

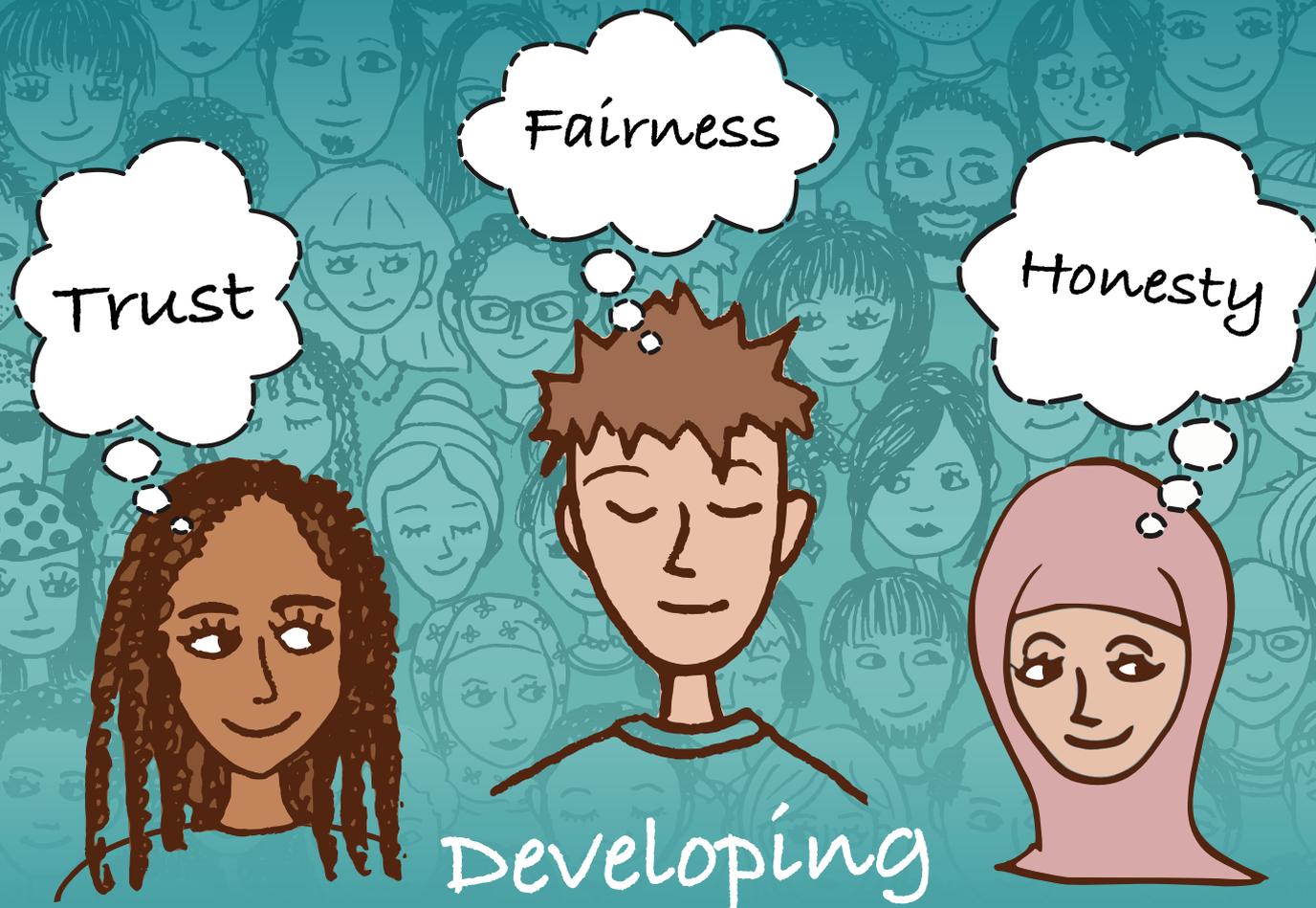
# SECONDARY

## LEARNING RESOURCES

### + DIGITAL COLLECTIONS

LONDON  
GRID FOR LEARNING

2017 EDITION

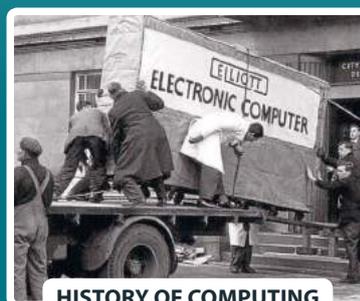


# BRITISH VALUES

HIGH-QUALITY, SAFE AND RELEVANT TEACHING MATERIALS FOR  
DEEPER UNDERSTANDING AND INFORMED DEBATE BY YOUNG PEOPLE

## VIRAL CONTAGION

EXPLORING THE REAL-WORLD  
MATHS BEHIND AN OUTBREAK  
OF A BIOLOGICAL EPIDEMIC



HISTORY OF COMPUTING



WW1 AUGMENTED REALITY

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# WELCOME

There are some exciting developments on the way from LGfL TRUSTnet in 2017, but one thing will never change – teaching & learning comes first. We put the ‘ed’ into edtech, and not the other way around!

Blink and you’ll miss it! My first year as CEO is nearly over, and it only feels like yesterday that I took over at the helm. But it is well worth stepping back for a moment to reflect upon 2016 as we enter what will hopefully be another year to remember in 2017.

In the first few weeks of the year, we won a Bett Award for our augmented-reality resource ‘Maya – a Journey through the Maya World’. It was our fourth AR project with the experts at Computeam (and came a full six months before Pokémon Go! brought AR crashing, flying and spinning into the mainstream).

The Maya resource embodies the spirit within which we work – we don’t just dump the latest technology in the classroom, wait for a quick ‘wow!’ and then return to business as usual. We want to make tech work for teachers, meet a clear need (Maya was new to the curriculum), and lay the groundwork for curriculum excellence. The Bett Award was recognition of that aim.

Also in 2016, we launched the LGfL Training Hub, further developing our curriculum centre of excellence; we boosted bandwidth for all our schools, with an upgrade that truly futureproofs our network; and for the first time, the community grew to more than 3,000 schools.

We now service schools outside of London in Sandwell, Liverpool, Glasgow and Northern Ireland. And we are delighted to provide schoolsafe broadband, cloud services and online learning resources to some of the UK’s largest and most



- Saving schools money
- Supercharging connectivity
- Keeping children safe
- Tackling educational inequality
- Helping children reach their potential
- Energising teaching & learning
- Cloud acceleration and digital transformation

successful academy chains.

Looking forward to 2017 then, we are ramping up our efforts to bring cloud transformation into education.

There is much more to the cloud than meets the eye, and we are engaged in various projects that will benefit schools looking for help in

this area (read more on page 6).

As part of this, we have built new partnerships with the Education Teams at Google and Microsoft (p8) which we think will be truly transformational for schools which take part.

And at the same time, we will be expanding our CPD offering, increasing safeguarding activities, rolling out the Free-School Meals Checker to every UK school, and much, much more.

It has been an exciting journey for me so far, and I look forward to the next exciting chapter with you in 2017.

**John Jackson**  
LGfL CEO



Find out more about LGfL at [www.lgfl.net](http://www.lgfl.net)  
Stay up to date at [news.lgfl.net](http://news.lgfl.net) and on social media



**Facebook**  
/LondonGridforLearning



**Twitter**  
@LGfL

# LEARN MORE WITH LGfL

## WATCH MORE

**4,769**

VIDEOS UPLOADED BY LGfL SCHOOLS



**1,189,741**

PUBLIC VIDEOS PLAYED

**77,698**

PREMIUM VIDEOS PLAYED

## ENGAGE MORE

**9,120**

DOWNLOADS OF JUST ONE OF OUR AUGMENTED-REALITY APPS IN 2016



## LISTEN MORE

**57,500**

PROFESSIONALLY RECORDED AUDIO FILES

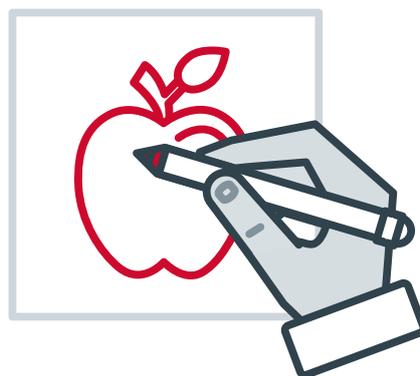


## READ MORE

**30 AUTHORS**

**550+** INTERVIEW CLIPS ON READINGZONE LIVE

## CREATE MORE



**324,705**

FILES CREATED BY LGfL LEARNERS WITHIN THE J2E TOOL SUITE IN 2016

“ LGfL’s VideoCentralHD gives us a secure place to store and share video content from teachers and pupils. The ability to share these videos helps us engage parents more in their children’s daily lives. ”

**Bina Bond**

*Class teacher, PE leader & Maths development team, Anson School, Brent*

“ The new LGfL Cold War resource is packed with new and exciting content which teachers and students could not realistically access by any other means. This includes input from academic historians, original documents, and even interviews with bestselling novelists and former Stasi prisoners. All packaged in helpful topic-based bundles with activities which will engage and challenge. ”

**Ben Walsh**

*Senior examiner for GCSE History and author of many well-known textbooks including GCSE Modern World History for OCR, AQA and Edexcel*

“ LGfL is so much more than a broadband provider. It has content that allows us to keep children safe online and enrich their curriculum experience, and provide crucial links to help parents support children at home. ”

**Simon Pile**

*Assistant Headteacher, Anson School*



# CLOUD TRANSFORMATION starts here!

CEO John Jackson has long advocated the power of the cloud to transform local government. Now he is bringing his experience to bear in the education sector. But what's it all about and how can the cloud help busy teachers and cash-strapped schools?

My history in local government can be summed up in one word: transformation. And for me, that is the essence of the cloud.

For many people, 'cloud' is a nebulous term (no pun intended), but I can assure you that this is not just a trendy buzzword.

For me, it is about a different mindset; about getting things done in the most effective way whilst saving real money; about cutting out waste and adding exciting new functionality that allows teachers and students to focus on their core tasks – teaching & learning.

At LGfL TRUSTnet, we are committed to enabling and accelerating cloud adoption. We already offer supercharged, schoolsafe, value for money connectivity.

But we want to leverage that to enable digital transformation of schools on a large scale. That requires common platforms, services and infrastructure; it means one-and-done connectivity; it means pay as you use, not pay when you don't; it means

open-source friendly; and in order to be truly responsive to schools' needs, it also means open and interoperable, whether with Google and Microsoft (see pages 8-9) or with newcomers to the education arena.

Is this a question of out with the old and in with the new? It may be to an extent, but we aren't about to throw out any babies with the bathwater.

Technologists often talk about wanting to cause disruption – that is, to shake up the market and bring about a revolution.

In schools, disruption (albeit with a slightly different meaning) is generally undesirable, so it is important to state that we are not looking to force our users into anything, but we do want to enable them to do a lot more if they so choose!

That is the driving force behind our new partnerships with Google and Microsoft. Both offer amazing opportunities for the classrooms of the future, and we are committed to making it easier for any school wanting to go Google or make more of Microsoft.

Don't worry though – we aren't forcing this on anyone, but hope that our new curriculum training hub and centres of excellence will help to make it a worthwhile value proposition.

2017 will be a big year for the cloud, so be sure to stay up to speed with the latest.

**news.lgfl.net**



“ 2017 will be a big year for the cloud, so be sure to stay up to speed with the latest at [news.lgfl.net](http://news.lgfl.net) ”

**John Jackson LGfL CEO**



# G SUITE FOR EDUCATION

Google Classroom and the other G Suite for Education tools are already exciting schools around the world. At LGfL, we are all about digital transformation, so that’s why we have started a partnership with Google to help our schools ‘go Google’.



Google’s strength is the development of technology solutions that ‘simply work’ and have, at their core, a commitment to innovation.

G Suite for Education provides a platform for learning that enables real-time collaboration and helps teachers save time.

Around the world, there are more than 60 million active users of the platform (and it is growing rapidly).

In many US states, G Suite has become the dominant technology choice due to features like the ability to automatically copy a Google document for each student and send parents or

carers weekly summaries of completed and missed homework.

Teachers and students say that the platform truly drives collaboration in schools and helps promote a learning culture based on peer-to-peer interaction and project-based activity.

Google Classroom represents Google’s biggest investment yet in the education space. At its core, Classroom provides a set of tools to help teachers create and collect assignments paperlessly, including time-saving features like the ability to automatically make a copy of a Google document for each student.

We are working with Google to find the best way to roll out G Suite at scale (remember we have 3,000 schools!) and to help schools make the change.

At the time of writing, the plans aren’t quite finalised, but by the time you read this they may well be, and in any case, we are looking for pilot schools now.

For the latest, or to go Google today, head to [gsuiteinfo.lgfl.net](mailto:gsuiteinfo.lgfl.net)

## Introducing Classroom

Create, share, and grade assignments with ease. Classroom was designed to help you save time and keep classes organised.

## Take Gmail to school

Gmail’s spam protection, powerful search, and integrated calendars help you get more done. For education, there are absolutely no ads.

## Streamline your class

Create, share, and grade assignments with ease. Classroom helps you keep classes organised, and improve communication with students.



## Collaborate on documents

Create and edit docs, spreadsheets, and presentations right in your browser. Multiple people can work at the same time, and every change is saved automatically.



## Share in the cloud

Save work files in Drive, access them from any device and share them instantly. No more sending attachments or merging different versions.



## Share calendars

Spend less time planning and more time doing with shareable calendars that integrate



seamlessly with Gmail, Drive, Contacts, Sites, and Hangouts.

## Create websites

Launch a website for your class, your team, or a project with our easy site builder. All without writing a single line of code.



## Meet face to face

Connect any time via video, voice, or text. Use text chat for quick questions and Hangouts for group video calls, virtual office hours, and field trips.

## Archive your emails and chats

Manage, retain and search for your organisation’s email and on-the-record chats. Export files to Google Drive and preserve your data.

# OFFICE 365 FOR EDUCATION



We are committed to giving schools choice, so we are also ramping up our partnership with Microsoft to help schools transform teaching & learning for the digital age.

## NEVER LOSE HOMEWORK AGAIN

Each staff and student account comes with 1TB of free storage for emails, documents, presentations and associated photos and media.

That's more than enough to last any student throughout their life at school. What's more, this space is a repository for all their vital files, always available, always online.

## WORRY-FREE IT

Office 365 is incredibly flexible, and how your school uses it is up to you. If you want all your data in the cloud, then Office 365 is safe, secure and reliable.

## COLLABORATION WITHIN AND WITHOUT THE SCHOOL

Collaboration is part and parcel of Office 365. Using just the Office Web Apps, teams of students can work on a single version of an online Word, Excel or PowerPoint document, viewing and making edits simultaneously with all changes synchronised.

Teachers and students can also work on the same document at the same time, enabling new styles of teaching and learning.

SharePoint Online, meanwhile, provides an ideal platform for group activities and larger projects.

Yet Office 365 for Education takes collaboration even further. With Skype for Business, it's easy to set up real-time video chats, instant messaging and screen-sharing with students across classrooms, schools and even around the world.

Teachers can use it to foster relationships between different schools and communities, or call in experts without needing to physically bring them into school.

Office 365 for Education helps staff and students work together – and bring in the wider world.

## OFFICE 365 WORKS ON ANYTHING

Office 365 for Education is the perfect fit for Windows, and whether you're using

PCs, laptops or tablets. Yet it's not in any way limited to Microsoft technology. Office 365 for Education's email will work perfectly well with Macs, iPads, iPhones and Android smartphones and tablets.

## INSPIRE NEW WAYS OF LEARNING

With the power of the cloud behind you, you can investigate new approaches to teaching and learning:

Create team sites for staff and students; manage cross-class projects with SharePoint and get everyone involved.; use video chat and instant messaging to let ideas develop and thoughts run wild; or harness Office Web Apps for collaborative activities that might involve teachers and teams of students.

