London Connected Learning Centre

Supporting schools in digital strategies for learning

2015-2016

E-Safety
Computing
Research
Digital Strategy
Learning Technology
School Improvement
Technical Solutions
Professional Learning

CfBT Education Trust

London Connected Learning Centre

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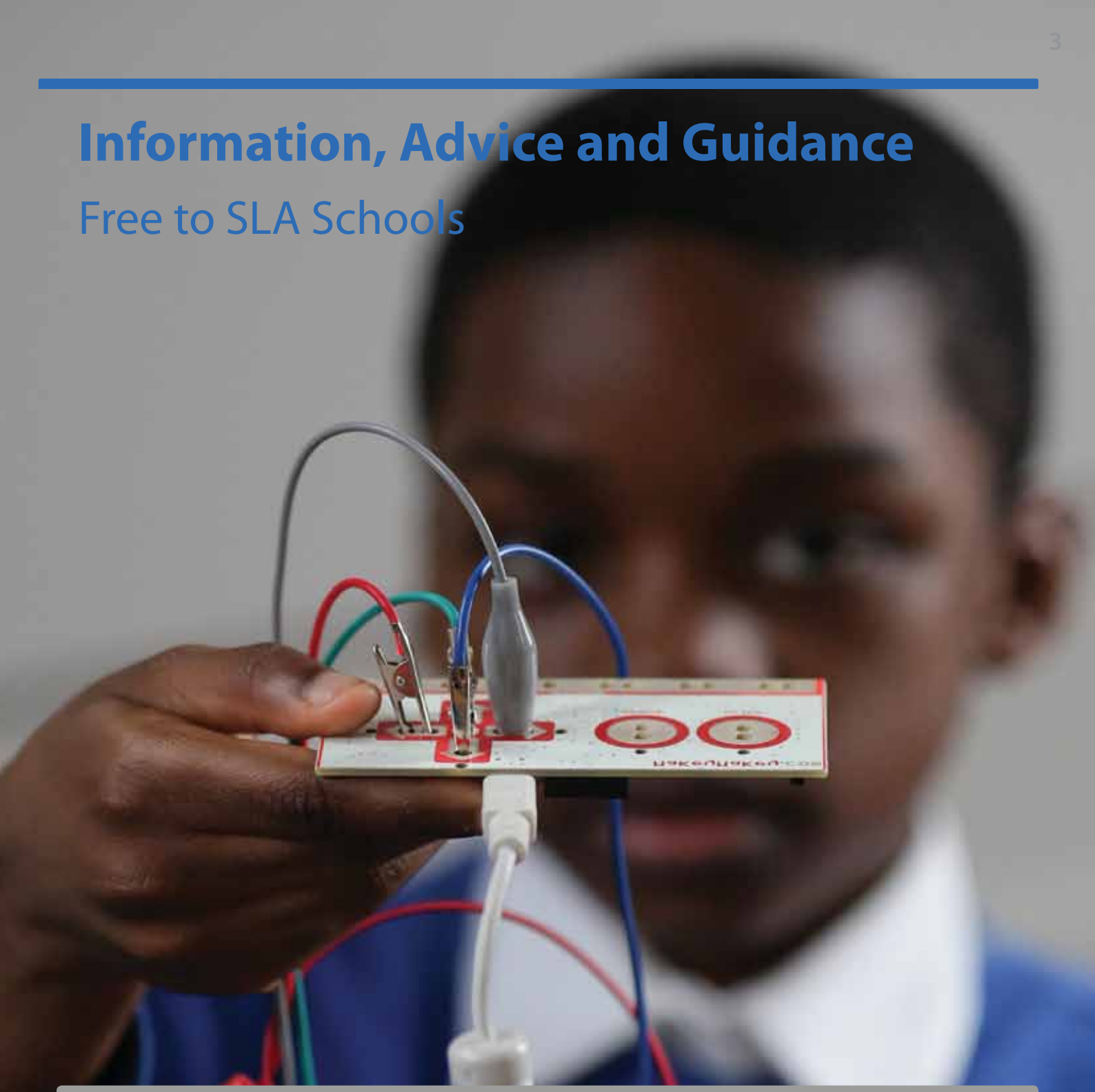
Information, Advice and Guidance

Free to SLA Schools



Telephone & Email Advice

The CLC will endeavour to provide a telephone and email response service. However, if a query requires significant input, it must be taken as a consultation session. The CLC will advise when and if this applies.

Twitter

Keep up to date with CLC activities and join the ever-growing teaching community using social media to learn and share ideas, by following @ldnclc on Twitter. If your school has not yet joined the Twitter community, why not use one of your consultancy sessions to find out how to make the most of this very powerful marketing tool (see page 14).

Pupil Workshops at the CLC

These practical workshops take place at the CLC's Clapham centre. The sessions are led by a CLC staff member but the class teacher is expected to take a leading role in teaching and organising the session. These activities have been designed with reference to the national curriculum programmes of study. Sessions have been split into specific support for delivery of the computing programmes of study and sessions to facilitate using technology to support cross-curricular learning.

Computing: Full-Day Workshops at the CLC

W01 Yrs 3-6

Programming and Games Design – KS2

Pupils will design and build their own computer games using free tools, so their learning can continue at home or at school. Teachers can decide to use Scratch or Kodu for this workshop.

Curriculum links:

- Computing: Design, write and debug programs. Use logical reasoning to predict the behaviour of simple programs. Use sequence, selection and repetition in programs
- English: Elaborate and explain their understanding and ideas

W02 Yrs 3-6

E-Safety Interactive – KS2

Pupils will better understand how to keep themselves and others safe online by creating a digital campaign to promote E-Safety, with a focus on social networking. On completion, pupils will receive the SAFE Certificate in Safe Social Networking.

Curriculum links:

- Computing: Use technology safely, respectfully and responsibly. Recognise acceptable/unacceptable online behaviour, be discerning in evaluating digital content
- English: Elaborate and explain their understanding and ideas

W03 Yrs 5-6

Robot Challenge – Upper KS2

In this session, pupils will master writing and debugging programs with the new Lego EV3 robot whilst solving a series of complex problems.

Curriculum links:

- Computing: Design, write and debug programs. Use sequence, selection, and repetition in programs. Use logical reasoning to predict the behaviour of simple programs

W04 Yrs 3-4

Lego WeDo Robots – Lower KS2

Using Lego WeDo robots, pupils will build, program, investigate sensors and motors, and design a simple electronic device.

Curriculum links:

- Computing: Design, write and debug programs. Use sequence, selection, and repetition in programs
- Design & Technology: Design innovative, functional and appealing products

W05 Yrs 4-6

Raspberry Pi and Minecraft KS2

Pupils will become computer scientists for the day. They will design and build Raspberry Pi computers before programming them with Minecraft.

Curriculum links:

- Computing: Design, write and debug programs. Evaluate and apply information technology analytically to solve problems
- Science: Construct a simple series electrical circuit
- Design & Technology: Generate, develop, model and communicate

W06 Yrs 4-6

HTML, Web Design and the Internet KS2

Pupils will learn how the Internet works and will code their own webpage using HTML, the language of the world wide web.

Curriculum links:

- Computing: Understand computer networks including the Internet. Select, use and combine a variety of software (including Internet services) on a range of digital devices. Collect, analyse, evaluate and present data and information
- English: Elaborate and explain their understanding and ideas

Computing: Half-Day Workshops at the CLC

WH01 Yrs 1-4

Robots and Computing – KS1 and Lower KS2

Pupils will create algorithms to control floor robots in order to complete a set of geometric challenges.

Curriculum links:

- Computing: Understand what algorithms are. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs

WH02 Yrs 1-2

Games Design – KS1

During this session pupils will become games developers, designing and creating their very own computer games using 2Simple's 2DIY platform.

Curriculum links:

- Computing: Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- English: Elaborate and explain their understanding and ideas

WH03 Yrs 3-6

Games Design – KS2

Pupils will design and build their own computer games, using free tools so their learning can continue at home or at school.

