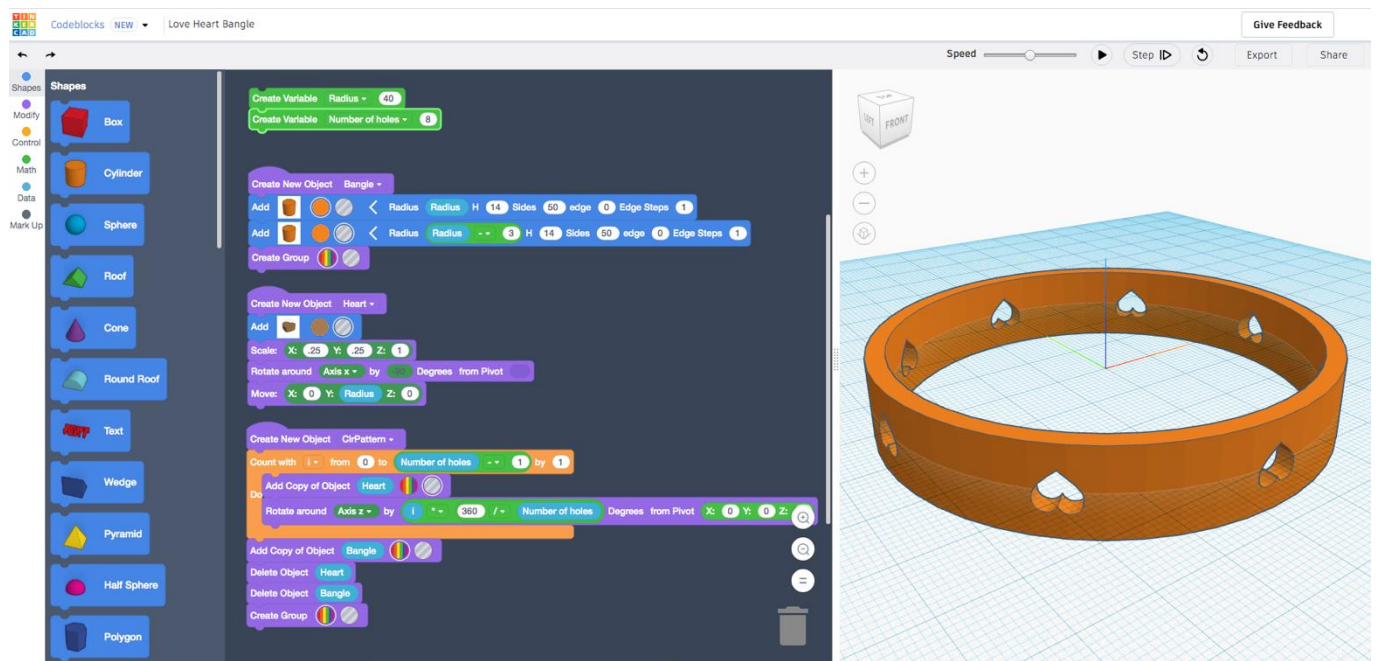
The National Centre for Computing Education recognises this and aims to provide specific support for trainee teachers, both primary and secondary, to help develop subject knowledge and subject specific pedagogy as well as providing an opportunity to network with fellow trainees who are in the same position. [Find out more here.](#)

RESOURCE FOCUS: TINKERCAD

Tinkercad is a super piece of free software and provides an excellent introduction to CAD for younger children. One of the newest features of Tinkercad is the ability to 'design' with code blocks. So not only it is a great way to introduce some aspects of the Design Technology curriculum through 3D modelling, but it also offers the opportunity to embed some coding concepts such as variables and loops. To this end, children can adapt the code (shown on the next page), just as you can, and they can start to predict what the outcome may look like given the variables they input at the start of the program and what the 'count with' loop might do. The software will also run a simulation of the program so children can see what is happening in real time or even block by block as they click their way through the program. Using the latter approach, they can follow what is happening in the program since they can have both screens open at the same time just as the image on the next page shows. It is even possible to 3D print their work so they get a physical product as well.

To find out more about how to combine Tinkercad and its new feature, code blocks, join us at the CAS Showcase (further details below) where we will be presenting a session on Friday July 3rd at 10:00.

As an incentive to give it a go, we would encourage you to copy this code from Tinkercad and play with the variables and even try using some different shapes:



<https://www.tinkercad.com/codeblocks/fSPDhmpTz2i>

Share your designs with us on Twitter [@ComputingHubOTS](#) and **we will 3D print the first design posted.** We would also be delighted to share your designs in our July newsletter.

CAS VIRTUAL SHOWCASE

In response to the Coronavirus Pandemic, CAS (Computing At School) have re-organised regional conferences into the CAS Virtual Showcase. This is a terrific opportunity for teachers of both primary and secondary pupils to access a range of excellent CPD. The two-week packed programme runs from Monday 22 June to Friday 3 July and brings together the CAS community, experts and guest speakers to offer over 50 online events and webinars.

There's a chance to find out more about Barefoot Programming, the NCCE's courses, ISAAC computer science, updates to the AQA's GCSE Computer Science specification, as well as a keynote speech from Simon Peyton-Jones, Chair of the CAS Board, and an update and welcome from the National CAS Community Manager, Beverly Clarke.

There are also fun and innovative ideas to inspire our teaching community.

Highlights of the CAS Virtual Showcase include:

- [Barefoot programming workshop with Jon Chippindall \(Tues 23 June, 10am to 10.45am\)](#)
- [Mental Health, Cat Lamin \(Fri 26 June, 1pm\)](#)
- [Inclusive Computing Classroom, Catherine Elliot KS 1 and 2 \(Thurs 25 June, 2pm\)](#)
- [Unplugged ideas in Ks1 and KS2, Martin Bailey \(Thurs 25 June, 11am\)](#)
- [Preparing leaders for an Ofsted Deep Dive, Suffolk Computing Hub \(Tues 30 June, 10am \)](#)
- [Fake News, Elli Narewska \(Mon 29 June, 11am\)](#)
- [Machine Learning for Kids KS1 and 2, Dale Lane \(Fri 3 July, 1pm\)](#)

And don't forget to join us on July 3rd at 10am to find out more about the brilliant, cross curricular tool Tinkercad.

For a full list of events and link to book click [here](#).

UNLOCK CYBER CHALLENGE

Unlock Cyber is a joint initiative between employers and universities in the West of England which aims to open up Cyber to young people.

The **Unlock Cyber Challenge** is a live virtual cyber competition for schools. It is taking place on **Wednesday 24 June from 10am until Midday**.

It is for **students in Y8** only. Each school can enter one team made up of 4 students (male or female).

There are just a couple of places remaining. Please register your interest by sending an email to elaine3.brown@uwe.ac.uk.

We have teamed up with **Immersive Labs**, the world's first fully interactive, gamified cyber skills platform, which is used by employers to train their cyber workforces. It is therefore a fantastic opportunity for young people to develop their cyber skills in a fun and engaging way.

KEEPING IN TOUCH

Teach Computing News and Updates

From the Teach Computing website you can [access news](#) relating to all things computing education in a variety of formats. News articles, blog posts, podcasts and Pedagogy Quick Reads are all featured and

provide information on a range of topics that would be of interest to subject leaders, teachers and students.

FINALLY...

Odyssey Computing Hub

Thank you for reading our newsletter.

We are keen to provide you with a newsletter which is a useful source of information. Please get in touch with any suggestions for content and any feedback on how we can improve. We would also love to hear about what you are doing. Stay safe and do keep in touch.

All the best Cara, Sarah and Barry

CONTACTS

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