## THE POWER OF MICROSOFT OFFICE

Some cloud-based services make you work with unfamiliar apps and tools. Not Office 365 for Education.

The Office Web Apps, covering Word, PowerPoint, Outlook, OneNote and Excel, have the familiar look and feel of their desktop versions and many of the same features.

Yet if you need more power, Office 365 for Education works hand-in-hand with the desktop Office applications. Staff and students can start projects using Office Web Apps then polish them in Word, PowerPoint and Excel.

Teachers can set up documents in the desktop Office applications before handing them off to students to continue the work in the Web Apps.

OneNote has become an invaluable tool for gathering ideas and information, and with Office 365 for Education it works across PCs, tablets and smartphones.

## LGfL-FLAVOUR OFFICE 365

Our staff and pupils have had access to Office 365 apps via LondonMail accounts for several years, but we are working intensively with Microsoft on improving the experience and allowing schools to customise their apps. Want to find out where we're at? Visit [365info.lgfl.net](http://365info.lgfl.net)

### OneNote

Organise class materials into a single digital notebook; access and prepare lessons and assignments from any device; combine handwritten text, web content, audio and video for more compelling content and personalized learning. And that's just the start of Office 365 collaboration for students and colleagues.



### Office 365

Create dynamic learning experiences in and beyond the classroom with the well-known core productivity applications.



### Skype in the Classroom

A fast and fun way for teachers to open up the classroom and create exciting, memorable lessons – talk to experts, share ideas and create amazing learning experiences with classrooms from around the world.



### Sway

With this digital storytelling app, students and teachers can create and share interactive reports, presentations, personal stories and more.



### OneDrive

File storage and collaboration in the cloud, enabling students, teachers and parents to access files anywhere, anytime, on any device.



### Office Mix

Blended learning at a click. Turn PowerPoints into interactive online lessons, annotate lectures, write on slides, and much more.



# NAVIGATING THE WORLD OF LGfL CONTENT

Our learning-resource portfolio is often described as a treasure trove; we can help you find out what's in it.



The LGfL content strategy is not about forcing teachers to abandon tried-and-trusted lessons and teaching methods; it isn't about a one-size-fits-all approach; and it isn't about replacing the teacher with technology.

So what is it all about? Using technology to enhance learning; making effective teachers even more effective; opening up new possibilities; providing resources that are flexible enough to slot into existing schemes of work or to become new standalone units; and supporting teachers old and new with materials that marry top-class engagement with curriculum relevance and solid pedagogy.

As well as sourcing, licensing, developing and creating this high-quality content, it is just as important to make it accessible to the busy teacher who barely has time to buy food for dinner, let alone spend hours

browsing resources and contemplating lesson-plan changes.

In 2016, we rebuilt lgfl.net to make it easier for teachers to find what they want, when they want.

When you visit **content.lgfl.net** (or click the 'content' dropdown menu from any page on the site), you will see these six red icons, which all give you a slightly different way into the materials.

 Want to browse everything that could be relevant for the classes and subjects you teach? Then this is the button for you.  
**grid.lgfl.net**

 Click here to see a limited selection of resources which will help you meet a very specific curriculum need.  
**pos.lgfl.net**



Our portfolio of inclusive resources to help teachers in mainstream and SEND schools is extensive and growing!  
**send.lgfl.net**



This one should be obvious; you're reading it now! We have print and online versions of this and other content magazines.  
**contentmagazines.lgfl.net**



Ideal for staff / department meeting, there is a Primary and Secondary video to remind you what is available.  
**contentvideos.lgfl.net**



Let us surprise and inspire you with our Forward Planner, Did You Know?, Online-Safety Tip, Author of the Week, On this Day, Image of the Day.  
**inspireme.lgfl.net**

# DIGITAL COLLECTIONS

THOUSANDS OF RELEVANT IMAGES & VIDEOS AT YOUR FINGERTIPS



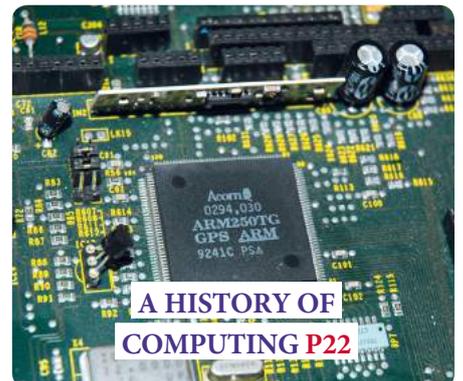
IMAGE BANK, HOME TO  
SUPER-HIGH-DEFINITION  
IMAGE COLLECTIONS **P20**



THE M ROOM **P14**



POLAR EXPLORATION **P16**



A HISTORY OF  
COMPUTING **P22**



# THE COLD WAR

One of LGfL's most ambitious resources spans borders, ideologies and even realities, with spies, journalists and dissidents; prisons, concentration camps and border walls.

This Key Stage 3/4 resource tackles a topic that is contemporary and absorbing for teachers and students.

The Cold War continues to make headlines today (Frederick Forsyth, who features here, last year admitted to his past as an MI6 spy), so what better time to provide well-founded, historically-

accurate and curriculum-driven materials to help match quality teaching & learning to the interest in the subject.

Designed with major GCSE exam-boards in mind, not to mention the revised KS3 History National Curriculum, The Cold War is highly engaging, but about much more than mere intrigue.

Lead presenter and consultant to the project is eminent historian, espionage expert and author Dr Helen Fry, who presents to camera from locations as diverse as a UK government nuclear bunker, former Stasi Prison, and the Brandenburg Gate.

She shows how a

**INTERVIEWS  
INCLUDE**



▶ **Frederick Forsyth**  
Did Britain have spies behind the Iron Curtain?



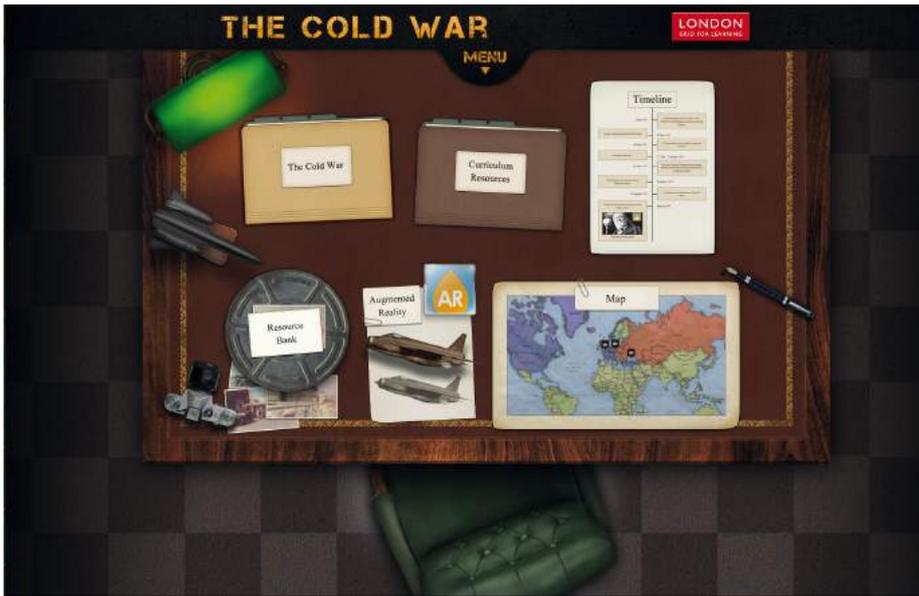
▶ **Fred Judge**  
Was the Berlin Wall impenetrable?



▶ **Peter Wulkau**  
How did prison change you and your opinions?



▶ **Dr Helen Fry**  
Why film on location at Duxford nuclear bunker?



historian works, with months of research preceding site visits and interviews with experts and witnesses.

For The Cold War, these included a former MI6 spymaster, Stasi prisoner, and a Reuters East Berlin correspondent (who just happened to be a bestselling author and former MI6 spy).

Dr Fry sourced recently-declassified MoD documents, plus personal photos from Churchill's bodyguard, and ensured that these and many more materials are available for educators and students.

The curriculum materials were created by exam-board adviser and GCSE textbook author Ben Walsh, who crafted a series of ingenious lesson activities to complement schools'

existing schemes of work.

Tasks help learners use the exclusive materials to conduct their own research into the murky world of the Cold War.

The resource is divided into thematic and curriculum sections, but all documents, images, and videos (300+ historical and contemporary assets) are searchable via the resource bank, allowing teachers to fully disaggregate the wealth of primary and secondary-source material.

All of this is complemented by a series of augmented-reality objects for quality engagement, all highly-relevant and embedded into lesson plans.

[coldwar.lgfl.net](http://coldwar.lgfl.net)

## PLACES OF INTEREST

Learn more about places of interest from the Cold War.



**Berlin Wall**  
Iconic symbol of the struggle between East and West



**Stasi Prison**  
Deep within a secure zone, nobody ever escaped



**Kelvedon Hatch**  
UK government nuclear bunker



**Glienicke Bridge**  
nicknamed the 'Bridge of Spies' by the media



**Cecilienhof Palace**  
home to the Potsdam Conference at the end of WW2



## THE COLD WAR AUGMENTED REALITY



All you need to make this resource come to life is a free Apple or Android app. See famous Churchill, JFK and Reagan speeches, nuclear fallout over London, or a mid-air intercept.



# THE M ROOM

World War II has long been core to the curriculum at Key Stage 3 and 4, but now teachers and students have the chance to explore a new angle – the bugging of German generals in British stately homes to reveal secrets of wartime strategy and even genocide.



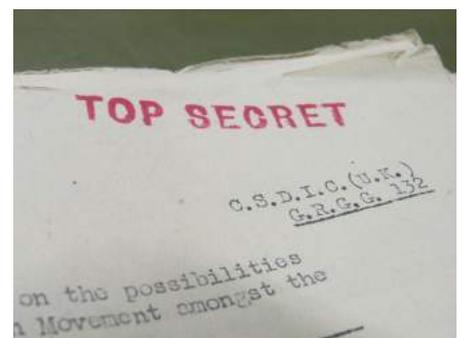
The M Room gives exclusive access to secret World War II listening sites where the British Secret Service bugged high-ranking German Military prisoners.

The resource features an interview with one of the original secret listeners (now aged 95), and extensive primary-source material from the Ministry of Defence, relatives of those involved, and The National Archives.

The lead presenter and consultant to the project is the eminent historian Dr Helen Fry.

The depth and range of material in the resource is a result of Helen's meticulous research at The National Archives, with relatives, and out on location: she uncovered information about The M Room story that even the Ministry of Defence was unaware of.

The resource features 50 high-



quality video clips filmed on location at declassified military sites, as well as over 50 high-resolution images of locations, personnel, maps and previously-classified documents.

Produced in response to the revised secondary National Curriculum, The M Room specifically targets the revised Key Stage 3 History curriculum section 'Challenges to Britain, Europe and the

“British Intelligence would always mix army, airforce and u-boat personnel, so prisoners would need to give more detail in their conversations. They didn’t realise that there were microphones in the light fittings just above their heads...”

Historian Helen Fry



wider world from 1901 to the present day’, picking up on the suggested focus of ‘the Second World War and the wartime leadership of Winston Churchill’.

It also features sections on Nazi atrocities, linking to the statutory requirement to cover the Holocaust at KS3, as well as incorporating curriculum-linked activities for KS3/4 English.

The resource is designed to be used both as a class teaching tool and in an individual learner context. The structure of support material is specifically designed to meet the needs of History teachers working with Key Stage 3 and 4 pupils.

There are detailed lesson plans to ensure accessibility to the resource for teachers who may be new to the subject, offering a complete support package

to maximise the benefit of this digital collection.

However, the M Room is equally designed to be of great value to the subject specialist, who may wish to use videos, images or augmented-reality objects as standalone stimuli.

The resource bank allows you to see all assets at a glance, for embedding into existing lessons and schemes of work.

Pupils could equally be tasked with conducting their own research on a particular section for homework.

And the ‘recording history’ section is an invaluable tool for learners to understand how historians work.

Dr Helen Fry models how she uses primary-source material to build an understanding of the past.

[mroom.lgfl.net](http://mroom.lgfl.net)

“I was told that it was just a disused storeroom, but before I knew it, I was stumbling across key documents that had not been seen for over 50 years.”

Helen Fry discovering documents at Wilton Park.



## THE SECRET LISTENERS



**Fritz Lustig** was a ‘secret listener’ – he helped translate the conversations of German prisoners-of-war bugged by British Intelligence during WW2.



# POLAR EXPLORATION

## IN THE HEROIC AGE OF SCIENTIFIC DISCOVERY

Not many schools can manage an annual trip to the North Pole; if there is a next-best thing, surely it is the immersive effect of this multimedia resource.



### OBJECTS OF INTEREST

P-p-p-pick up a Polar artefact!



#### Edwards Evans's sledge model

Model-making – one way to while away those long winter hours

#### Primus stove

Unique design lets you melt snow for drinking while you are cooking



#### Herbert Ponting's camera

Ponting used this camera for many of his iconic images

#### Penguin egg

You wouldn't want to scramble this artefact from the Terra Nova expedition



The University of Cambridge's Scott Polar Research Institute (SPRI) is one of the world's most famous bodies for the study of the science, technology, history and culture of the polar regions.

SPRI holds a unique collection of artefacts from expeditions past and present, from the eponymous explorer who gave his name to the Institute right through to modern-day adventurers.

And while the materials used for the gloves and goggles may have changed somewhat (you can investigate old and new within the resource), the challenges remain the same, and lessons learned from the first expeditions are still saving lives today!

LGfL was given unique access to the SPRI archive and its polar experts to create this cross-curricular resource, which includes lesson plans tailored to the Key Stage 3 and 4 English curriculum.

The resource includes video footage of equipment and artefacts from the most famous expeditions, complete with text transcripts, plus high-resolution photographs of objects featured in the video footage, as well as journal extracts read by a descendant of one of Captain Scott's Discovery expedition.

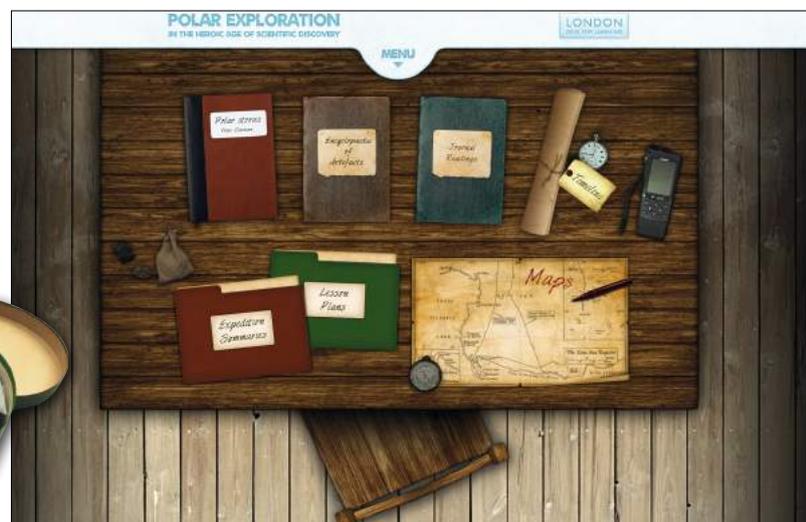
There are also opportunities to meet a modern-day polar explorer and hear of his experiences living for extended periods of time in some of the world's most extreme environments.

At GCSE, curriculum experts used the stimulating, rich primary-source material to create teaching resources that tackle: creating an argument, descriptive writing, understanding genre, making a radio script, and narrative writing.