Curriculum links:

- Computing: Design, write and debug programs. Use logical reasoning to predict the behaviour of simple programs. Use sequence, selection and repetition in programs
- English: Elaborate and explain their understanding and ideas

WH04 Yrs 4-6

Networks and the Internet – KS2

In this session pupils will develop an understanding of computer networks, the Internet and the world wide web by completing a range of exciting challenges.

Curriculum links:

- Computing: Understand computer networks including the Internet. Understand how networks can provide multiple services, such as the world wide web. Recognise the opportunities that networks offer for communication and collaboration
- English: Elaborate and explain their understanding and ideas

Cross-Curricular:

W07 Yrs 3-6

City Planning in Minecraft – KS2

In this session pupils will work collaboratively to design and build their own Minecraft city. After the session a 3D printed miniature model of the pupils' design will be sent to the school.

Curriculum links:

- Geography: Understand human geography, including settlements and land use
- Computing: Be confident and creative users of ICT
- Design & Technology: Research and develop design criteria to inform design

W08 Yrs 3-6

Electricity and Circuits Maker Day – KS2

Pupils will extend their knowledge of circuits by designing, building and programming their own electronic device. Pupils will use cutting-edge electronics, like the Arduino and the new BBC micro:bit (part of the BBC's Make It Digital initiative).

Curriculum links:

- Science: Construct a simple series electrical circuit, identifying and naming its basic parts
- Design & Technology: Design innovative, functional, and appealing products, apply their understanding of computing to program, monitor and control their products

W09 Yrs 3-6

Investigative Maths – KS2

Pupils will explore mathematical topics such as geometry and number, and apply their understanding to a range of technology-based challenges.

Curriculum links:

- Maths: Solve problems involving addition, subtraction, multiplication and division. Compare and classify geometric shapes
- Computing: Collect, analyse, evaluate and present data and information

W10 Yrs 4-6

Kodu Volcanoes – KS2

Pupils will apply aspects of the science and geography curricula to design and program an interactive, volcanic landscape in Kodu.

Curriculum links:

- Geography: Volcanoes and earthquakes: understand processes that give rise to key physical and human geographical features
- Science: Compare and describe the physical properties of rocks and soils
- Computing: Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems

W11 Yrs 3-6

Geography and Digital Maps – KS2

KS2 pupils will use digital mapping to develop knowledge about human and physical geography by comparing different localities and regions.

Curriculum links:

- Geography: Develop knowledge about the world, the UK and the locality. Understand geographical similarities and differences of different regions. Interpret geographical information from maps and photographs, label physical features, locate places on maps at different scales
- Computing: Be active participants in a digital world and be confident and creative users of ICT

W12 Yrs 4-6

3D Printing: Design, Make, Evaluate

In this session pupils will use research skills to evaluate architectural features and use their findings to produce their own 3D building design. After the session two designs will be brought to life on the CLC's 3D printer and sent to school.

Curriculum links:

- Design & Technology: Generate, develop, model and communicate ideas through prototypes and computer-aided design. Use research and develop design criteria to inform design
- Computing: Be confident and creative users of ICT

Cross-Curricular:
Full-Day Workshops at the CLC

W13 Yrs 4-6

Music – KS2

Using a variety of audio freeware, pupils will develop an understanding of musical composition through the creation of their own soundscapes. The session will culminate in pupils exploring graphic notation to produce a digital score of their composition.

Curriculum links:

- Music: Use technology appropriately. Use and understand staff and other musical notations. Improvise and compose music for a range of purposes

W14 Yrs 3-6

Science: Evolution Animation – KS2

Using 2D animation, pupils will collaborate to create animations that investigate and explore the evolution of chosen animals.

Curriculum links:

- Science: Understand how living things change over time. Understand that change can be an advantage or disadvantage
- Computing: Be active participants in a digital world and be confident and creative users of ICT

W15 Yrs 1-6

Build Your Own Workshop – KS1 & 2

Work with a CLC tutor to design your own workshop in any curriculum area. The CLC team can work with you to plan a session that suits your pupils' needs, links directly to your topic and learning objectives. The team will advise on the best technology to use and team-teach the session with you to build your confidence in working with technology.

Cross-Curricular:
Half-Day Workshops at the CLC

WH05 Yrs 1-2

Geography and Digital Maps – KS1

KS1 pupils will use a variety of digital and computer mapping tools to develop geographical skills and vocabulary.

Curriculum links:

- Geography: Use simple compass directions and locational and directional language. Devise a simple map. Use and construct basic symbols in a key

WH06 Yrs 1-2

Science: Patterns, Shape and Form in Everyday Materials – KS1

This workshop will enable children to closely observe, identify and classify natural and everyday materials. They will examine the textures, shapes and patterns of plants and seeds using digital microscopes to capture images to include in their own digital compositions.

Curriculum links:

- Science: Record and communicate scientific findings. Compare and contrast different plants. Describe the simple physical properties of everyday materials and compare and group them
- Computing: Be active participants in a digital world and be confident and creative users of ICT

WH07 Yrs 3-4

Patterns, Shape and Form in Rocks, Soils and Seeds – Lower KS2

Pupils will make systematic and careful observations, notice patterns, and group and classify rocks, soils and seeds. They will examine textures, shape and hidden patterns using digital microscopes and then create their own digital compositions based on their findings.

Curriculum links:

- Science: Record and communicate scientific findings. Compare and group together different kinds of rocks on the basis of appearance and simple physical properties. Recognise that soils are made from rocks and organic matter. Explore, identify and describe the functions of different parts of flowering plants
- Computing: Be active participants in a digital world and be confident and creative users of ICT

In-School Workshops

These in-school sessions bring some of the CLC workshops into your school. Some sessions are designed so that the class teacher can work alongside a CLC tutor and others require small groups of children to be taken out of class to work on a specific task. For these sessions, it would be beneficial if a teaching assistant could support the CLC tutor to ensure that work can integrate into school practice.

Some of these sessions may require schools to download specific software onto school machines. Sessions cannot run if the necessary freeware is not installed and tested on the school system. All workshops must be booked as full-days.

WS01 Yrs 3-6

Programming and Games Design – KS2

Pupils will design and build their own computer games using free tools, so their learning can continue at home or at school. Teachers can decide to use Scratch or Kodu for this workshop. To run this workshop, the school must provide at least 15 computers with Scratch or Kodu software installed. If this is not possible, consider combining this session with the CLC loan set of minibooks with Scratch installed (Loan L11 page 17).

Curriculum links:

- Computing: Design, write and debug programs. Use logical reasoning to predict the behaviour of simple programs. Use sequence, selection and repetition in programs
- English: Elaborate and explain their understanding and ideas

WS02 Yrs 1-4

Robots and Computing – KS1 and Lower KS2

Pupils will create algorithms to control floor robots in order to complete a set of geometric challenges. A large space (eg the hall) will be required. The day can be divided into two or more short sessions.

Curriculum links:

- Computing: Understand what algorithms are. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs

WS03 Yrs 5-6

Robot Challenge – KS2

In this session, pupils will master writing and debugging programs with the new Lego EV3 robot whilst solving a series of complex problems. A large space (eg the hall) will be required. The day can be divided into two or more short sessions.

Curriculum links:

- Computing: Design, write and debug programs. Use sequence, selection and repetition in programs. Use logical reasoning to predict the behaviour of simple programs

WS04 EYFS

Investigating the World with Digital Technologies – EYFS

Our experienced tutors will work in your EYFS setting to use digital technologies to support children's learning in understanding and communicating about the world. Using microscopes, cameras or recording devices on loan from the CLC, the tutor will help young children observe, research, reflect and create. This session should link to your current theme or topic and should be used in conjunction with a CLC equipment loan (see page 19) as a starting point for practitioners to build on.

Curriculum links:

- The World: Notice detailed features of objects in their environment. Can talk about some of the things they have observed
- Technology: Know how to operate simple equipment. Be able to select and use technology for particular purposes

WS05 Yrs 4-6

E-Safety: Digital Leaders & Pupil Voice

Using your school's E-Safety policy as a starting point, a CLC filmmaker will work with Digital Leaders to create a short film to explain the key content of the policy to the wider school community. The day will combine discussion on good E-Safety practice, with the afternoon spent creating a short film that can be uploaded to the school's website.

Curriculum links:

- Computing: Use technology safely, respectfully and responsibly. Recognise acceptable/unacceptable online behaviour. Be discerning in evaluating digital content
- English: Elaborate and explain their understanding and ideas

WS06 Yrs 1-6

Animate IT – KS1/2

CLC tutors will work with a class in small groups (six per group) to create a short film to animate a chosen story or historical narrative, or to document scientific, mathematical or geographical learning. Pupils will learn the basics of 2D or 3D animation and film production and editing skills. Artwork will need to be created prior to the session.

Curriculum links:

- Computing: Select, use and combine a variety of software. Be active participants in a digital world and be confident and creative users of ICT
- English: Use familiarity with fiction, myths, legends and traditional stories to create their own animated story. Generate ideas, plan and create a narrative for an audience

Special Projects

Following on from the success of last year's projects, the CLC has developed new programmes with two of London's leading arts and cultural organisations. Both programmes use cultural learning as a context for creative work with digital technology. Each mini project combines a cultural visit with a follow-up session at the CLC. Schools must commit to both sessions. Demand is expected to be high and places will be offered on a first come, first served basis.

IWM IMPERIAL WAR MUSEUMS HMS BELFAST

HMS Belfast - Dazzle, Deception and Design

Availability in terms 1 and 2 only
Code: HMSB
Yrs 3-6

This session will be delivered in partnership with the Learning Department of the Imperial War Museum on board HMS Belfast. Pupils will research the historical applications of design in warfare to create their own patterns, and will combine this with the use of 3D design software.

Camouflage and deception have always played a part in warfare. The first day of the project will be spent on board HMS Belfast finding out about life on board, how the ship was designed and how visual distractions such as dazzle painting were used as camoflage during the Second World War.

The second day of the project will be a follow-up visit to the CLC, where pupils will create their own digital camouflage designs. They will then use 3D modelling software to wrap their patterns around their very own digital warships.

- History: Understand Britain's past. Understand the connections between military, cultural, national and international historical contexts. Understand how our knowledge of the past is constructed from a range of sources
- Design & Technology: Evaluate design technology in the past, developing a critical understanding of its impact on daily life and the wider world

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National Portrait Gallery

Noteworthy
Exploring history through portraiture

Availability in term 6 only
Code:NPG
Yrs 3-6

These sessions will be delivered in partnership with the Learning Department at the National Portrait Gallery. Pupils will work collaboratively to create campaigns in an effort to determine which of a range of significant individuals should be the next to appear on a UK banknote. Apart from the Queen, the last woman to appear on a UK banknote was Elizabeth Fry, who was replaced by Charles Darwin in 2013. The Bank of England has promised to rectify this in 2017 with the addition of Jane Austen, but in the interim we invite classes to decide which historical woman they would choose for the honour.

At the National Portrait Gallery, working in the Gallery spaces, pupils will be invited to examine representations of three inspiring women across a range of historical periods. Through observation and discussion pupils will discover the challenges the women faced, the similarities and differences in considering what still makes these women inspirational today. They will explore portraiture as one of many different sources through which we gain our knowledge and understanding of the past.

Cont.

Between the two sessions pupil will be asked to research their favourite of the women studied, or to pick another of their own choosing, applying the historical approaches they have learnt at the gallery.

Pupils will spend the second session at the CLC. Here they will launch digital campaigns to argue which woman they believe should be the next to appear on the £10 note. To succeed, they must write persuasively, and use thoughtful selection and organisation of relevant historical information.

- History: Note connections, contrasts and trends over time. Construct informed responses that involve thoughtful selection and organisation of relevant historical information. Understand how our knowledge of the past is constructed from a range of sources. Study an aspect or theme in British history that extends chronological knowledge beyond 1066
- Computing: Create a range of programs, systems and content that accomplish given goals including collecting, analysing, evaluating and presenting data and information

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IBM Robo Challenge 2016

In terms 3 and 4
Code: IBM
Yrs 5-6

For the last eight years the CLC has partnered with IBM to run the Robo Challenge. The project invites nine schools to put forward a small team of students (about six per school) from Years 5 and 6 to come together to take part in a competitive programming day using Lego NXT and its software. The school must commit to establishing a group of children to take part in the competition. These pupils will be supported by IBM mentors. The final event, on a Saturday in March, is fun, challenging and very rewarding. The pupils will be put through their paces with a series of challenges including programming robots to dance, racing and navigating a predetermined route, and presenting the team's strategy to an unfamiliar audience. Although only a small number compete in the event, whole-class activity can be done in preparation.

In order to take part, schools would need to commit the following from their entitlement:

- 1 x Lego loan
- 1 x CLC twilight
- 1 x Full-day pupil workshop either in school or at the CLC (optional)

Please note, the Robo Challenge will be heavily subscribed. Priority will be given to schools that have not been involved previously.

Game-Changer Summer Challenge - Upper KS2

Wednesday 20 April
Code: GCC
Yrs 5-6

This project invites your school's budding programmers to take on the role of games designers in an inter-school challenge to find out which team of pupils can create the best computer game.

Teachers will be briefed on the judges' criteria during a twilight session (Wednesday 20 April - see page 26), and schools can also use their workshop allocation to give their classes some contact time with a CLC tutor in one of our Game Design workshops (see page 28).

The project will culminate in a Gameathon at the CLC at the end of the summer term, during which children will have the opportunity to deliver a presentation to a panel, which includes professional games creators, explaining their game design process, as well as testing each other's games and finding out who will be crowned the overall winners.

Schools must commit to the twilight session on page 26 to be a part of this project.

E-Safety

The CLC provides a range of services to support schools in safeguarding children online. The centre offers services for the whole school community including accredited training for staff, briefing sessions for parents, certified workshops for pupils, and consultancy and advice for SLT. The CLC is also able to support schools wishing to apply for the E-Safety Mark.

Use your SLA entitlement to incorporate E-Safety support into your school's programme for next year or buy a bolt-on package to ensure that you are keeping up to date in this ever-changing area.

Staff:

- Attend the CLC's Think You Know and E-Safety CPD (page 21)
- Use an in-school CPD session to brief your colleagues (page 15)
- Attend the E-Safety for TAs CPD (page 27)
- Use a consultancy session to run an E-Safety for Governors session (page 14)
- Use a consultancy session to have a member of the CLC team support you in resolving E-Safety issues (page 14)
- Use a consultancy session to find out more about social media (page 14)

Whole School:

- Apply for the E-Safety Mark and use a consultancy session to help prepare (page 14)

Pupils:

- Use a consultancy session to have the CLC run E-Safety Assemblies in school (page 14)
- Book an E-Safety Interactive KS2 workshop (page 4) and develop E-Safety awareness around social media
- Book a Digital Leaders & Pupil Voice in-school workshop (page 9) and help the wider school community better understand your E-Safety policies
- Send your Digital Leaders to the E-Safety Academy in the lead-up to Safer Internet Day (page 21)

Parents:

- Use a workshop to run a parents' and carers' E-Safety briefing (page 27)
- Use a consultancy to audit your parents' understanding of E-Safety issues (page 14)

For further information contact Kim Morrison, **kmorrison@londonclc.org.uk**

CLC Technical Advice and Support

Did you know that the CLC also provides technical support for local schools. From regular weekly visits to system audits, the CLC's tech team can help ensure your school's ICT systems are fit for purpose. The team can also take on iPad deployment, computer imaging, server deployment and MinecraftEDU installation in addition to undertaking network audits and providing general advice. Contact **techsupport@londonclc.org.uk** for further details.

Naace Impact Awards Winner
Tech Support 2015

LONDON GRID FOR LEARNING 2.0
RECOGNISED SUPPORT

The London CLC provide us with outstanding technical support – from responding quickly to crises, to planning long-term upgrades and 'future proofing' of systems, to keeping us on top of all the latest developments in technology which make our lives so much easier. Teachers need the kit there, ready to go and working in order to be able to deliver high-quality lessons. London CLC make sure that our classrooms are always fully operational. However, more than that, they do it with skill, understanding and a great sense of humour

Headteacher, Rosendale Primary School

Consultancy and Advice

Every SLA package includes a number of in-school or centre-based consultancy sessions offering one-to-one support in a specific area.