At Key Stage 3, Polar Authors includes lessons covering: autobiographical writing, forming a chapter, adverbs and intransitive verbs, adjective and noun phrases, fronting and modifiers, compounds and active voice.

Students are encouraged to immerse themselves into the lives of the explorers, aided by the hundreds of HD images and high-resolution images, plus interactive timeline and Google Map interface – take a look at how the inside of Scott's preserved expedition hut looks today. Explore – engage – inspire...

[polar.lgfl.net](http://polar.lgfl.net)





**DID YOU KNOW?**

Herbert Ponting was one of the most renowned photographers of his time and a pioneer in the use of the camera in extreme conditions; he liked to be referred to as a 'camera artist'.

Pictures: Scott Polar Research Institute, University of Cambridge



POLAR EXPLORATION

IN THE HEROIC AGE OF SCIENTIFIC DISCOVERY

LONDON  
DISCOVER SOMETHING GREAT

MENU

Weddell Sea

Antarctic Map
High Altitude Map
White Key

Select Expeditions

- Discovery
- Nansen
- Terceiro
- Endurance
- Graham Land

Key Events

- 1 Entering the pack ice
- 2 Trapped in the ice
- 3 Endurance abandoned
- 4 Endurance sinks
- 5 Ice begins breaking
- 6 Elephant Island
- 7 South Georgia
- 8 Hut Point

# AUDIO NETWORK

Includes  
**60,000+**  
audio files

Over 60,000 professionally-recorded tracks licensed for educational use. No getting caught out by copyright law; no need for poor-quality rippoffs.

## IT COULD BE YOU

It was just another Monday morning at St John's. Parents were phoning the absence line and delivering forgotten P.E. kits, and the photocopier had jammed again.

Then the letter arrived. American copyright detectives had sent a 'breach of copyright' notice for an illegal copy of a hit song on a class blog.

It was a pupil video, and it was educational. But the lawyers didn't want to know. The school had 4 weeks to pay up \$10,000 or be taken to court.

## NO NEED TO FALL FOUL OF THE LAW

Online tracking makes it foolish as well as illegal to breach copyright in this day and age. But in an LGfL school, there really is no need.

On behalf of London schools,



“ You can even search by mood – try *scary, jolly or angry!* ”

LGfL has licensed the Audio Network database for teachers and pupils for educational use – in school and at home.

## QUALITY AND QUANTITY?

Audio Network is not just another

compilation of unwanted tracks and poor covers.

With recordings of professional musicians (often entire orchestras!) by professional engineers in professional studios (heard of Abbey Road?), LGfL schools can use over 60,000 tracks, spanning a wide range of genres, styles, instruments, composers, etc. You can even search by mood - try *scary, jolly or angry!*

Once you have found your perfect track, you can stream it live, save it to your favourites, or download it in .WAV or .mp3 format.

But Audio Network isn't just a gift for the music teacher – why not explore mood and atmosphere in literacy, or a historical era in History and Art?

[audionetwork.lgfl.net](http://audionetwork.lgfl.net)



# AUDIO NETWORK TV

Go behind the scenes at Audio Network; see how professional musicians work. Do you need big hair for 'Big Hair Rock'? Find the answer to this question and many more.

Music isn't just for musicians! From the makers of Audio Network, Audio NetworkTV gives us an insight into the recording of some of the high-quality music tracks available to all LGfL-subscribing schools.

We meet producers, engineers, studio owners, conductors and musicians, and see how they work together to make some of the greatest tracks ever heard.

From music producer Steve Levine and the Royal Philharmonic Orchestra on recording at Abbey Road Studios, to Ray Davies on big bands, and metallers on 'big hair', Audio NetworkTV opens the door to the recording process, and gives an insight into the professionalism of all those involved in creating a track.

[audionetworktv.lgfl.net](http://audionetworktv.lgfl.net)



OVER  
**1,000**  
HI-RES  
IMAGES



Picture: Royal Collection Trust © Her Majesty Queen Elizabeth II 2016

# IMAGEBANK

“My, my! At Waterloo Napoleon did surrender...”  
Whilst Abba might have some historical insights, a better way to study the famous battle might be with a collection of super-high-definition images from the British Library.

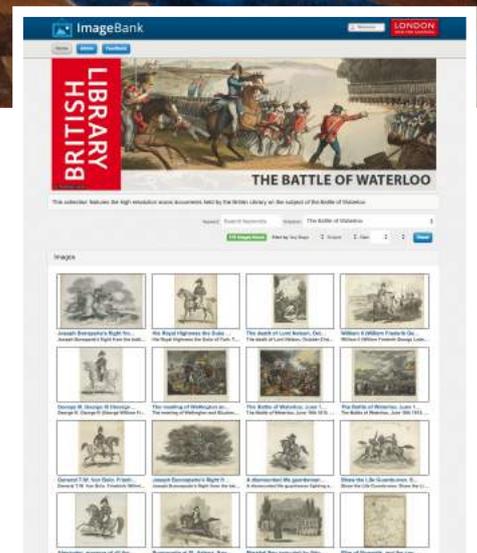
The new LGfL ImageBank is home to an expanding set of image collections licensed from national cultural institutions including the British Library and Royal Collection Trust (with whom we have started a series of training events - see [training.lgfl.net](http://training.lgfl.net)).

All the images are in extremely high resolution and include many paintings on display in famous collections, not to mention those which cannot currently be seen anywhere in the UK.

The nine Royal Collection Trust collections are curated selections of works displayed during RCT exhibitions at royal palaces around the country.



Picture: © The British Library



And thanks to the generosity of the British Library, the Magna Carta can now put in an appearance in your classroom.

Much more than an Art resource, the image collections have applications across the curriculum – from History, to Biology, to Geography.

Each image has been curated as appropriate for use in an educational context and, uniquely, can be downloaded in high resolution.

[imagebank.lgfl.net](http://imagebank.lgfl.net)

# THE GUARDIAN AND OBSERVER NEWS ARCHIVE

“Extra! Extra! Read all about it!”

The LGfL News Archive includes scans of every Guardian newspaper printed since 1821 and every Sunday Observer since 1791. That’s quite a lot of ‘extra’ to read about.

What did people actually think when man landed on the moon? Did British public opinion shun apartheid when Nelson Mandela was first in the news?

And did John Scot’s “pills for curing gouty bilious and nervous disorders” actually work in January 1792?

The answers to these and many other questions can be found within this unique archive of over 300 years of British journalism (Mr Scot’s pills might

“ The newspapers are an amazing historical record of all the events of the past two centuries. ”

not seem relevant, but attitudes to medicine were a little different in 1792).

History textbooks by nature need to distil the essence of a story for a schools audience, whereas a newspaper

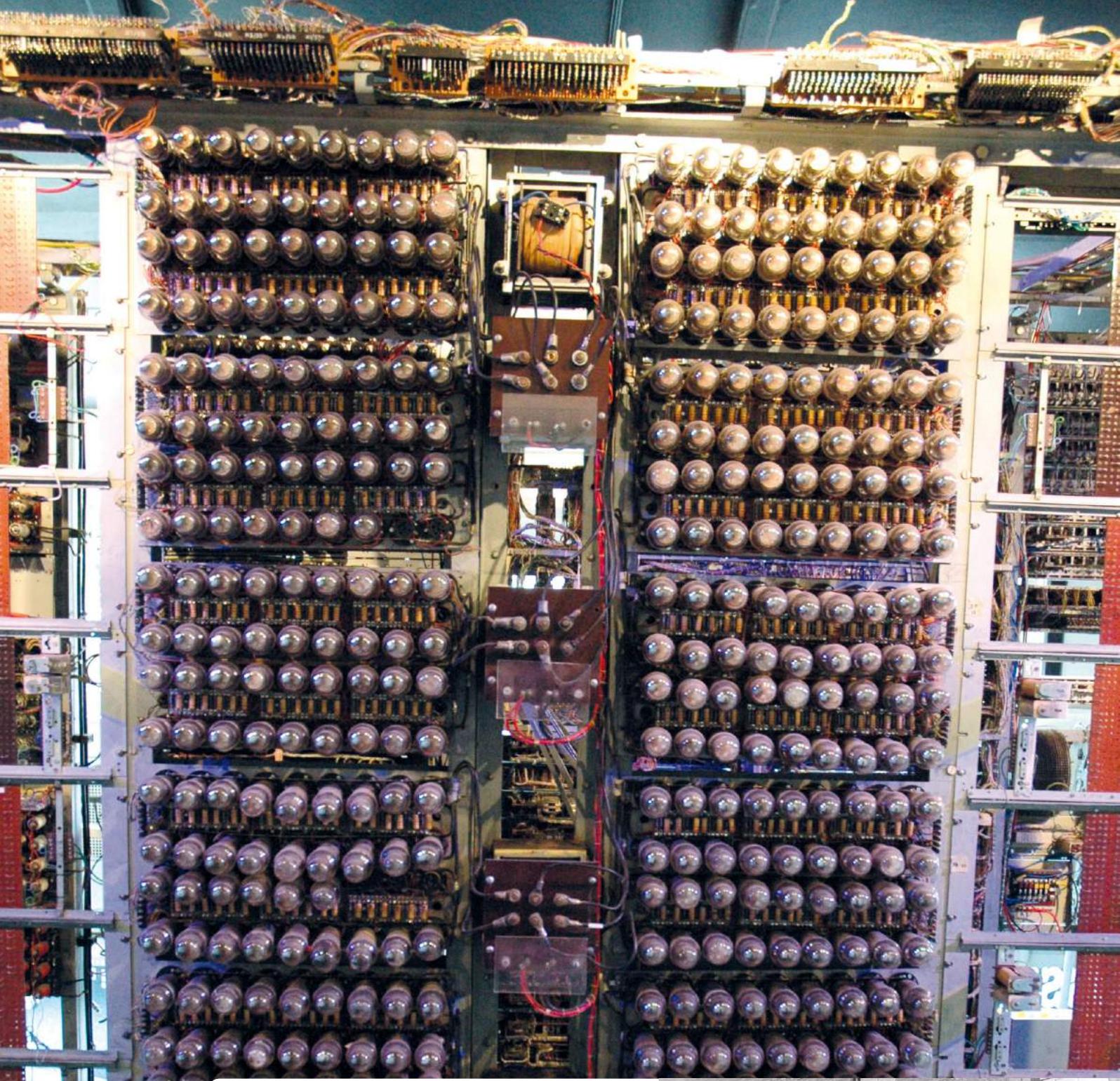
article gives a snapshot of the attitudes of a certain time, not to mention how perceptions are inextricably linked to current thinking and understanding.

It would be tempting to call this a History resource – which of course it is as well – but across the curriculum, teachers are encouraged to take a little ‘extra’ and “read all about it”.

[newsarchive.lgfl.net](http://newsarchive.lgfl.net)



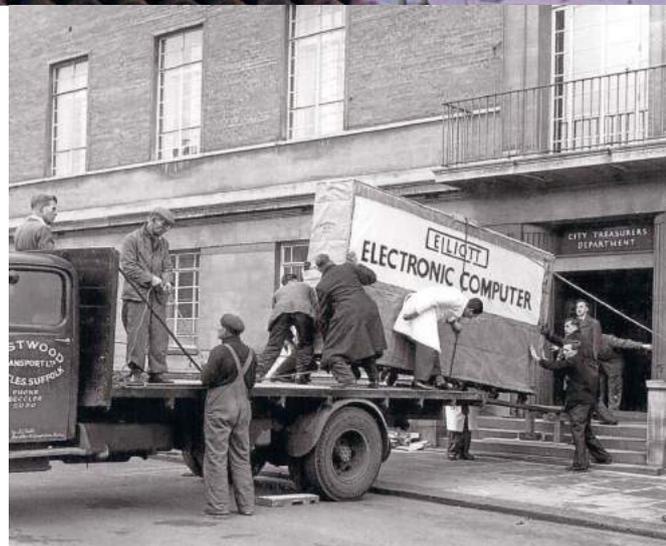
EVERY PAGE  
FROM EVERY  
EDITION SINCE  
**1791**



## **DID YOU KNOW?**

Learn more about the Elliott 803

**The Elliott 803 was one of the first ever mass-produced (over 200) computers. Before this time, you would have to build one yourself. The Elliott was so large that it was delivered in several lorryloads. Here it is (or rather one part of it) being delivered in 1961.**



# A HISTORY OF COMPUTING

Playing the ‘imitation game’ – helping the developers of tomorrow understand the relevance of lessons learned by the pioneers of computing.

Winner of the 2014 Bett Award for best Digital Collection and Resource Bank, The History of Computing has become one of the most popular resources available from LGfL.

Importantly, it is not an attempt to provide blanket coverage of the entire new Computing National Curriculum, but to offer a unique insight into the people and products that formed the bedrock of modern computing.

Produced in partnership with and on location at The National Museum of Computing, Bletchley Park, and Manchester’s Museum of Science and Industry, this resource features

video footage and high-resolution photographs of many of the iconic British computing systems used since 1940, including the Colossus Mark II system – restored to full working order.

For each system, Input, Processing, Storage and Output are deconstructed and placed within a societal context, and experts explain how the systems function and what role they played in advancing our work and leisure activities.

Resources include learning support material for the revised Computing National Curriculum and Key Stages 2-5.

The History of Computing aims to show that an understanding of our digital heritage is critical for shaping our digital future.

British computing developments have significantly influenced the world we live in. These unique materials show how home-grown innovations continue to impact on our world today and shape all of our tomorrows.

[hoc.lgfl.net](http://hoc.lgfl.net)

## DID YOU KNOW?

**Colossus (main image) was one of the first-ever electronic computers. It was built to break German coded messages during WW2 and would easily fill a large room.**



## PEOPLE OF INTEREST

Learn more about the people behind the development of modern-day computing

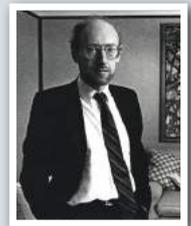
**Tommy Flowers**  
designed and built Colossus



**Alan Turing**  
is regarded as the founder of computer science

**Sir Clive Sinclair**

invented the first affordable electronic pocket calculators and home computer



## OBJECTS OF INTEREST

Learn more about computers

**Tape reader**  
for the Elliott 803. Used to input data on perforated paper



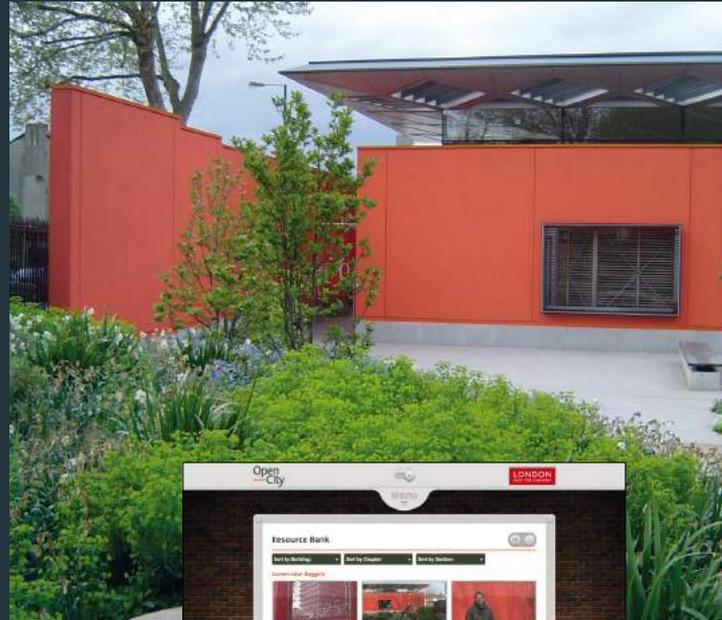
**ICL mainframe data storage disk**

**Teleprinter**  
with Colossus  
for outputting readable results



**Sinclair ZX Spectrum**





# OPENING UP ARCHITECTURE

No longer the preserve of specialists, architecture has relevance across the curriculum.