SLT

- ICT Mark and the SRF
- Digital strategy and ICT Vision

E-Safety

- E-Safety audit
- Governor E-Safety briefings
- E-Safety for parents
- E-Safety Mark
- Creating an acceptable use policy/policies
- E-Safety Assemblies

Computing

- Computing assessment and progression
- Curriculum planning

Cross-Curricular use of technology

- Using technology to support cross-curricular learning
- Subject-specific consultancy – eg technology to support maths/science/English, etc

Blogging

- Blogging – Technical set-up (class accounts/ templates/basic settings, etc)
- Blogging – The Pedagogy (effective use of class blogs to improve children's learning)

Wider School Community

- Family learning and working with parents
- E-Safety for parents
- Bid writing

Marketing and Communication

- Using Twitter and social media tools for school promotion
- Advice on school website and online presence

Technical

- IT procurement and advice
- IT infrastructure health check
- Google apps
- Wifi audit
- iPad set-up advice

School-based CPD

Some of the packages include in-school CPD (after school or full-day). This can be delivered in the following areas:

Computing

- Embedding the computing curriculum
- Phase-specific CPD in computing
- Specific software/hardware support – e.g Scratch, Kodu, Lego NXT
- Understanding Digital Literacy

E-Safety

- E-Safety update for teachers
- ThinkUKnow certification for staff (full-day only)
- E-Safety for TAs

Cross-Curricular use of technology

- Using technology to support science
- Using technology to support English
- Using technology to support maths
- Using technology to support humanities subjects
- Using technology in Early Years

Social Media

- Get going with Blogging (Blogs must be set up in advance of CPD. Consultancy sessions can be used if help is required in setting up blogs.)
- Use of Twitter to promote, learn and share

Assessment

- Digital portfolios for assessment and evidence
- Assessing the computing curriculum

Hardware/software specific

- Get going with Minecraft
- Get going with animation
- Get going with film-making
- Get going with Green Screen
- Get going with Scratch or Kodu
- Moving on with Scratch or Kodu
- Getting the most from your iPads
- Getting more from your 2Simple software
- Creating great films with your iPads
- Making the most of your Macs

Other

- Working with parents
- E-Safety for parents

For schools booking full-day CPD, it may be possible to run these at the CLC. Please email **jlawrence@londonclc.org.uk** to enquire about availability.

Technology Loans

The CLC has a range of equipment and hardware that schools can borrow for the period of a short term. The CLC will provide help-sheets including curriculum ideas, video tutorials and maintenance support for the duration of the loan. Loans can be combined with CLC or school-based training to help ensure that equipment is used most effectively.

Please note that the CLC expects kit to be put onto the school's own insurance policy for the duration of the loan. All losses, damages and breakages will be re-charged to the school.

Control technology

EYFS – Get Programming

2 sets
Code: L1

This set features five programmable robots, including Bee-Bots, a Constructa-Bot, a Bee-Bot floor map, and a tablet device loaded with EYFS programming apps. It provides the perfect framework for developing young children's problem solving and critical thinking using technology.

- The World: Knows how to operate simple equipment. Shows skill in making toys work by pressing parts. Completes a simple program on a computer
- Creating and thinking critically: Develop their own ideas, make links between ideas, and develop strategies for doing things
- Technology: Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. Children find out about and use a range of everyday technology

Test before you Invest – Robot Set

1 set
Code: L2

This set is perfect for schools planning to invest in control technology for KS1 and 2 but uncertain about which to choose. It contains a variety of sample robots including the Yo!Bot, Blue-Bot, Sphero, Bigtrak and a pair of Ozobots.

- Computing: Understand algorithms. Design, write and debug programs. Use logical reasoning

Blue-Bots and iPads

1 set of 6
Code: L3

Blue-Bots are TTS's latest offering in programmable floor robots for EYFS and KS1. They are similar to Bee-bots but, thanks to their Bluetooth capacity, they can be controlled remotely through the accompanying app, opening up a huge range of new activities.

- Computing: Understand algorithms. Create and debug simple programs. Use logical reasoning

BBC micro:bit

2 sets
Code: L4

The new BBC micro:bit, part of BBC 2015 Make it Digital initiative, allows young people to design and program wearable technology. Using conductive thread, LEDs and switches, pupils can sew circuits into fabric, literally lighting-up their wardrobes. Code meets the catwalk, whilst pupils learn about electronics and computer science.

- Computing: Design, write and debug programs that accomplish specific goals. Work with various forms of input and output
- Design & Technology: Design innovative, functional, appealing products

Pippin Robots

2 sets
Code: L5

Pippins are suitable for KS1 and lower KS2. The inclusion of numbers in their controls means that, when fitted with a pen, they can be programmed to draw shapes and patterns.

- Computing: Create and debug simple programs. Work with various forms of input and output
- Maths: Compare and classify geometric shapes

Technology Loans

ProBot Robots

3 sets of 6
Code: L6

- Probots are programmable robots with numbered buttons and can be fitted with a pen for geometric drawing activities. Additionally, they feature a digital display screen, a useful visual aid for building up more complex instructions.
- Computing: Create and debug simple programs. Use sequence, selection, and repetition in programs
- Maths: Compare and classify geometric shapes

Yo!Bots plus iPods

1 set of 6
Code: L7

These robots are programmed remotely through an app, which comes preinstalled on the six accompanying iPods, and is also available for other Android and iOS devices.

- Computing: Understand what algorithms are. Predict the behaviour of simple programs. Design, write and debug programs

Lego NXT

2 sets of 6
Code: L8

These KS2 robot kits feature several sensors and motors, all of which are programmable through Lego's Mindstorms software. They provide opportunities to create more complex programs. Sets include six pre-assembled robots and laptops. In terms 3 and 4, the kits are only available to schools participating in the IBM Robo-Challenge.

- Computing: Use sequence, selection and repetition in programs. Work with variables and various forms of input and output. Detect and correct errors in algorithms and programs

Lego WeDo Lower KS2

1 set of 6
Code: L9

WeDo is a simple, programmable Lego kit. Pupils can design and build a simple robotic device and program it through Scratch or with Lego's own software. The set includes six kits and accompanying laptops.

- Computing: Design, write and debug programs that accomplish specific goals. Work with various forms of input and output
- Design & Technology: Design innovative, functional, appealing products

Programming

Raspberry Pi Computers

1 set of 6
Code: L10

Raspberry Pis are small, cheap DIY computers, which come with programming software preinstalled. Pupils can build a Raspberry Pi computer, and then program games or even use Python coding to manipulate a world within Minecraft Pi Edition.

- Computing: Design, write and debug programs that accomplish specific goals. Work with variables and various forms of input and output. Select, use and combine software on a range of digital devices

Makey Makeys

1 set of 6
Code: L11

Makey Makeys can transform any conductive object (including bananas or pupils) into a computer keyboard button, creating the potential for a plethora of creative electronics or computing projects.

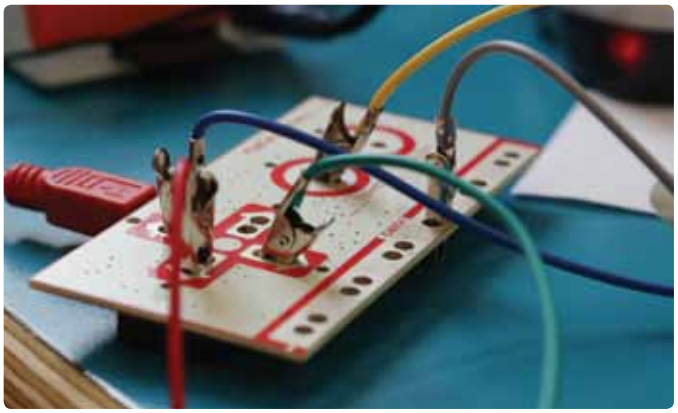
- Computing: Work with various forms of input and output
- Design & Technology: Design innovative, functional, appealing products
- Science: Compare everyday materials on the basis of conductivity

Programming Minibooks

1 set of 15
Code: L12

This set of 15 lightweight Minibooks includes a range of programming software, such as Scratch, which can be used by pupils to create games or animations.