## JUST IMAGINE

Imagination, Maggie's and the Channel 4 Building – three iconic London landmarks that are fine examples of outstanding but diverse architecture.

Opening up Architecture provides expert insights into these unique buildings in a cross-curricular resource that covers ten different school subjects.

## WHY ARCHITECTURE?

How often do we consider the influence that the built environment has on our daily London lives?

How do materials, use of light, layout and construction methods impact on our work and leisure?

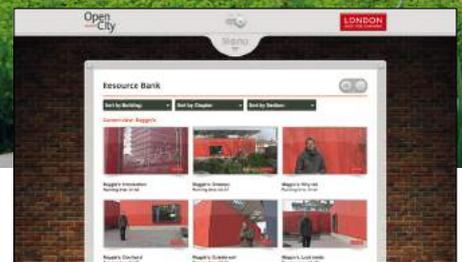
## AN OPEN CITY

LGfL worked in partnership with not-for-profit organisation Open City to create a programme that will help London teachers and students to better understand the built environment.

Materials used, use of light and sensitivities of the needs of clients and daily users are all analysed and presented in an accessible way for the non-specialist to incorporate into a wide range of curriculum areas.

This unique resource aims to develop a better understanding of the environment in which we all live.

[oua.lgfl.net](http://oua.lgfl.net)

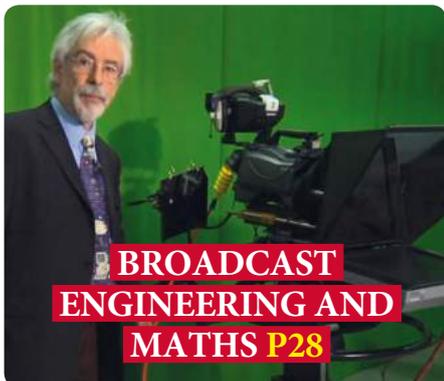


# LEARNING RESOURCES

WITH 73% COVERAGE OF THE NATIONAL CURRICULUM,  
YOU'RE BOUND TO FIND LGfL CONTENT THAT WILL  
ENRICH YOUR TEACHING



**LONDON  
SCHOOLS SYMPHONY  
ORCHESTRA P54**



**BROADCAST  
ENGINEERING AND  
MATHS P28**



**EMPLOYABILITY P50**



**GROWING UP  
AROUND THE  
WORLD P32**

**THERE'S MORE!** TURN OVER FOR MORE LEARNING RESOURCES FROM LGfL



# CORNERSTONE MATHS

This unique Key Stage 3 Maths content with embedded CPD is the product of several years' pan-Atlantic research and classroom testing by leading university academics.

Cornerstone Maths was developed over the course of five years by an international team of experts based at the UCL Institute of Education and Stanford Research Institute International.

The resource includes three web-based digital units of work for Key Stage 3. These are aligned to the new National Curriculum and use dynamic visualisations, such as tables, graphs and animations, to help children grasp difficult mathematical ideas in new ways.

The materials were initially proven in over 125 secondary schools before being launched via LGfL TRUSTnet.

The units of Maths are linear functions, geometric similarity, and patterns & expressions.

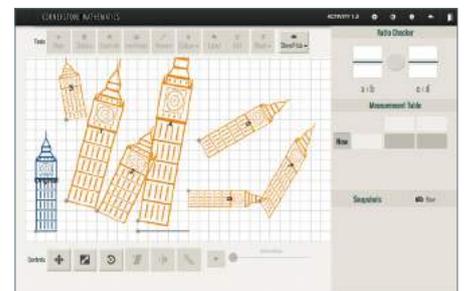
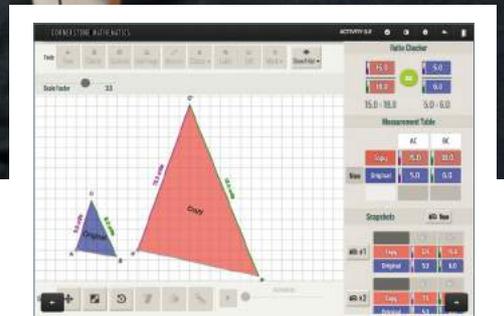
Each unit has a detailed pupil book, teacher book and teaching guide.

Cornerstone Maths includes online CPD materials embedded within the

resource, but there are also face-to-face sessions held as part of the LGfL Training Hub (see training.lgfl.net). These give teachers further opportunities to embed best-practice.

Schools that engage with Cornerstone Maths benefit from high-quality professional development, and use specially-designed classroom materials to complement the digital tools, supporting wider school-based scaling and sustainability.

**cornerstonemaths.lgfl.net**  
**csmathsmaterials.lgfl.net**



“ There was a distinct demarcation in my Year 8 class between those who had learned with Cornerstone Maths and those who hadn't. Retention a year on was significantly better than a class who had done similar work from a textbook. ”

*Liz Gould, Ormiston Bushfield Academy, Peterborough*

# MATHSPACE

Revise online for end of Key Stage tests or for GCSE with the Mathspace LGfL revision tests. Students get step-by-step feedback as they work through the questions. Teachers see marked workings-out for every student and can check misconceptions as they arise.

This Bett Award winning resource is an LGfL evergreen. Why?

Ofsted has criticised online resources for giving “no attention to how well the work [is] set out, or whether correct methods and notation [is] used.”

The unique advantage of Mathspace, which differentiates it from the surfeit of other online maths resources, is that it does much more than automatically check students’ answers and feed data back to teachers.

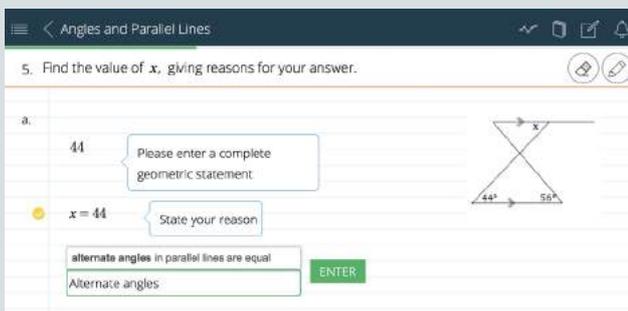
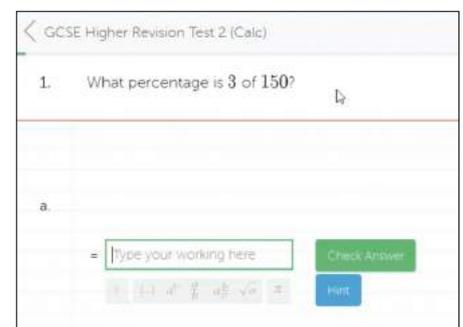
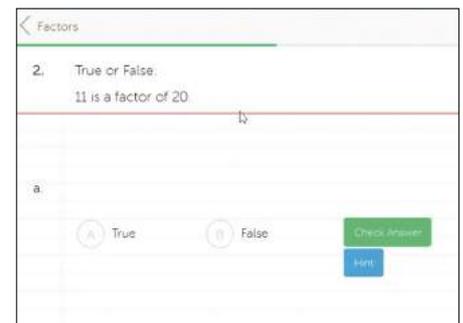
As students progress through the tests, they get instant feedback on every step they take, with hints given for every incorrect working. Mathspace also automatically creates tailored revision tasks to further aid their learning.

Teachers receive class and student breakdowns, but are also able to drill down to see workings-out for every student.

There are five Mathspace progress tests for Key Stage 3 students, which each test at three different levels well suited to Years 7-9. There are also six GCSE progress tests.

If you would like to start using Mathspace in your school, download a guide from [mssettings.lgfl.net](http://mssettings.lgfl.net) for the settings needed to export your class data – essential for the tracking element of the system to function correctly.

**[mathspace.lgfl.net](http://mathspace.lgfl.net)**  
**[mssettings.lgfl.net](http://mssettings.lgfl.net)**



## ENCOURAGING GOOD MATHEMATICAL HABITS

Mathspace only accepts answers that are mathematically possible.

This means that, where an equation is asked for, a student must enter a balanced formula; for geometry questions, all intermediate steps must be shown: students are always required to show their workings-out.

Developing these good habits ensures students are well-prepared when it comes to tackling complex mathematical concepts in the exam hall.



## HANDY HINTS KEEP STUDENTS ON THE RIGHT TRACK

What normally happens when a student is working on a problem and gets stuck?

In an ideal world, a teacher might be at hand with a handy hint. But in reality, this is not always possible, and students working online can easily get frustrated or give up altogether.

With Mathspace, there are tips and suggestions at the ready for each question, turning every difficult problem into a fully-worked example.

# BROADCAST ENGINEERING & MATHS

There is a lot more to the world of TV broadcasting than a B-list celebrity and a cameraman. This engaging introduction to the engineering and maths involved shows pupils how Eastenders can only go out on time if everyone gets their sums right.

LGfL created Broadcast Engineering and Maths in partnership with experts at Ravensbourne College, as a series of 'Maths in a real-world context' lessons.

The fast-moving broadcast industry is very appealing for young people, so demonstrating the relevance of classroom Maths in this area can be a powerful tool for teachers.

There is a series of four lessons in the resource, each with video clips of experts on location explaining how the technology works, plus extensive teacher guidance, lesson plans and student worksheets.

## TV SCHEDULING

The first lesson asks pupils to set a TV schedule and present it to their peers.

Differentiation makes this activity ideal for all learners: students may simply allocate programmes to time slots; they might use time placement to maximise viewing figures; or even target a certain advertising yield per viewer.

## SLEEPING SATELLITE

It seems strange to think that the picture we see on our screen could have travelled thousands of miles. But how?

'Satellite Maths' includes

Pythagoras, Circle Theorem, Speed-Distance-Time, and Standard Form.

## TRANSMISSION IMPOSSIBLE

This resource uses map loci and construction (with different scales) to work out the signal coverage of a fictional set of TV transmitters.

## SIGNALS AT THE CORE

Why do we sometimes not receive a TV signal? Unfortunately, data degrades with distance. Find out why.

[broadcastmaths.lgfl.net](http://broadcastmaths.lgfl.net)



## TV scheduling

Pupils are asked to be a TV scheduler for a day, firmly putting to bed the myth that you don't need Maths in the real world.



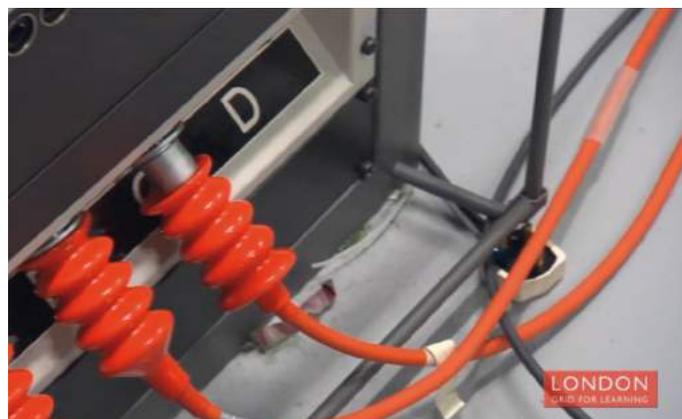
## Satellite signals

Unlocking the maths behind satellite signals – how do they travel from one point to another?



## Broadcast transmitters

Using scales, loci and construction to work out the signal coverage of a fictional set of TV transmitters.



## TV signal degradation

Graphs for visualising the maths and science behind data traffic, and how data degrades over distance.

# VIRAL CONTAGION MATHS

Investigating the real-world maths behind an outbreak of a viral epidemic in an urban area, and the unpredictable impact of changing infection rates.



Viral Contagion has unfortunately been regularly topical over the past few years, as SARS, bird flu, swine flu and Ebola grabbed headlines and caused deaths around the world.

This resource uses fictional news reports to describe the impact of a virus spreading across London, considering the maths behind an outbreak.

The collection of four differentiated standalone lessons provides an engaging, challenging focus for KS3 & 4.

Each lesson features high-quality dramatised video scenarios, computer models, interactive-whiteboard resources, and full teacher guidance.

## OUTBREAK SUSPECTED

What would happen if a contagious virus broke out in London? What are the infection rates and population totals?

## OUTBREAK CONFIRMED

The situation has deteriorated. Initial

tests show that the virus is airborne. What should your next steps be?

## AIRBORNE AND CONTAGIOUS

We now know you are infectious for one week after initial contact with the virus.

## SIX MONTHS ON...

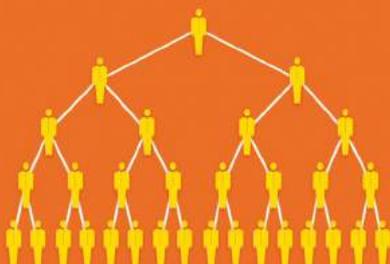
The virus has passed. What are the lessons learned?

[viralcontagion.lgfl.net](http://viralcontagion.lgfl.net)

## 4 RESOURCE LESSON PLANS

Each lesson includes differentiated teaching material to encourage students to get 'in role' and think through the impact of infection rates that change from day to day.

Plus special *making-of* feature.



### Lesson 1 – Outbreak suspected

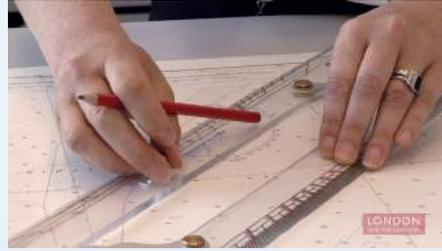
### Lesson 3 – Airborne and contagious

### Lesson 2 – Outbreak confirmed

### Lesson 4 – Six months on

# SEARCH AND RESCUE

Maths can sometimes be a matter of life and death. This exciting new resource, made possible through direct partnership with the UK Maritime and Coastguard Agency, shows pupils exactly how and why.



Featuring exclusive footage of real-life rescues at sea, lifeboat and helicopter searches, and rescue coordination at the National Maritime Operations Centre, pupils can see mathematical problem-solving in action – real life,

with real consequences.

Much more than a series of exciting, attention-grabbing videos and images, the resource is extensively mapped to the new National Curriculum and includes detailed lesson plans and

resources to enable pupils to apply their skills in context, solving problems for themselves.

Featuring comprehensive and differentiated support materials, topics covered include Bearings, Pythagoras

“ Problem-solving has never been so real and so relevant. ”



### Determining POD

In this example in the conditions we can fit taken to search this resulting POD.

10mph (100% POD)	hours
20mph (80% POD)	hours
40mph (60% POD)	hours

### Determining search areas

The coastguard have to develop efficient search techniques. The speed that a helicopter travels, determines its ability to detect search objects.



**PLAN YOUR OWN RESCUE**

and Trigonometry, Algebra, Vectors and Speed, Distance and Time.

Some topics also include online interactive assessments, built within the LGfL Assessment Maker. Students can complete these on any internet-enabled device to receive immediate

feedback on their understanding.

The online assessments are designed to help teachers and students identify possible misconceptions and gaps in the required knowledge.

Pupils may sometimes question the excitement or relevance of plotting an

accurate triangle and calculating its sides, but what if the three points are a helicopter, a lifeboat and a sailor in distress, with only minutes left to save a life?

[www.sar.lgfl.net](http://www.sar.lgfl.net)



Learn about the people behind a multi-vessel coastguard rescue and their different roles. Use scenario-based lesson activities to apply complex mathematical concepts and problem-solving skills to real-world rescues.



### Helicopter paramedic and winchman

His judgement is critical to securing an effective rescue.



### HM Coastguard ops staff

Integrated computer systems help support critical decision-making at sea and in the air.



### Helicopter pilots

These experts have to take many factors into account for rescue missions in all weather conditions.



### Rope mechanics

Understanding the principles of Physics and Maths is essential for successful rope-based rescues.



### Rescue calculations

No two rescues are the same, but strict procedures must be followed at all times.



### Coastal rescue teams

The maths behind specific 'rescue systems' are explored within problem-solving scenarios.







BRAZIL - ROSEMARY



INDIA - PANJY



LATVIA - MARTENS



PAPUA NEW GUINEA - ANGELA



USA - STEPHANIE



NORWAY - EMILIE



SOUTH AFRICA - JUSTIN



CHINA - KAY KAY



KENYA - ERODO



UK - HAYLEY



SOUTH AFRICA - VUSUMZI

11  
REAL-LIFE  
STORIES

# GROWING UP AROUND THE WORLD

Eleven lives, eleven stories, eleven dreams, eleven countries... one life cut short!  
What's it like growing up around the world?



Over more than two decades, charity tve followed the lives of 11 children in 10 different countries to make a series of groundbreaking films.

A precursor to the BBC's "Child of our Time" series, this resource provides a unique insight into what it means to grow up in different parts of the world; the challenges, hopes and dreams of the 11 children and the impact of the world around them.

Growing up around the World aims to help UK children understand the realities of childhood in different contexts. Strikingly, many of the struggles and challenges the children encounter are universal, from the UK to South Africa to India.

Designed for use in Citizenship, PSHE or Geography lessons, the videos introduce Key Stage 2, 3 and 4 pupils to human rights, building an understanding of the issues facing

people around the world, specifically regarding education.

These are real stories, including poverty, unemployment and death, so this resource aims to provide schools with a safe space in which to tactfully address these complicated issues.

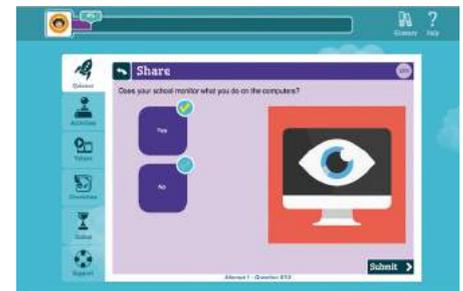
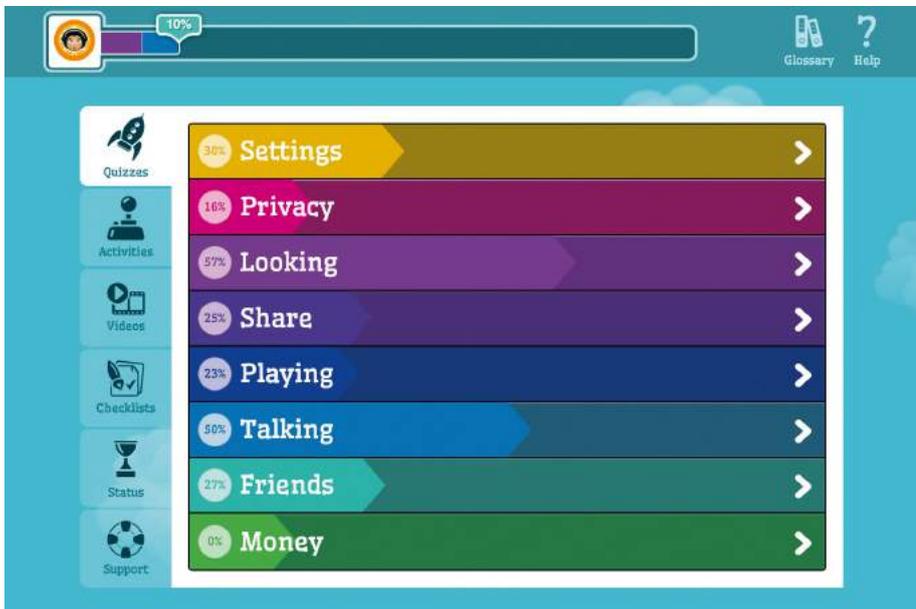
Particularly useful in multi-cultural London classrooms, the resources come with a comprehensive teacher pack with full lesson plans, starter activities, sample worksheets, a dictionary of key terms and tips for expanding on the material provided in the resource.

This also includes ideas to help pupils get involved with human rights and take action about issues they are passionate about, through social media campaigns, blogging, organising debates, petitions and writing to decision makers.

[growingup.lgfl.net](http://growingup.lgfl.net)

# CYBERPASS

LGfL is providing teachers with a trackable, data-rich, competence-based online safety assessment and training tool, but at the heart of this innovation is a new approach.



CyberPass embodies a new approach to online-safety education, turning the conventional wisdom on its head on how to tackle this key topic.

It presents the flip-side to traditional lesson sequencing: rather than delivering a series of lessons on predefined topics and then testing pupils on their abilities, CyberPass helps teachers identify strengths and weaknesses in the first instance, in order to target time and resources on the

topics children really need support with.

Students take a quiz on one or all of the eight key online-safety themes, then teachers view the rich data on pupil performance broken down by theme, competence, and/or question, before tailoring and differentiating their teaching accordingly for this time-pressured, important curriculum area.

There are also videos and interactive lesson materials tailored to the eight themes that teachers may choose to use.

LGfL has long been at the heart of the online-safety agenda, protecting children with cutting-edge network and security features. We also provide help, advice and resources for the classroom.

CyberPass is part of our response to the rapidly-changing landscape and teachers' needs, as they are tasked with producing and safeguarding the next generation of digital citizens.

[cyberpass.lgfl.net](http://cyberpass.lgfl.net)



## WHY CYBERPASS?

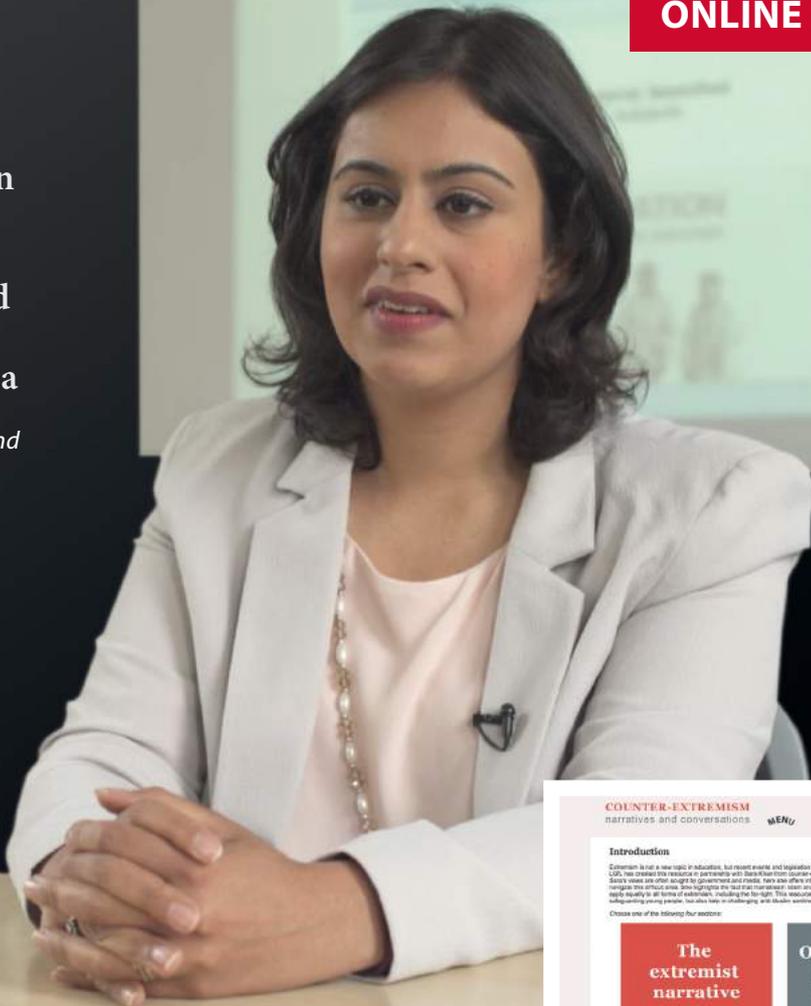
CyberPass can be accessed anytime, anywhere; it can be approached in various different ways; and the built-in resources can be used or disregarded – the teacher can decide.

But what makes it unique is the ability to take a snapshot of learners' competencies and knowledge before and after teaching time.



Sara Khan and Matthew Goodwin's views are often sought by government and media; they offer information, insights and advice to help schools navigate this difficult area

Sara Khan from counter-extremism and women's-rights organisation Inspire



# COUNTER-EXTREMISM

Empowering teachers to address one of the most sensitive yet important school duties.

'Counter-Extremism: narratives and conversations' is a video resource designed to enable and empower teachers to discuss and respond to conversations about extremism.

Initially launched in time for the enactment of the Counter-Terrorism and Security Act 2015, it has already been put to good use thousands of times across the United Kingdom in schools, community centres, council offices and homes.

The new act made schools "specified authorities" with the duty to "have due regard to the need to prevent people from being drawn into terrorism".

This presented a significant challenge for schools, where concerns were raised about lacking expertise for dealing with this sensitive issue, coupled with the potential to damage relationships with pupils and parents.

Headlines such as "Anti-terror

plan to spy on toddlers" only served to increase unease amongst professionals.

Against a background of teachers eager to 'do their bit' but wary of the consequences, LGfL created this online CPD resource for teachers and other



Matthew Goodwin, extremism expert at Chatham House and the University of Kent

professionals working with young people. Given the importance of the subject matter to schools across the UK and beyond, it was decided to make it open-access for all schools to use.

The existing ISIS section with Sara Khan from counter-extremism and women's rights organisation Inspire has now been complemented by a series of videos on the far right, voiced by Matthew Goodwin. Matthew is a Professor of Politics at the University of Kent, and Associate Fellow at Chatham House.

The resource takes the form of 32 question-based clips spanning four thematic sections and two forms of modern extremism, with questions such as "Why do certain groups of young people engage with the ISIS narrative?", "What can we say to young people who think all immigrants are bad?", and "What is the most important message about Islam that counters the ISIS viewpoint?"

[counterextremism.lgfl.net](http://counterextremism.lgfl.net)

# DEVELOPING BRITISH VALUES

High-quality, safe and relevant materials that foster understanding and informed debate amongst young people on issues that are hard to address in the classroom.



'Developing British Values' is a video and discussion resource which aims to meet a clear need in the education sector: supporting schools with the DfE requirement to "promote fundamental British Values as part of SMSC" across the curriculum and throughout the life of a school.

Since 2014, this has been a statutory requirement, yet many teachers and senior leaders felt that guidance was lacking beyond the official document.

LGFL's new resource brings together experts from different fields who share their thoughts on what British values mean in the real world, and provide thought-provoking discussion points

**British Values can mean very different things to different people. This presents particular challenges for busy teachers, who may be unfamiliar with some of the issues involved.**

for teachers and students.

British Values can mean very different things to different people. This presents particular challenges for busy teachers, who may be unfamiliar with some of the issues involved.

So how should a school approach this subject?

This resource does not aim to provide a set answer to the question, or indeed a simple definition for teachers and students to learn and regurgitate (although several are stated).

Rather, the aim is firstly to show pupils what British Values mean to key players at the cutting edge of international diplomacy, equal opportunities, education and culture; and secondly, to kickstart discussion.

In this way, we can help the young people of today to form balanced opinions that will inform the decisions and values of tomorrow.

[bv.lgfl.net](http://bv.lgfl.net)



# REAL VOICES

The sad story of Alan Kurdi, the three-year-old Syrian whose lifeless body washed up on the Turkish coast, made the world sit up and pay attention. But what next?



Immigration has always been an emotive topic; the events of the last couple of years, with millions of people on the move and thousands dying at the mercy of the waves, did little to help.

Emotions run high on all sides of the argument, but LGfL recognises the importance of giving schools the resources they need to enable sensible discussion in a child-friendly way.

**“ Syria is my soul, my country, my life, my land, my past and my present... It was the most difficult decision of my life. ”**

Real Voices lends a human face to the crisis, telling the story of three Syrian refugees currently sheltering in Jordan.

In their own words, they tell of the pain of leaving their homeland and the difficulties faced in their host nation.

Although the videos are powerful in their own right, lesson plans, assembly resource and glossary give context and curriculum relevance, and help teachers tackle the crisis in a sensitive manner.

[realvoices.lgfl.net](http://realvoices.lgfl.net)

**WORLD MAP**

Real Voices from Syria to Jordan

Mahmoud Mohammed al-Masri	Um Jamal	Zainab Ali Al Soudi

# THE PRODIGALS ONLINE

The Prodigals Online has been produced to engage, educate and empower young people to confidently face the challenges and opportunities of independence and adulthood.



This innovative resource supports Key Stages 4 and 5 school-leavers as they seek to secure an independent life.

The resource is based on a film featuring a cast of characters experiencing the ups and downs of living away from home for the first time.

The film can be viewed in one 40-minute sitting, but is also edited into short thematic sections to link in

with the teaching materials on different developmental issues.

The resource supports these areas:

- Personal Learning & Thinking Skills
- Behaviour for Learning
- Sex and Relationship Education
- Social & Emotional Learning

The soundtrack to the Prodigals Online

includes three music videos linked to the narrative of the film, and an album featuring performers such as Beverley Knight and Typah.

Use this comprehensive resource to engage pupils on a challenging topic with relevant, credible and authentic resources, and a London focus.

[prodigals.lgfl.net](http://prodigals.lgfl.net)

# EVERYONE MATTERS

Everyone Matters challenges homophobic bullying and empowers teachers and students to challenge negative attitudes – in the classroom and beyond.



Everyone Matters is aimed at tackling the issue of homophobic bullying at Key Stages 3 and 4.

The resource uses video stimuli to provoke open discussion of the sensitive issues involved, and highlights that any kind of bullying is serious and can have grave consequences.

The footage features re-enactments of homophobic bullying scenarios acted out by students from London Schools.

“ Each year, 20 young people take their life due to the trauma of bullying. ”

The curriculum materials were developed in partnership with the Metropolitan Police and staff and students from the London Boroughs of Wandsworth and Waltham Forest.

The videos, presentations, lesson

plans and teacher guides can be used as a standalone lesson series, or to complement established anti-bullying schemes.

The sensitivities related to this issue are acknowledged and supported within the resources, which address issues of engagement and the social and emotional aspects of learning.

[everyonematters.lgfl.net](http://everyonematters.lgfl.net)

# ESPRESSO FAITHS

What better way to foster understanding of the six major world faiths than by seeing them through the eyes of London schoolchildren.

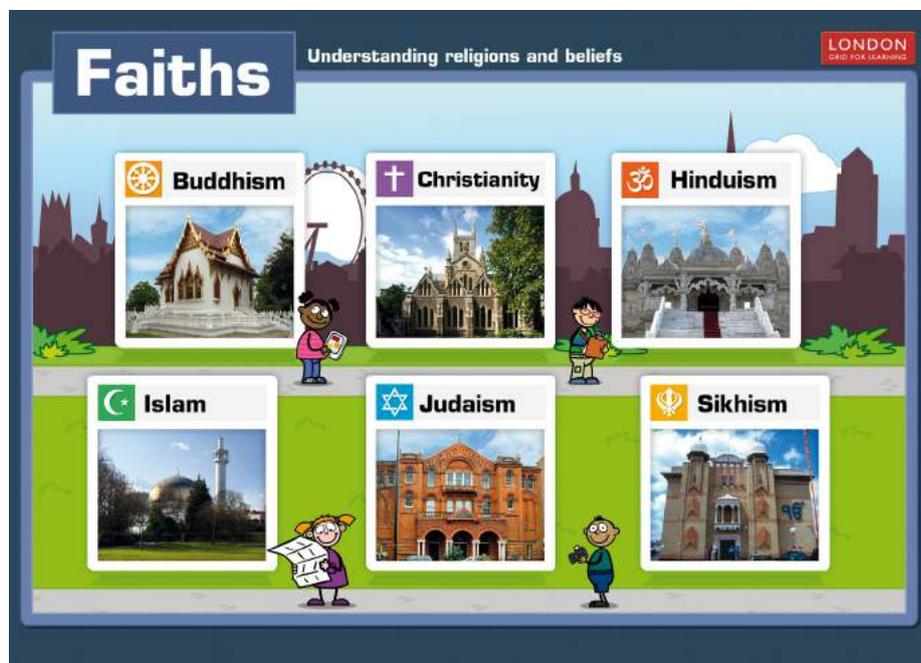
Commissioned by LGfL, Espresso Faiths looks at the six major world faiths as found in London communities, with schoolchildren explaining their faith to their peers.