- Computing: Use sequence, selection, and repetition in programs. Design, write and debug programs that accomplish specific goals. Select, use and combine a variety of software to create programs



Technology Loans

Datalogging

TTS Log-Box Datalogger

2 sets of 6
Code: L13

This simple-to-use data logger includes light, sound and temperature sensors. Readings can be downloaded via a USB cable for more detailed analysis of field experiments. This loan set includes a laptop with the software installed.

- Science: Take accurate measurements using thermometers and data loggers. Gather, record, classify and present data
- Geography: Use fieldwork to observe, measure, record and present

LogIT Explorer Set

3 sets
Code: L14

Much like the Log-Box, these ergonomic data loggers can gather light, sound and temperature data to support the science and geography curricula. This can then be analysed using the accompanying laptop and software.

- Science: Take accurate measurements using thermometers and data loggers. Gather, record, classify and present data
- Geography: Use fieldwork to observe, measure, record and present

Media

Our range of media equipment loans is extremely versatile and can be used to support virtually any curriculum area.

Digital Cameras

3 sets of 10
Code: L15

These easy-to-use cameras enable students to create digital images, either with a design or research focus. The Canon Ixus can also record video.

MP3 Sound Recorders

2 sets of 10
Code: L20

These sound recorders are extremely simple to operate and accessible to all ages. They allow pupils to create, store and retrieve audio information related to any curriculum area.

iPod Film Set

1 set of 6
Code: L16

This set makes use of the iPod's high-quality camera and recording function. It also contains tripods, microphones and the iMovie app, allowing children to write, shoot and edit footage in their own mobile film studio.

Animation Sets

10 sets
Code: L17

Animation is an effective and engaging way to support learning across the curriculum. Animation sets now include HD webcams, making them even easier to use. This loan can be combined with 'Animation Across the Curriculum' CPD on page 22.

Pocket Video Cameras

2 sets of 10
Code: L18

These portable cameras are extremely simple to use and can store up to an hour of footage. This makes them suitable anywhere from EYFS to Year 6.

Green-screen Camera Set

2 sets
Code: L19

The potential for green-screen filmmaking to support the curriculum is boundless, as it allows any background image to be imported into a piece of video. It can take your class anywhere – past or present, real or fictional. The set includes a green-screen backcloth with supporting frame, a camera with tripod, a microphone and a MacBook laptop.

Samson USB Microphones

2 sets of 10
Code: L21

This set of computer microphones is ideal for making high-quality audio recordings. They connect via USB and can be used to make podcasts, audio books or school radio shows in conjunction with a range of software, such as Audacity.

Technology Loans

Other

Visualisers

1 set of 4
Code: L22

This mix of large, high-quality cameras and cheaper, more mobile webcam visualisers can be used to display all kinds of lesson content. This loan enables schools to explore a range of devices and make an informed decision before purchasing their own. Please note that software may need to be installed on school computers.

EYFS Outdoor Explore

2 sets
Code: L23

This set offers a range of exciting ways to use technology to enhance outdoor learning in EYFS. It contains two microscopes, cameras and sounds recorders, a visualiser and three Talking Buttons, all of which create exciting opportunities for young children to interact with the outside world – from examining minibeasts to recording voices.

3Doodler Pens

1 set of 6
Code: L24

If your school is excited by the prospect of 3D printing but uncertain about buying a printer, this loan could be the perfect solution. The 3Doodler is a pen which extrudes heated plastic at a steady pace, so that as it cools it solidifies into a 3D shape of your design. Like glue guns, these pens reach high temperatures, so should be used with care under adult supervision.

EYFS USB Microscopes

2 sets of 6
Code: L25

USB microscopes can support primary science and EYFS outdoor learning. They are ideal for exploring plants, minibeasts and everyday objects up close, providing a fascinating new perspective on the world around us. Software installation on school computers may be necessary, so contact the CLC technical team for advice.

iPads

4 sets of 6
Code: L26

iPads have fantastic potential for learning but they can also represent a huge financial commitment for schools. This loan is a great opportunity to explore the possibilities they offer in the classroom before investing in this fast-developing and versatile technology. CLC iPads come with a range of education apps for use across the curriculum.

PE – Wii Fit and Sports Science

2 sets
Code: L27

Technology is used by athletes throughout the sporting world to monitor, analyse and improve performance. This set includes a Wii Fit, a camera, a heart rate monitor and a pedometer to help pupils measure the effects of exercise upon the body.

Voting Pads

1 set of 90
Code: L28

Voting pads can be used to survey parents or pupils in large groups, and are great for big events and parent consultations. They allow you to transform PowerPoint presentations into interactive quizzes or surveys. The software can display feedback in real time, presenting a great stimulus for class discussion. Results can be stored and retrieved for analysis. The loan includes 90 handsets. A laptop is available on request, although any computer with PowerPoint installed can be upgraded to run a survey.

Nook Simple Touch eReader

1 set of 6
Code: L29

Many schools are exploring the potential of eReaders to engage pupils and to share books across a school. This set of six Nook Simple Touch devices will give schools the opportunity to trial an eReader, to support targeted pupils and to provide a resource for guided reading sessions. The CLC Nooks will come preloaded with a range of popular children's books including Diary of a Wimpy Kid, Holes, Lemony Snicket, Harry Potter, Artemis Fowl, War Horse and many more.

Professional Learning at the CLC

Full-Day courses and conferences (9.15am - 3.15pm)

Autumn Term

ResearchED Conference

Technologies for learning
What works and how do we know?

Saturday 3 October
Code: PL1

This conference, led by ResearchEd, a grassroots, teacher-led organisation, aims to improve research literacy in educational communities, dismantle the myths and explore the evidence to reveal what does and doesn't work in terms of technologies in the classroom. This session will bring together teachers, academics and researchers to discuss, challenge and share. The event is appropriate for headteachers, subject leaders, school research leads, or anyone interested in how to become more proficient in using research to support their schools and classrooms.

Thursday 8 October
Code: PL2

Teach Computing KS1

This session will help class teachers who are not computing specialists to understand the requirements of the computing curriculum so that they can teach it in an engaging and accessible way. It will help teachers unpick the programme of study, focusing on the major concepts and progression into KS2. The session will help teachers become more familiar with the key technologies and online resources that can be used to teach computing. Teachers will be signposted to activities and lesson plans that be used in class.

Having attended this course, teachers will:

- Fully understand the requirements of the computing curriculum at KS1
- Understand progression between KS1 and KS2
- Feel confident in their understanding of and ability to teach computing at KS1
- Feel confident in using a variety of appropriate software and hardware

Thursday 22 October
Code: PL3

Teach Computing KS2

This session will help KS2 class teachers understand the requirements of the computing curriculum, and learn how to teach it an engaging and accessible way. Teachers will better understand the idea of computational thinking, which underpins so much of the computing curriculum. The session will build confidence in a variety of tools that can be used in class, and will look at ways to assess and monitor progress.

Having attended this course, teachers will:

- Fully understand the requirements of the computing curriculum at KS2
- Understand progression between KS1 and KS2
- Feel confident to teach computing at KS2
- Feel confident in using a variety of appropriate software and hardware

Full-Day courses and conferences (9.15am - 3.15pm) Autumn Term

Thursday 5 November
Code: PL4

3D Printing and Minecraft Across the Curriculum

3D printing is becoming an increasingly viable option for design and rapid prototyping in schools. This session will explore the many ways in which 3D design can be used to support a range of areas across the curriculum – including design & technology for designing, making and evaluating products. Practical activities will take teachers through a variety of software options for 3D modelling, including Minecraft, making it accessible to pupils throughout KS1 and KS2.