Updated to ensure the closest fit with the new curriculum, Faiths offers important support for the development of inter-faith tolerance and understanding across London.

Each of the six world faiths covered in the resource are described in detail, including origins, main beliefs and practices; each section includes videos, activities, fact-files, parables and more.

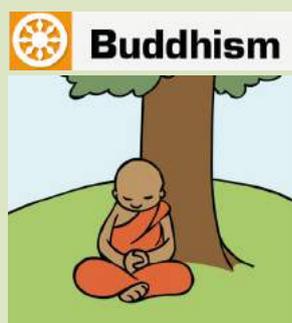
Ideal for Key Stage 3, Espresso Faiths also has new quizzes to test comprehension and reinforce understanding.

[faiths.lgfl.net](http://faiths.lgfl.net)

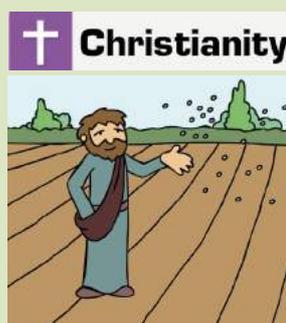


All sections feature extensive videos, on-screen activities and downloadables, plus images, online books and factfiles

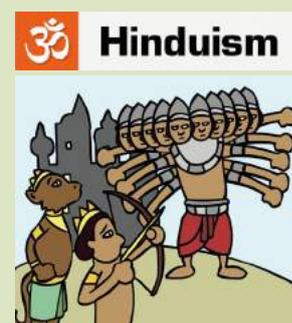
STORIES & PARABLES



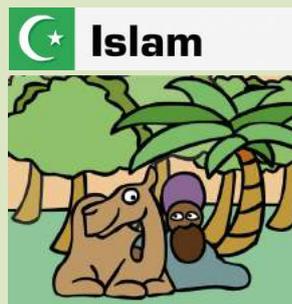
The story of the Buddha



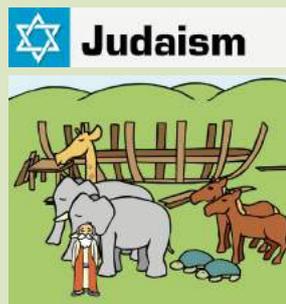
The story of the Sower and the Seed



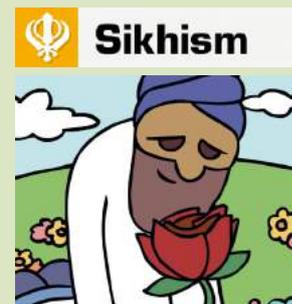
The story of Diwali



The story of the Crying Camel



The story of Noah's Ark



The story of the Rose

# READINGZONE LIVE

How can you inspire reluctant readers to read, and reticent writers to write? That is the challenge behind this resource, which brings authors to the heart of the classroom.



Teachers and pupils can take one of two approaches, focussing either on a particular author, or on a topic such as genre, planning, character, writing and so on.

Next it is time to hear from the authors themselves. Hours of interviews are distilled into bite-sized Q&A video clips, where advice is given to pupils on how to collect ideas, what to write about, how to form a story arc, what makes a good character, and much more.

Often the advice might seem to be common sense, but a 30 second clip from a bestselling author often has slightly more effect than a parent!

But at the same time, there are plenty of hidden gems as well – who would have thought that the key to Anthony Horowitz's success is the mid-morning Kit-Kat (other chocolate bars are available).

Ideal for starters and plenaries, the clips can be used as a standalone resource to spark a creative writing session or discussion within an existing lesson plan. Alternatively, they could easily form the basis for an entire lesson or series of lessons.

The curriculum materials have recently been refreshed and updated to include new topic pathways into the resource.

[readingzonelive.lgfl.net](http://readingzonelive.lgfl.net)

If you ever wondered why there is no 'WritingZone' on LGfL, then you've missed a key part of ReadingZone.

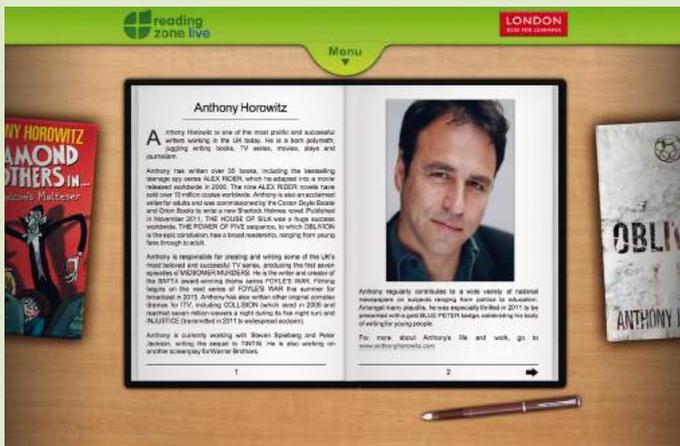
Much more than a brief encounter with an author as a special treat or to fill the Word Book Day slot (although it fits very much in those categories as well), this resource is all about driving literacy.

The authors that take their place on the ReadingZone Live bookcase cover a multitude of genres, age ranges and styles, from Holly Webb's Secret Kittens and Tony Ross' Horrid Henry, through

**“ The only difference between successful and unsuccessful writers is that unsuccessful writers stop! ”**

*Author Anthony Horowitz*

Henry Winkler's Hank Zipzer and Jacqueline Wilson's Hetty Feather, all the way up to Michael Morpurgo's Warhorse and Frederick Forsyth's Day of the Jackal.



# EARLY SHAKESPEARE

Early Shakespeare from SEN Assist is an innovative new introduction to the Bard for learners with SEND.

Underpinned by the many specialist principles behind interventions such as PECS and TEACH, Early Shakespeare is an animated, interactive learning tool, created by education experts for learners with SEND and EAL.

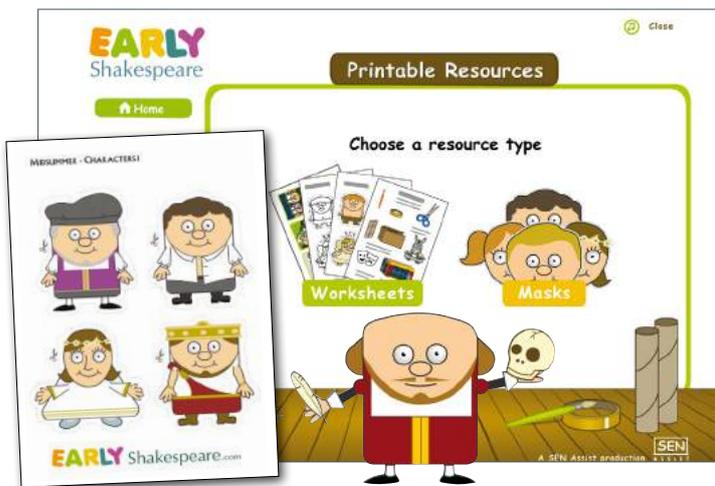
Shakespeare's stories are broken down into bite-sized portions, which learners can easily follow, understand and remember.

Animated characters bring each scene to life, with differentiated activities to help teachers include all learners. Pupils can watch the stories at their own pace, and turn the accompanying text and symbols on or off; there is also a choice of motivators to reward successful answers.

[earlyshakespeare.lgfl.net](http://earlyshakespeare.lgfl.net)

“Children are so motivated by ICT. I just wanted to find a way to harness their interest to engage and include all children – no matter what their ability, language or learning style.”

*Adele Devine, SEN teacher and Director of SEN Assist*



# SHAKESPEARE PICTURE COLLECTION

Need quality Shakespeare images? As you like it! A collection of production photographs from a wide range of stage and film versions of Shakespearian productions.

The Cambridge School Shakespeare Picture Collection is a bank of collated production photographs from a wide range of stage and film versions of the Bard's plays and sonnets. The collection is designed to support students' exploration of interpretation, staging and performance.

Learners can select and annotate the images to create their own storyboards; they can read student notes on characters, themes, acts, productions and staging, and a variety of essay-style questions provoke further engagement with work they are studying.

Fully differentiated for the entire Secondary phase (up to Key Stage 5), each play also includes over 100 pages of editable, printable support materials, including lesson ideas, worksheets and production reviews.

[shakespeare.lgfl.net](http://shakespeare.lgfl.net)



# FIRST WORLD WAR – AUGMENTED REALITY

“They shall grow not old, as we that are left grow old. Age shall not weary them, nor the years condemn. At the going down of the sun and in the morning... We will remember them.”



Teaching young people about the First World War is about so much more than ticking boxes and learning facts. Now that the last survivors have all passed on, we must find other ways to remember the lessons of ‘The Great War’.

Augmented-reality (AR) comes into its own when breathing life into objects that no longer exist and situations which no-one can relate to at first hand.

From the haunting notes of Elgar floating over a 3D cenotaph, to the daunting sight of a Zeppelin over Hull, or a gramophone ‘Last Post’, this resource pays tribute whilst provoking thoughtful discussion of the First World War.

Originally produced in response to the centenary of World War 1, the augmented-reality artefacts generate genuine ‘wow’ moments for pupils,

adding a brand new learning dimension.

Pupil engagement is consolidated by National Curriculum activities that focus on History, English, Music and Art.

The resource is ideal for embedding into existing lesson plans or for creating standalone new activities.

[ww1.lgfl.net](http://ww1.lgfl.net)

**Search WW1 LGfL on the appstore**

**DOWNLOAD TRIGGER IMAGES SEPARATELY FOR A TREASURE HUNT AROUND SCHOOL. >**



**< USE THE APP TO MAKE THE AUGMENTED-REALITY OBJECTS LEAP OFF THE PAGE.**

# TRENCH EXPERIENCE

Ready to go over the top, Tommy?  
It's time for the Big Push, and you're going (head) first!

This innovative new virtual-reality (VR) app brings life in the trenches to life, and is ideal for History and English teachers covering World War 1 and trench life and warfare in general. The full immersion in the sights and sounds of the trench create the ideal stimulus for writing.

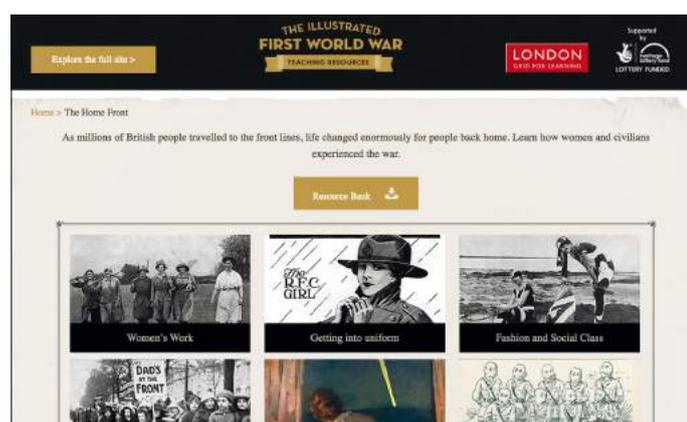
As LGfL's first foray into VR (not to be confused with the AR you have just read about), Trench Experience gives pupils an idea of what it would be like to move around a trench on 29th June 1916, in the rain, waiting for the call to go 'over the top'.

Walk around the trench, exploring and learning about the objects you see, and if you are brave enough, look up the trench periscope!

The accompanying worksheet and mp3 voiceover and sound effects provide background information to further build the atmosphere in the classroom.

The app plays on most modern smartphones with inexpensive Google Cardboard VR glasses (available for under £10), and needs headphones for the full immersive experience.

[trench.lgfl.net](http://trench.lgfl.net)



# THE ILLUSTRATED FIRST WORLD WAR

A picture tells a thousand words...

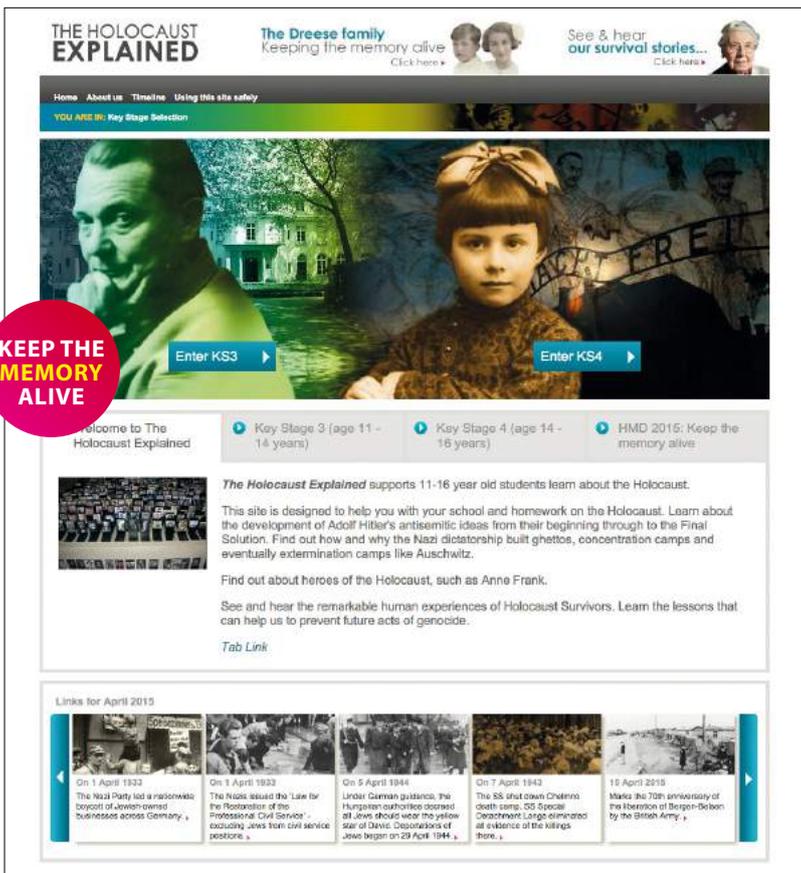
The Illustrated London News was the world's first illustrated newspaper, launched in 1824. It quickly dominated the weekly news market, and specialised in war reporting, with "special artists" sending sketches back from the world's battlefields.

This new LGfL resource allows pupils to learn about the 'Great War' using real news reports and original pictures, from the Illustrated London News archives. The reports and images are broken down into three main sections:

- The Global War
- The Home Front
- Technology and Propaganda

The digital assets are the core of the resource and students and teachers will explore the themes of the war by investigating the evidence, rather than following a traditional narrative and using the assets to illustrate expected conclusions.

[illustratedfirstworldwar.lgfl.net](http://illustratedfirstworldwar.lgfl.net)



# HOLOCAUST EXPLAINED

The first ever student-focused Holocaust education resource.

LGfL worked in partnership with the London Jewish Cultural Centre to produce this high-quality resource of great cultural and historical significance.

Holocaust Explained features a vast range of media resources, historical documents and graphical representations of a range of Holocaust-related issues.

The site has over 500 web pages, with 1,000 media assets, a glossary of 720 terms, and 11 oral testimonies.

A companion resource has also been produced by LGfL and the Ben Uri Art gallery called Holocaust Education (second link below).

[holocaustexplained.lgfl.net](http://holocaustexplained.lgfl.net)  
[holocausteducation.lgfl.net](http://holocausteducation.lgfl.net)

# DOCUMENTING THE HOLOCAUST

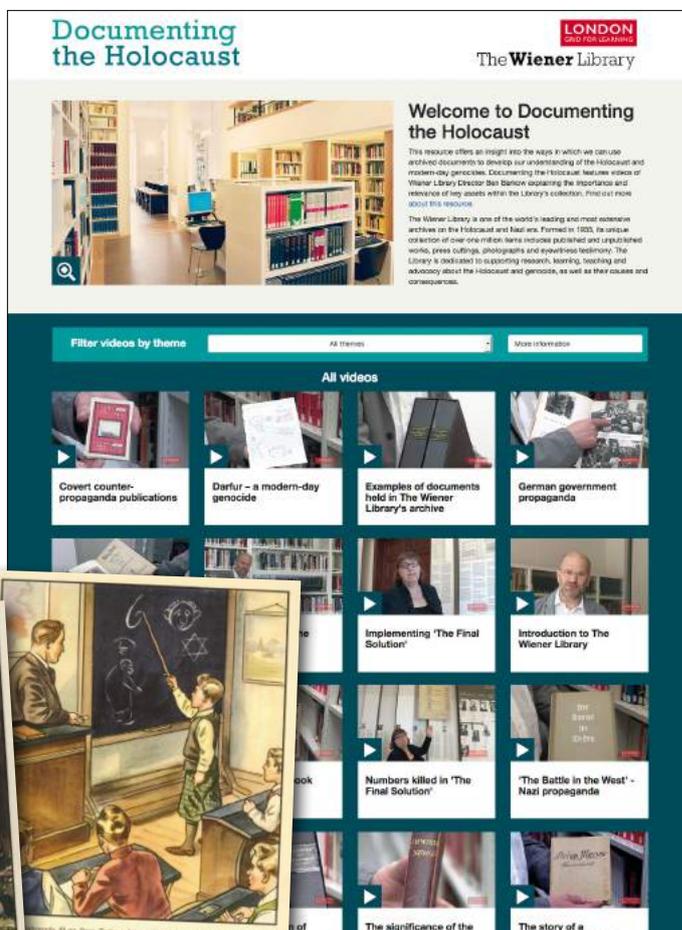
Exclusive access to the archive of the Wiener Library, which includes a signed copy of 'Mein Kampf' and outrageous anti-Semitic propaganda published by the Nazis.

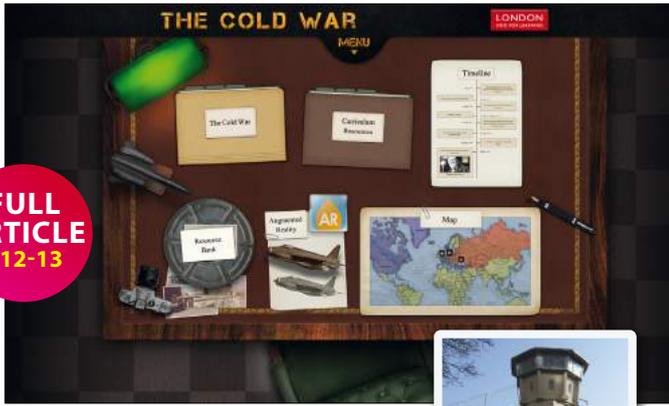
The Wiener Library is one of the world's leading and most extensive archives from the Holocaust and Nazi era. Formed in 1933, the Library has a unique collection of over one million items, including published and unpublished works, press cuttings, photographs and eyewitness testimony.

LGfL cameras were given exclusive access to the archive, where we were guided through a brief history of unique holocaust materials by Library Director Ben Barkow.

Dr Helen Fry is also featured on location in Berlin at the site of 1942 Wannsee Conference. She explains the background to 'The Final Solution' and the awful efficiency of the Nazi regime.

[dth.lgfl.net](http://dth.lgfl.net)





FULL ARTICLE  
P12-13

## COLD WAR



This Key Stage 3/4 resource tackles a topic that is contemporary and absorbing for teachers and students.

The Cold War continues to make headlines today (Frederick Forsyth, who features here, has since revealed his past as an MI6 spy), so what better time to provide well-founded, historically-accurate and curriculum-driven materials to help match quality teaching & learning to renewed interest in the subject.

Plus curriculum materials from Ben Walsh (more on p12).

[coldwar.lgfl.net](http://coldwar.lgfl.net)



FULL ARTICLE  
P14-15

## THE M ROOM

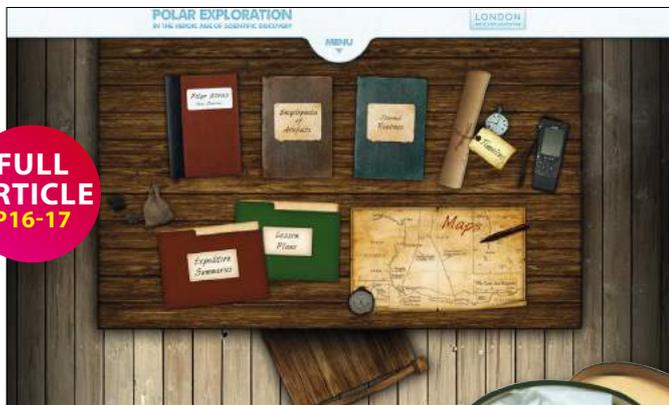


The M Room gives exclusive access to secret World War II listening sites where the British Secret Service bugged high-ranking German Military prisoners.

The resource features an interview with one of the original secret listeners (now aged 95), and extensive primary-source material from the Ministry of Defence, relatives of those involved, and The National Archives.

The lead presenter and consultant to the project is the eminent historian Dr Helen Fry. (more on p14).

[mroom.lgfl.net](http://mroom.lgfl.net)



FULL ARTICLE  
P16-17

## POLAR EXPLORATION



LGfL was given unique access to the archive and polar experts at the University of Cambridge's Scott Polar Research Institute (SPRI) to create this cross-curricular resource, with lesson plans tailored to the Key Stage 3 and 4 English curriculum.

The resource includes video footage of equipment and artefacts from the most famous expeditions, complete with text transcripts, plus high-resolution photographs of objects featured in the video footage, and journal extracts read by the grandson of an explorer on Captain Scott's Discovery expedition. (more on p16).

[polar.lgfl.net](http://polar.lgfl.net)



FULL ARTICLE  
P22-23

## HISTORY OF COMPUTING



Winner of the 2014 Bett Award for 'Digital Collections and Resource Banks', The History of Computing has become one of the most popular resources available from LGfL, and is relevant for the KS3 History National Curriculum statement "challenges for Britain, Europe and the wider world 1901 to the present day (Second World War)".

It was produced with and on location at The National Museum of Computing, Bletchley Park, and Manchester's Museum of Science and Industry.

(more on p22).

[hoc.lgfl.net](http://hoc.lgfl.net)



## J2CODE

Starting from Scratch? You don't have to, with j2code's full curriculum coverage. But you can, thanks to new Scratch integration.

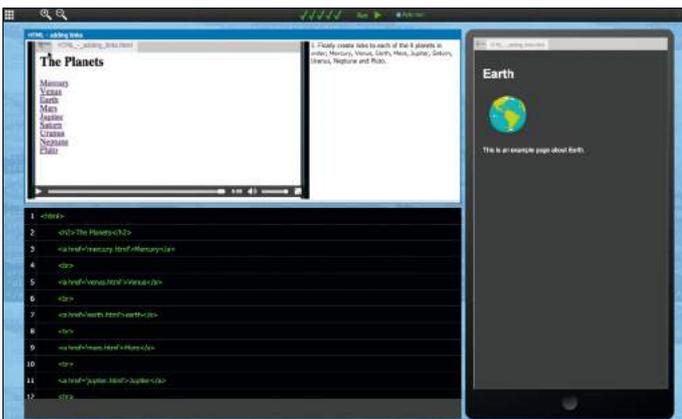
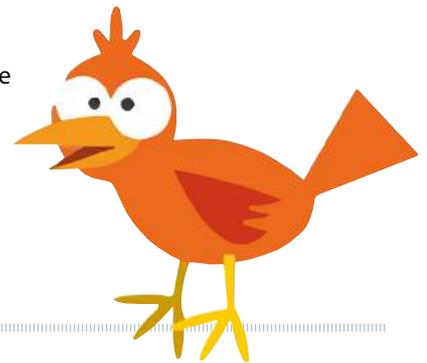
This coding resource from the makers of the j2e Tool Suite is a Bett Award winner, and with good reason. An intuitive interface brings together three platforms (JIT, visual and logo), which are ideal for lower KS3 classes.

Couple this with lesson plans, help videos and Scratch integration to make the best of both worlds, and you begin to understand the scope of the package.

The drag-and-drop building-block format will be familiar to users of Scratch, making the already user-friendly and engaging tool even more accessible.

j2code is available nationwide, but the beauty of using it in an LGfL school is full integration into the j2e Tool Suite: you can save, embed and write about your work, and then even blog about it (why? See Blog Central; how? All the tools are in j2launch).

[j2launch.lgfl.net](http://j2launch.lgfl.net)  
[blogcentral.lgfl.net](http://blogcentral.lgfl.net)



## WEBTECH TUTOR

Waking up in a cold sweat at the thought of teaching coding? No longer! If you can drag and drop, or spot the difference between two sentences, you can learn HTML.

The natural progression for KS3 pupils finished with j2code and Scratch is to move onto the LGfL WebTech Tutor.

While the thought of teaching HTML, JavaScript and CSS might cause some concern (imagine a chorus of "It doesn't work" as pupils miss a bracket and break the syntax), WebTech Tutor addresses these concerns in a highly-innovative way.

The package is broken down into bite-sized, easily-achievable modules, with a short video walkthrough for each section that can be replayed if necessary. Drag-and-drop functionality allows pupils to get to grips with the concepts, terms and syntax without being frustrated by broken code.

When the crucial skill of debugging is introduced, it is manageable for all: the code doesn't change, but the English (e.g. "Hello World.") must be typed accurately – did you notice the capital H/W in the example, or the full stop? This prepares pupils for taking the plunge into free code in later modules.

[webtech.lgfl.net](http://webtech.lgfl.net)

# PYTHON TUTOR

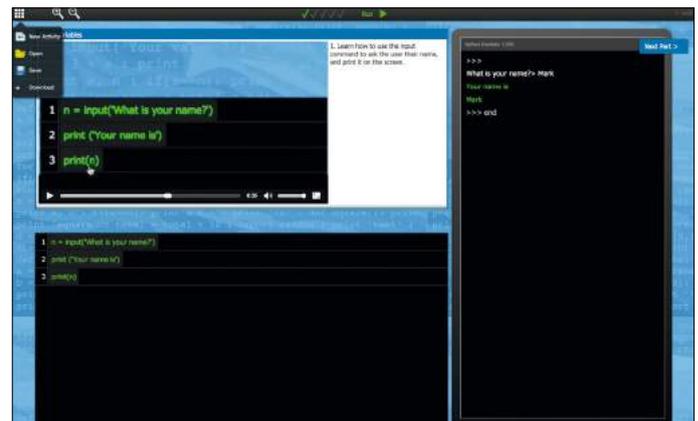
KS3/4: Two years on from the introduction of Computing to the National Curriculum, this resource adds variety to the languages available by introducing students to the object-oriented programming of Python.

Expert teaching within an interactive, supportive environment will allow teachers with no previous experience of the Python language to use it to meet the coding requirements of the Key Stage 3 curriculum.

The package includes 25 different coding concepts, presented one standalone lesson at a time. Students' understanding is initially developed at a conceptual level by allowing them to drag and drop elements of code. They can then refine their skills with more advanced activities on code-creation later in the resource.

Students begin by watching a short introductory video, which presents a new coding concept or problem. They then carry out a series of related short tasks, after which Python Tutor presents them with increasingly-difficult follow-up activities.

[python.lgfl.net](http://python.lgfl.net)



# HISTORY OF COMPUTING (CONCEPTS)

KS5: The cross-stage History of Computing resource has a dedicated A-Level section on Computing Concepts.

Do your students know how to count in binary? Do they know their ASCII from their hexadecimal? Can they use logic gates, and simplify logic into algebra?

With the 'History of Computing' module on Computing Concepts, they soon will be able to. Videos, lesson plans and presentations help teachers and students to explore the Key Stage 5 requirements of the Computing curriculum, and to understand how British Computing developments have influenced our world.

The resource was designed and made in partnership with experts from the National Museum of Computing at Bletchley Park.

Read more on pages 22-23.

[computingconcepts.lgfl.net](http://computingconcepts.lgfl.net)



## THEMES



## Key Stage 2:

- Cameras and Gadgets
- City Machines
- Underwater Adventure
- Caves and Jungles
- Mountain Rangers



## Key Stage 3:

- Introduction
- Contact with the Floor
- Pushing and Pulling
- Lifting and Falling
- Moving in and out of the Floor
- Partner work: In and out of the Floor



## Key Stage 4:

- Intentions
- Twister
- From Solo 1 to Solo 2
- From Solo 2 to a Dynamic Duet
- Structuring a Duet

## BALLETTYOYZ

Introducing dance to a school can be a challenge, especially for boys. That's where the BalletBoyz come in. This groundbreaking project removes many of the entry barriers to the world of dance.



In 2007, LGfL and BalletBoyz began a unique collaboration which resulted in the launch of an innovative online resource exploring three pieces of repertoire from the BalletBoyz company.

Since that first collaboration, the company has received countless accolades and awards as it transitioned into the today's mature contemporary company, which is held in the highest regard throughout the dance world.

LGfL is proud to have once again partnered with the company to bring another new set of innovative resources to London Schools.

Many of the core elements of the new resource 'MoovBank' are now available through LGfL. The resource is divided into three distinct sections – for Key Stages 2, 3 and 4, with the specific aim of providing guidance and materials suitable both for specialist dance teachers, and also non-specialists who teach dance.

The BalletBoyz have always believed that dance education is most engaging when students have direct access to the performer.

That's why the resources for curriculum lessons consist of short expert videos with voiceovers by company dancers who break down moves and show students how to join them together

in sequences.

Filmed in their Kingston studio with BalletBoyz Company dancers, lessons are based on contact work, creativity and choreography, designed to develop students' physical health, build trust, problem solve and enhance creativity.

Detailed lesson plans are also provided for teachers, explaining how to use the videos. In addition, inspiration clips from the company repertoire are included to further encourage and inspire students and teachers alike.

Keep dancing!

[balletboyz.lgfl.net](http://balletboyz.lgfl.net)



Live Performance: Harris Academy Boys



## LAUNCH EVENT

On 11 July 2016, BalletBoyz directors William Trevitt and Michael Nunn launched the new LGfL BalletBoyz contemporary dance resources for London schools at Sadler's Wells.

The event featured a presentation of the new resource by its creators, case studies and live performances from London pilot schools, and a live performance by members of the acclaimed dance company.

“The BalletBoyz approach has always been that dance education in schools is most engaging when students have direct access to the performer.”



Live Performance: Robin Hood Primary



Live Performance: Gladesmore Community School

## EMPLOYABILITY

A multimedia resource designed to develop employability skills and to support literacy and numeracy for secondary school students.