Having attended this course, teachers will:

- Be aware of the broad range of applications for 3D printing, both within schools and in the wider world
- Be proficient in using a range of software tools to teach 3D design
- Recognise the curriculum areas in their school that might be enriched through 3D printing projects
- Know how to use a UP Plus2 3D printer effectively

Thursday 19 November
Code: PL5

E-Safety Training (including CEOPs ThinkU Know certification)

This daylong training session will cover all the essential aspects of E-Safety. We will examine the risks pupils, parents and school staff face online. We will outline ways in which schools can encourage pupils to become responsible and respectful digital citizens and address concerns around the core issues of content, contact and conduct. We will also review curriculum requirements and OFSTED policy. Participants will gain the ThinkUKnow accreditation for E-Safety, but the course will also draw on other programmes and materials. E-Safety is not simply a technological issue, so we invite SLTs, safeguarding leads and subject leaders to attend.

Having attended this course, teachers will:

- Have an excellent grounding in the key aspects of E-Safety
- Know about initiatives and resources for pupils, parents and school staff
- Have a clear idea of policy requirements and best practice
- Be better able to respond to E-Safety incidents
- Have gained ThinkUKnow accreditation

Thursday 3 December
Code: PL6

Computing and Technologies Conference 1

These popular conferences are aimed at Computing/ Technology subject leaders, heads of department and teachers interested in the use of technologies across the curriculum. The conferences will include keynote speakers, policy and curriculum updates, practical sessions and opportunities to learn from other schools.

Having attended this course, teachers will:

- Be able to support and lead school colleagues in teaching the computing curriculum and in using digital technologies across the curriculum
- Know more about policy and practice in E-Safety, digital skills and the computing curriculum
- Be up to date with innovation in technology and pedagogy

Spring Term

Monday 25 – Wednesday 27 January
Code: PL7

Digital Leaders' Academy: Preparing for Safer Internet Day

(Places are limited to ten Digital Leaders per school)

Does your school have digital leaders? The CLC is running a series of workshops in the lead-up to Safer Internet Day to support Digital Leaders in becoming E-Safety ambassadors. The day will encourage pupils to become active E-Safety leaders in their school community. The session will focus on consolidating awareness of key issues, sharing expertise and generating new ideas to help the wider school community better understand this complex area. Each day can accommodate up to ten leaders from a school. Demand is expected to be high, which is why this session will be run several times.

Full-Day courses and conferences (9.15am - 3.15pm)

Spring Term

Thursday 28 January
Code: PL8

SRF and ICT Mark

The NAACE Self-Review Framework (SRF) provides a structure for reviewing a school's use of technology and its impact on school improvement. Additionally, because the Self-Review Framework complements the inspection frameworks, its use can provide compelling evidence in support of schools' inspection profiles.

This session will be run by an accredited ICT Mark assessor to guide participants in using the SRF online tool to audit a school's technology provision and prepare for gaining the ICT Mark. The afternoon will be free for colleagues to begin work on their application supported by an ICT Mark assessor. The afternoon session is optional and the course can be booked as either a full-day or half-day (see page 25 for half-day option).

Having attended this course, teachers will:

- Have a good understanding of the elements of the Self-Review Framework (SRF)
- Be more consistent in judgements about a school's effective use of technologies and the threshold for the ICT Mark
- Be able to use the SRF to inform the school's digital strategy and to create an action plan

Wednesday 10 February
Code: PL9

Animation Across the Curriculum

Animation is an effective and engaging way to support learning across the curriculum. It encourages collaboration and helps pupils present ideas for an audience. From re-telling stories and literature, animating scientific ideas to re-enacting historical events, animation can help pupils reinforce understanding and present concepts.

Having attended this course, teachers will:

- Be confident in using computer software and apps to create impressive 2D and 3D animated films
- Know how to edit a simple animation
- Have a range of ideas and activities for using animation in the classroom

Thursday 25 February
Code: PL10

Evidence and Assessment across the Curriculum

Digital technologies have changed the way pupils are able to reflect on and present their learning and how teachers can track, record and evidence pupils' progress. During this full-day session, teachers will learn about different approaches to assess and evidence learning across the curriculum.

Having attended this course, teachers will:

- Understand the role of blogs and digital portfolios to support metacognition and children's reflection and to provide a record of children's learning
- Be confident in how to use video, audio, digital image and presentation tools to capture pupils' learning and reflections
- Be able to evaluate digital platforms (eg blogs, cloud-based storage) to evidence pupils' learning

Wednesday 2 March
Code: PL11

Film-Making across the Curriculum

Learn how to create films for school websites and broadcasts. Improve your camera techniques, support pupils' film-making and master simple film and editing skills working alongside CLC film tutors.

Having attended this course, teachers will:

- Know how to plan and structure a film
- Know how to use different kinds of shots and edit simple films
- Have a range of ideas and activities for film-making in the classroom

Thursday 17 March
Code: PL12

Humanities Conference

The humanities conference provides an opportunity for teachers with responsibilities for geography, history and RE to learn about curriculum developments, share their expertise and investigate a range of ways that digital technologies can support humanities teaching and learning. The conference will also introduce experts from partner museums and galleries who will share exciting opportunities to work with their organisations.

Having attended this conference, teachers will:

- Have a range of new digital skills to support learners
- Know about exciting opportunities provided by local and national cultural organisations
- Learn from the experiences of other schools and subject leaders

Full-Day courses and conferences (9.15am - 3.15pm)

Summer Term

Wednesday 27 April
Code: PL13

Reading for Pleasure – sharing our love of books through technology

Digital technologies can play an important role in a school's strategy to create an environment where children love literature and reading for enjoyment. In his 20-point plan to make a school into a place where everyone talks about reading, Michael Rosen recommends book reviews, book swaps and book posters as ways for readers to inspire each other about books. During this day-long session, we will explore how pupils can use surveys, blogs, online book reviews, comics, posters, films, audio and multimedia presentations to share their love of books and to help other children choose inspiring texts.

Having attended this course, teachers will:

- Be able to set up an online book review blog
- Know how to use a range of digital tools to present and share ideas about books and reading
- Have a range of strategies and activities to support reading for pleasure in school

Thursday 16 June
Code: PL14

Computing and Technologies Conference 2

These popular conferences are aimed at Computing/ Technology subject leaders, heads of department and teachers interested in the use of technologies across the curriculum. The conferences will include keynote speakers, policy and curriculum updates, practical sessions and opportunities to learn from other schools.

Having attended this conference, teachers will:

- Be able to support and lead school colleagues in teaching the computing curriculum and in using digital technologies across the curriculum
- Know more about policy and practice in E-Safety, digital skills and the computing curriculum
- Be up to date with innovation in technology and pedagogy

Half-Day courses and conferences

Times vary. Please check carefully.

Autumn Term

Wednesday 23 September
9am – 12 noon
Code: PL15

New to Leadership in Technology and Computing (three half-day sessions)

This programme has been designed for primary teachers who have recently taken on responsibilities and leadership for technology and computing. The subject leader's role is extensive and ever-changing, and can seem daunting to even the most experienced practitioner. Three half-day sessions will be spread over the year. Colleagues will be expected to attend all three sessions. The third session will be held in a school and will include classroom visits.

Having attended this course, teachers will:

- Have a clear understanding of the role of the computing/technology subject leader
- Be able to create a school action plan to support their subject area
- Be confident to support colleagues' professional development in computing and the use of digital technologies across the curriculum
- Learn from the experience of other schools and subject leaders

Thursday 1 October
9am – 12 noon
Code: PL16

Languages (MFL) Forum

This session, facilitated by a lead advisory teacher, is for languages (MFL) subject leaders or anyone involved in coordinating or teaching languages. The forum will give teachers the opportunity to learn about policy and curriculum updates, discuss the latest developments in primary languages, and share their expertise and their experiences. Discussion will be followed by a CLC-led practical session that will demonstrate how digital technologies such as film, audio, blogs and other tools can be used to aid language learning.

Having attended this course, teachers will:

- Be up-to-date with the latest developments in primary language teaching
- Have practical ideas for integrating digital technologies into primary languages lessons

Half-Day courses and conferences

Autumn Term

Using Blogging to Support Children's Writing

Wednesday 14 October
9am – 12 noon
Code: PL17

This course will draw on the recently published CLC research study Educational Blogs and their Effects on Children's Writing. The session will use examples from the research study to give teachers practical ideas to involve pupils in blogging. This session does not cover the technical aspects of setting up a blog. Schools should use a consultancy session if technical support is required.

Having attended this course, teachers will:

- Understand what constitutes good practice in class blogging
- Have ideas and activities to develop class blogs to support pupils' writing and cross-curricular learning

E-Safety Mark and the 360 review tool

Thursday 15 October
9am – 12 noon
Code: PL18

The 360-degree safe self-review tool, developed by SWGfL and aligned to the Ofsted inspection framework, is free to use and is intended to help schools review their E-Safety policies and practice. This session, led by an accredited E-Safety mark assessor, will guide participants in using the online tool to audit a school's provision in preparation for gaining the E-Safety mark.

Having attended this course, teachers will:

- Have a good understanding of the elements of the 360-degree safe review tool
- Be more consistent in judgements about schools' policies and practice in relation to E-Safety
- Be able to use the tool to identify strengths and weaknesses
- Be able to use the tool to create a detailed development plan to produce or review E-Safety policies and develop excellent practice

Computing assessment and moderation

Thursday 12 November
9am – 12 noon
Code: PL19

Recording and evidencing pupils' learning and progression in computing requires a good understanding of developmental steps and expectations. During this half-day session, teachers will have the opportunity to moderate children's computing work and learn about a range of assessment approaches. Teachers will be required to bring examples of children's work to the session.

Having attended this course, teachers will:

- Have a clear idea of pupil progression in computing
- Be able to moderate pupils' work in computing
- Be able to set up a school system to assess computing
- Know about digital tools that can be used to evidence pupils' learning

Maths Forum

Thursday 26 November
1.15 – 4.15pm
Code: PL20

This session gives maths subject leaders an opportunity to discuss the latest developments in primary mathematics, sharing their expertise and their experiences. A CLC tutor will lead a practical session, which will investigate a range of digital technologies that can be used to support maths teaching and learning. The technology-based maths activities will go beyond simply replacing worksheets with online games, to explore how computers can provide pupils with entirely new contexts to explore mathematics.

Having attended this course, teachers will:

- Be able to support colleagues in using technology in primary mathematics
- Be able to teach ICT-Maths activities back in class
- Be familiar with the maths practice of other schools and subject leaders

Half-Day courses and conferences Spring Term

New to leadership in computing

Wednesday 20 January
9am – 12 noon
Code: PL15

The 2nd of three half-day sessions. See page 23 for more details.

Introduction to Scratch

Thursday 14 January
9am – 12noon
Code: PL21

Scratch is the CLC's go-to tool for KS2 Computing. It is flexible, encourages creativity, and provides a rigorous logical structure to help pupils learn about programming and problem solving. In this session, teachers will be able to hone their Scratch skills and feel confident using this software with pupils. The session will begin with the basics to help teachers get to grips with the key concepts that underpin Scratch and Computer Science. Teachers will also be given a chance to review some of the CLC's favourite lesson plans and Scratch teaching resources. This course is repeated in the summer term (see page 26).

Having attended this course, teachers will:

- Know how to use and teach Scratch
- Understand the relevance of Scratch in the Computing curriculum.
- Be aware of a range of resources that support teaching and learning with Scratch

Introduction to Kodu

Thursday 14 January
1.15 – 4.15pm
Code: PL22

Kodu can help KS2 pupils understand computational thinking and programming through the context of games design. In this CPD session teachers will explore logic and problem-solving using Kodu's easy, drag-and-drop, 3D programming language. The course will demonstrate how this software can be used to teach computing in a practical and engaging way. Kodu is also a great way to extend learners who are already well versed in Scratch. The 3D graphics offer a new dimension in terms of creativity and challenge. This course is repeated in the summer term (see page 26).

Having attended this course, teachers will:

- Know how to use and teach Kodu
- Understand relevance of Kodu in the Computing curriculum.
- Be aware of a range of resources that support teaching and learning with Kodu

SRF and ICT Mark

Thursday 28 January
9am – 12 noon
Code: PL23

Please note that this session can be booked as either a full or half-day. See page 22 for full details.

E-safety: Working with Parents

Thursday 28 January
1.15 – 4.15pm
Code: PL24

This session is designed to support teachers and other colleagues within school in delivering E-Safety information to parents. The day will cover information that all parents should know to ensure that their children can navigate the risks and enjoy the benefits of the digital world. This course is suitable for education professionals looking to run parent-facing activities or simply wanting to engage parents more effectively on E-Safety issues.

Having attended this course, colleagues will:

- Better understand the E-Safety issues faced by parents
- Better understand how to support parents with issues around cyberbullying
- Be informed about the strategies to engage parents in discussion in this area
- Be informed about the resources and materials available to support parents in this area

Half-Day courses and conferences

Times vary. Please check carefully.

Spring Term

Science Forum

Thursday 10 March
1.15pm – 4.15pm
Code: PL25

The CLC's Science Forum is an opportunity for primary science subject leaders to share their expertise and to work with a CLC tutor to investigate a range of digital technologies that can support science teaching and learning. The open forum format allows teachers to discuss a range of issues, such as systems for assessment and to share their ideas, and solutions. Discussion will be followed by a CLC-led practical session which will demonstrate how digital technologies can be used to aid scientific investigation and help pupils present their learning.

Having attended this course, teachers will:

- Be familiar with the science practice of other schools and subject leaders
- Be able to use digital technologies to facilitate cutting-edge scientific investigations
- Know about a range of engaging tools pupils can use to present their understanding of key scientific concepts

Summer Term

New to leadership in computing

Date/Time tbc
Code: PL15

The 3rd of three half-day sessions. See page 23 for more details.

Game Changer Challenge

Wednesday 20 April
4.15 – 5.30pm
Code: GCC

Get involved in the CLC's Game Challenge for upper KS2. See page 11 for full details.

EYFS Forum

Wednesday 18 May
9am – 12 noon
Code: PL26

This half-day forum provides an opportunity for practitioners from EYFS settings, nursery and reception classes to come together to share ideas and approaches, learn about policy and practice updates and take part in hands-on technology-based activities.

Having attended this course, teachers will:

- Be more confident in planning computing and technology based learning activities for young children
- Be familiar with the practice of other EYFS practitioners and settings

Introduction to Scratch

Thursday 26 May
9am – 12noon
Code: PL27

Repeat of earlier session. Please see page 25 for full details.

Introduction to Kodu

Thursday 26 May
1.15 – 4.15pm
Code: PL28

Repeat of earlier session. Please see page 25 for full details.

Art and Design Subject Leaders' Forum

Wednesday 29 June
9am – 12 noon
Code: PL29

The CLC's Art and Design subject leaders' forum is an opportunity for colleagues to share their expertise and to work with a CLC tutor to investigate a range of digital technologies that can support visual art teaching. The forum will combine discussion, hands-on activities and sharing and will bring together teachers with representatives from museums and galleries to raise awareness of the opportunities available across London.

Having attended this course, teachers will:

- Understand the potential of digital tools to enhance art and design teaching
- Be informed about learning opportunities provided by local museums and galleries
- Extend their knowledge of artists, craft makers and designers

Teaching Assistant Training

Half-Day Sessions (9am - 11.45)

Wednesday 23 September
TA1

Using Wordpress

This session will focus on the basic features and functions of Wordpress from getting to grips with the dashboard to choosing themes and uploading photographs.

Having attended this course, colleagues will:

- Have a good understanding of the functions in wordpress
- Be confident in uploading images and creating displays
- Feel confident to support the class teacher in managing a class blog

Thursday 4 February
TA2

Introduction to E-Safety

This session is designed to help TAs develop their awareness of E-Safety issues and better understand the role they play in keeping children safe in a digital world.

Having attended this course, colleagues will:

- Have a better understanding of the key aspects of E-Safety
- Know about initiatives and resources to support pupils, parents and school staff
- Understand their role in supporting children's online safety

Tuesday 12 January
TA3

Filmmaking and iPads

This session will help TAs to gain confidence in using the functions, features and apps on an iPad to shoot, edit and upload films.

Having attended this course, colleagues will:

- Have a good understanding of how to create quality film using iPads
- Feel confident to support pupils in creating films using iPads
- Understand how to save, upload and export films made on an iPad

Thursday 21 April
(morning and afternoon sessions)
NQT1

Free Session

Computing for NQTs

In this half-day session NQTs will learn how to teach the computing curriculum in a creative and engaging way. Attendees will learn about a range of digital tools, lesson plans and resources to support learning in computing and across the curriculum.

Having attended this course, teachers will:

- Have a good understanding of the requirements of the curriculum
- Feel confident in their ability to teach computing
- Feel confident in using a variety of appropriate software and hardware

Family Learning

The CLC offers a varied programme of family learning consultancy and activities to support and develop relationships between home and school. Funding for this strand of work is sought through the local authority and other external bodies, and priority is given to schools within the SLA to access support. For further details, contact Suki Coe **scoe@londonclc.org.uk**

E-safety for Parents/Carers

Parents and carers have a vital role to play in ensuring children develop as safe and responsible digital citizens. The CLC's 2-hour 'Introduction to E-Safety' workshops are tailored for families and carers and help raise awareness of the issues while also providing practical tips and advice to help parents keep their children safe online.
Workshops cost £300

Workshop Table

EYFS / KS1

Half-Days

Workshop	Yrs	Location	Subject	Page	Code
Robots and Computing	1-2	LCLC	Computing	5	WH01
Games Design	1-2	LCLC	Computing English	5	WH02
Geography and Digital Maps	1-2	LCLC	Geography	7	WH05
Science: Patterns Shape and Form	1-2	LCLC	Science Computing	7	WH06

KS2

Half-Days

Workshop	Yrs	Location	Subject	Page	Code
Robots and Computing	3-4	LCLC	Computing	5	WH01
Networks and the Internet	3-6	LCLC	Computing	5	WH04
Science: Patterns Shape and Form	3-4	LCLC	Computing	7	WH07
Games Design	3-6	LCLC	Computing English	5	WH03

EYFS / KS1

Full-Days

Workshop	Yrs	Location	Subject	Page	Code
Investigating the world	EYFS	In-School	The World Technology	8	WS04
Robots and Computing	1-2	In-School	Computing	8	WS02
Animate IT	1-2	In-School	Computing English	9	WS06
Build your own workshop	1-2	LCLC	The World Technology	7	W15

Workshop Table

KS2

Full-Days

Workshop	Yrs	Location	Subject	Page	Code
Programming and Games Design	3-6	LCLC	Computing	4	W01
E-Safety Interactive	3-6	LCLC	Computing	4	W02
Robot Challenge	5-6	LCLC	Computing	4	W03
Lego WeDo Robots	3-4	LCLC	Science Maths Geography	4	W04
Raspberry Pi & Minecraft	3-6	LCLC	The World Technology	4	W05
HTML, web design and the Internet	3-6	LCLC	Computing	4	W06
Robots and Computing	3-4	In-School	Computing English	8	WS02
Robot Challenge	5-6	In-School	Computing	8	WS03
E-Safety: Digital Leaders & Pupil Voice	4-6	In-School	Computing	9	WS05
City Planning in Minecraft	3-6	LCLC	Science Maths Geography	6	W07
Electricity and Circuits Maker Day	3-6	LCLC	The World Technology	6	W08
Investigative Maths	3-6	LCLC	Computing	6	W09
Kodu Volcanoes	4-6	LCLC	Computing English	6	W10
3D Printing: Design, Make, Evaluate	4-6	LCLC	Computing	6	W12
Geography and Digital Maps	3-6	LCLC	Computing	6	W11
Music	4-6	LCLC	Computing	7	W13
Evolution Animation	3-6	LCLC	Science Maths Geography	7	W14
Build your own workshop	3-6	LCLC	The World Technology	7	W15
Animate IT	3-6	In-School	Computing English	9	WS06
Game-changer	5-6	LCLC	Science Maths Geography	10	GCC
HMS Belfast	3-6	LCLC	History Art & Design D & T	10	HMSB
National Portrait Gallery	3-6	LCLC	History Computing	11	NPG

Professional Learning Summary Table

Full-Day Training and Conferences

Autumn Term

	Date	Page	Code
ResearchED Conference	Saturday 3 October	20	PL1
Teach Computing KS1	Thursday 8 October	20	PL2
Teach Computing KS2	Thursday 22 October	20	PL3
3D Printing and Minecraft Across the Curriculum	Thursday 5 November	21	PL4
E-Safety Training	Thursday 19 November	21	PL5
Computing & Technologies Conference 1	Thursday 3 December	21	PL6

Spring Term

	Date	Page	Code
Digital Leaders' Academy: Preparing for Safer Internet Day	Mon 25 - Wed 27 January	21	PL7
SRF and ICT Mark	Thursday 28 January	22	PL8
Animation Across the Curriculum	Wednesday 10 February	22	PL9
Evidence and Assessment across the Curriculum	Thursday 25 February	22	PL10
Film-Making across the Curriculum	Wednesday 2 March	22	PL11
Humanities Conference	Thursday 17 March	22	PL12

Summer Term

	Date	Page	Code
Reading for Pleasure	Wednesday 27 April	23	PL13
Computing & Technologies Conference 2	Thursday 16 June	23	PL14

Half-Day Training and Conferences

Autumn Term

	Date	Page	Code
New to leadership in Computing 1/3	Wednesday 23 September	23	PL15
Languages (MFL) Forum	Thursday 1 October	23	PL16
Using Blogging to Support Children's Writing	Wednesday 14 October	24	PL17
E-Safety Mark and the 360 review tool	Thursday 15 October	24	PL18
Computing assessment and moderation	Thursday 12 November	24	PL19
Maths Forum	Thursday 26 November	24	PL20

Professional Learning Summary Table

Half-Day Training and Conferences

Spring Term

	Date	Page	Code
Introduction to Scratch	Thursday 14 January	25	PL21
Introduction to Kodu	Thursday 14 January	25	PL22
New to leadership in Computing 2/3	Wednesday 20 January	25	PL15
SRF and ICT Mark	Thursday 28 January	25	PL23
E-Safety: Working with parents	Thursday 28 January	25	PL24
Science Forum	Thursday 10 March	26	PL25

Summer Term

	Date	Page	Code
New to leadership in Computing 3/3	Term 6 Date tbc	26	PL15
Game Changer Challenge	Wednesday 20 April	26	GCC
EYFS Forum	Wednesday 18 May	26	PL26
Introduction to Scratch	Thursday 26 May	26	PL27
Introduction to Kodu	Thursday 26 May	26	PL28
Art and Design subject leaders forum	Wednesday 29 June	26	PL29

Teaching Assistant Training

	Date	Page	Code
Using Wordpress	Wednesday 23 September	27	TA1
Introduction to E-Safety	Thursday 4 February	27	TA2
Filmmaking and iPads	Tuesday 12 January	27	TA3

Free NQT Training

	Date	Page	Code
Computing for NQTs	Thursday 21 April	27	NQT1

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Service standards

The CLC is accredited as an Apple Regional Training Centre and is an official trainer for Purple Mash. Staff at the CLC are qualified CEOP Ambassadors and ThinkUKnow Trainers. The CLC was recently awarded a NAACE (subject association for ICT) Impact Award 2014 - 2015 for the quality of its school support services and were named as Technologists of the Year 2012-2013 by the Association of Learning Technologists. The CLC is a Computing at Schools Lead Centre for the teaching of computing and computer science and is an LGfL-recognised technical support provider for London schools.

Cancellation

The CLC will endeavour to operate a 'no cancellation' policy. However, unavoidable circumstances such as illness may occasionally require sessions to be cancelled. Where this occurs, the CLC will make alternative provision at the earliest opportunity. The CLC will not cancel CPD provision if numbers are low, although it may offer a more cost-effective alternative or occasionally postpone to increase numbers.

Complaints

If a complaint is made regarding the CLC service, it will be investigated fully, with a response made within five working days. Complaints should be made by email to Julia Lawrence **jlawrence@londonclc.org.uk**

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