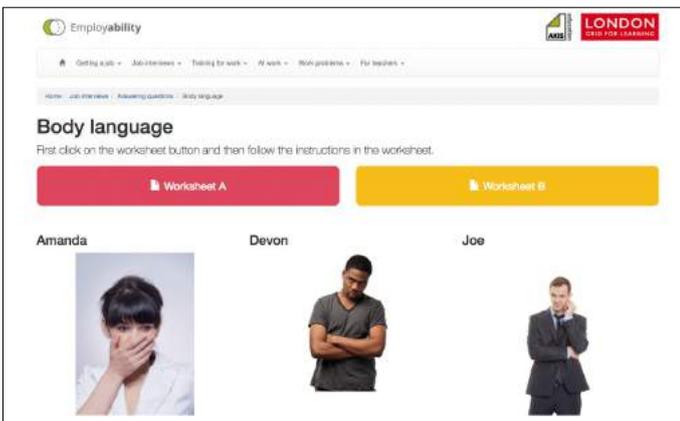
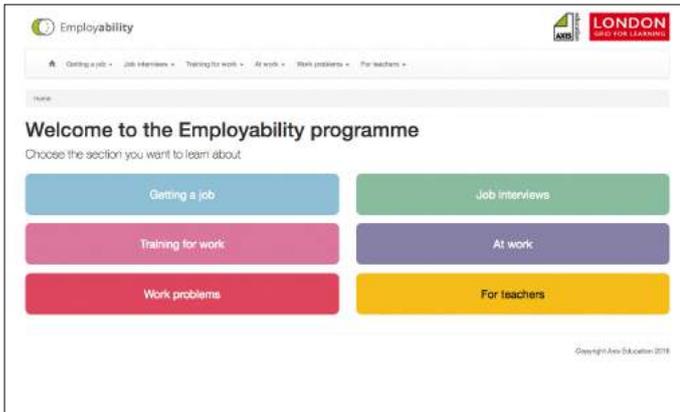
The differentiated materials provided here support students with a variety of abilities, but has been particularly successful for pupils with low literacy and cognitive ability, as well as with EAL learners, and those with SEND including ASD, SpLD, MLD, SLCD and SEMH.

There are five distinct sections with audio and video-based content and activities. The multi-sensory approach is complemented by A and B versions of each worksheet.

The dedicated Teacher Section contains teaching notes and answers, curriculum mapping, and a bank of additional literacy and numeracy downloads.

Schools have successfully used these resources to prepare for work placements to enhance the success of work experience placements and to support entry-level employability qualifications.

[employability.lgfl.net](http://employability.lgfl.net)



## INCLUSIVE RESOURCES

Beautifully illustrated PowerPoints for Literacy, Maths, PSHE and Science, designed to support students with severe learning difficulties working at P Levels.

These inclusive and engaging resources, suitable for pupils working at P Levels, have been created by artist and teacher Nick Wonham from The Bridge School in North London.

Teacher notes are available for each PowerPoint as separate documents; these contain ideas for how to get the most out of the resource, extension activities and printable materials. The resources fall into four categories:

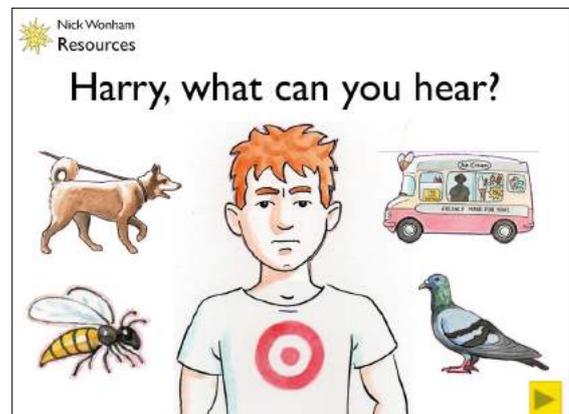
- Literacy – story resources to engage and motivate your students. They range from sensory stories requiring props, to interactive stories told in call and response.

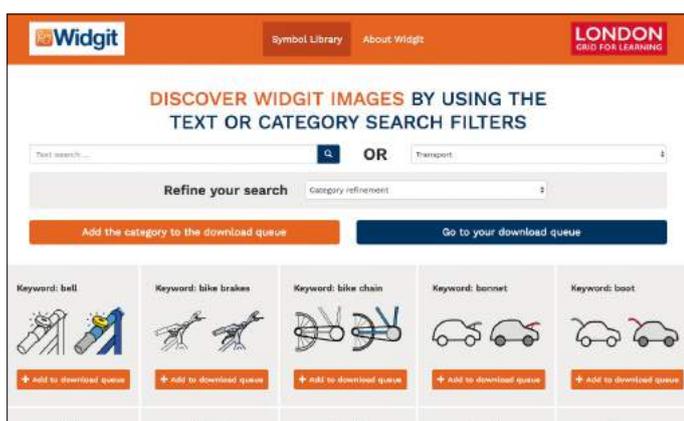
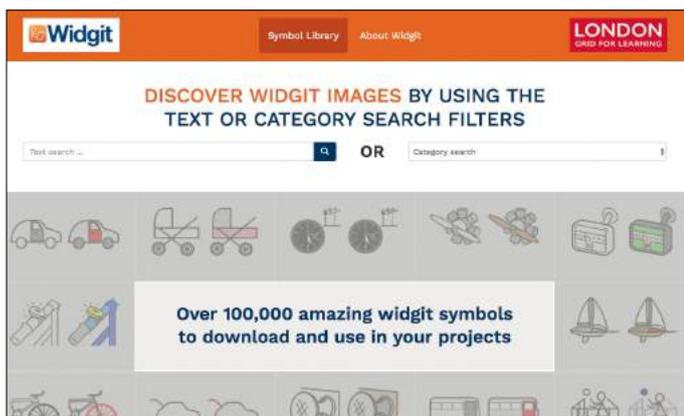
- Maths – resources to develop students' knowledge and understanding of money, time, and numbers.

- Science – resources to develop your students' knowledge and understanding of the world around them.

- PSHE – resources to develop your students' knowledge and understanding of issues surrounding staying safe, public and private, and bullying.

[inclusiveresources.lgfl.net](http://inclusiveresources.lgfl.net)





## WIDGIT

A database of visual and accessible symbols and worksheets to support equal access to information and communication.

Our partnership with Widgit Education has enabled us to share over 12,000 Widgit symbols, as well as a vast range of differentiated worksheets using the symbols.

Widgit Symbols give readers of all literacy levels greater access to information, but are especially helpful with pupils with communication and reading difficulties.

Symbols can help support communication, independence and participation, literacy and learning, creativity and self-expression, as well as access to information.

Staff can browse and search the Widgit database via the online portal, where they can download groups or single symbols quickly and easily.

These can then be used to support understanding and communication in multiple ways, such as in symbol sentences, key symbols, communication grids or flashcards.

[widgit.lgfl.net](http://widgit.lgfl.net)

## WORDQ SPEAKQ

A powerful, easy-to-use tool that supports literacy for young people who can type, but have trouble with writing, grammar and spelling.

If you have ever worked with a young person who is held back by being unable to get their well formed ideas onto a page, you will soon see how transformational WordQ SpeakQ can be.

LGfL schools can download and install the tool on all in-school and (staff) home computers at no additional cost; and there is a heavily discounted price for pupil use at home.

Ideal for those with dyslexia, dyspraxia, ASC, ADHD, physical difficulties and learning difficulties, it can be used to support and improve the writing of the majority of learners in KS2-5 – not just those with recognised additional needs.

The tool works with all online and offline programs (wherever text is entered) and can be toggled on and off for Word Prediction, Speech Recognition or Spoken Feedback.

WordQ SpeakQ can help students to maximise their written potential within and beyond the classroom, and is even approved by JCQ for use in public examinations - saving time and money on the cost of scribes.

[wordqspeakq.lgfl.net](http://wordqspeakq.lgfl.net)

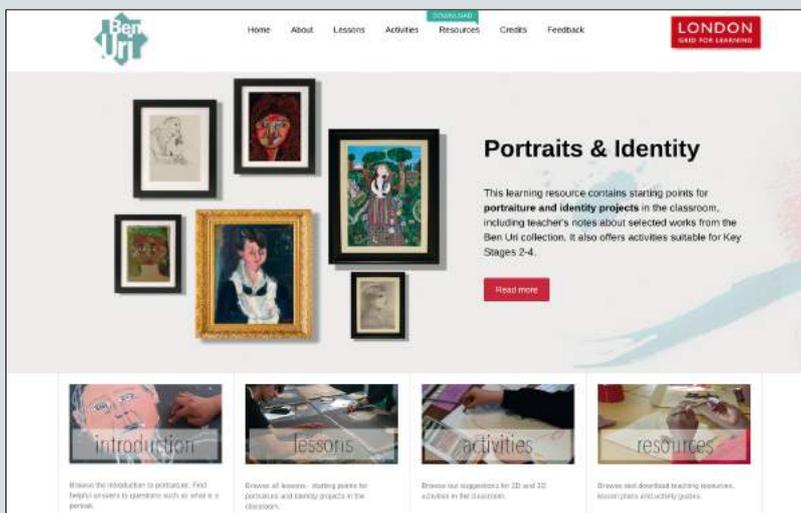
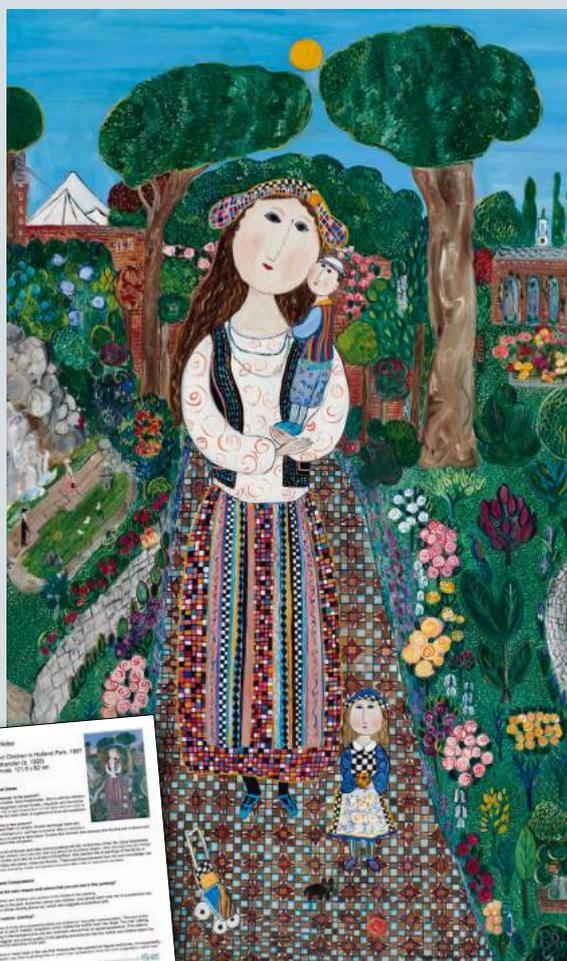


“The school put WordQ on our daughter’s laptop, and before we knew it, she started saying, “I’m writing like a pro” ...and she actually was! After years of struggling to write and being left out, she was getting her words down and doing well. It came just in time for her GCSE exams – and she passed!”

Lyse, Mother.

# PORTRAITS & IDENTITY

What is a portrait? What can we learn from portraits? This resource explores portraiture and artworks representing 'identity' through a wealth of practical lesson and project ideas.



## WELCOME TO THE BEN URI

The Ben Uri Gallery uses its extensive and distinguished collection to explore the work, lives and contribution of British and European artists of Jewish descent, placed where relevant alongside their non-Jewish contemporaries.

The collection of over 1,000 artworks explores a wide range of diverse themes, and shows how art does not just imitate life, but reflects, explores and seeks to understand it.

## REACHING OUT

At home in North London, the gallery takes its outreach role very seriously, and has now partnered with LGfL on three major online learning resources.

Portraits & Identity is the latest of these, bringing selected works into the

“The super-high resolution allows you to zoom in and focus on a particular detail of the painting.”

classroom at Key Stages 2-4, to enrich Art & Design, Citizenship and PSHE.

## MULTIPLE PATHWAYS

The resource can be approached in several different ways, with ideas for lesson series, standalone lessons and activities to integrate into existing projects.

For example, nine lessons on an iconic painting by artists including Soutine, Auerbach and Solomon have high-resolution scans which can be zoomed in on to focus on specific details. Teacher support also includes

notes on the artist, content and ideas, form and composition, materials and techniques, and in-depth lesson plans.

In the activities section, ideas range from a ten-day photography challenge, through literacy activities, to a collection of ten different 2D and 3D activities.

## WHO AM I?

With Portraits & Identity, pupils discuss the facial features that make them unique, identify key symbols that could represent them, and highlight the different things we see when we look at a portrait for the first time.

This is an important part of personal, social and health education; pupils learn to value themselves and others, and come to terms with their own identity.

**identity.lgfl.net**

# HOLOCAUST EDUCATION

Supporting Holocaust studies for GCSE History students, and highly relevant for GCSE Art & Design students researching Holocaust art.



Art is often used as a way of helping victims respond to and recover from distressing incidents, and this was also the case during and after the horrifying events of The Holocaust.

Part of the Ben Uri Gallery's outreach role is to bring Jewish art to a wider audience, and this important resource was made to complement the existing resource 'Holocaust Explained'.

"A picture paints 1,000 words" - an axiom confirmed by the works in this resource, such as the evocative 'Jewish family in the snow' and 'My Grandfather in Auschwitz' by Holzhandler (shown above - centre and right).

The three mini-galleries of paintings and sculptures by 15 different artists need little else to become a valuable discussion starter or stimulus.

Nonetheless, support material helps learners to deconstruct and analyse. These include annotations and activity sheets on collage and book-making, memorial sculptures, painting and printing techniques, and memory, illustration and autobiography.

[benuriholocaust.lgfl.net](http://benuriholocaust.lgfl.net)  
[holocaustexplained.lgfl.net](http://holocaustexplained.lgfl.net)

# ART SKILLS FOR TEACHERS

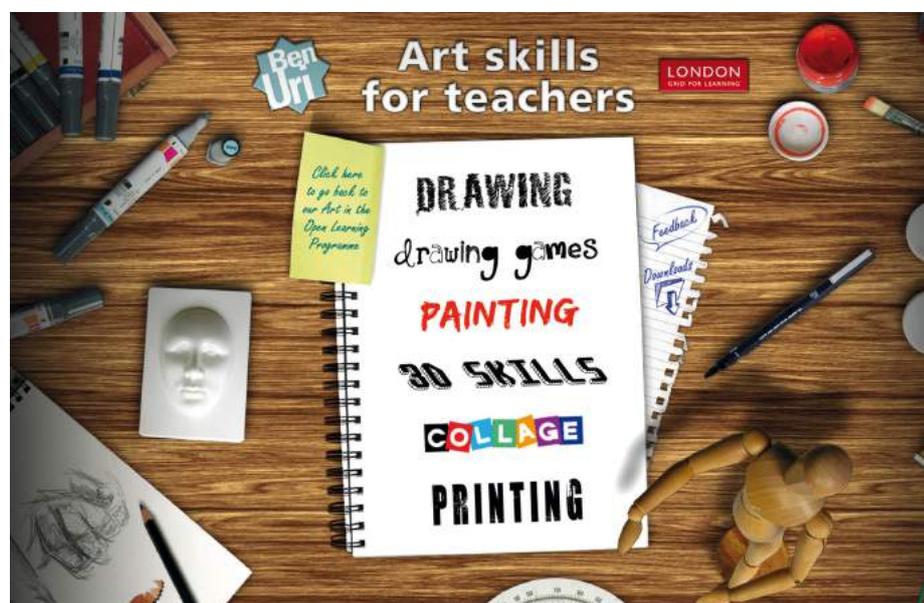
Another excellent resource made in close partnership between LGfL and the Ben Uri Gallery. The name is self-explanatory, but it isn't just for beginners.

Featuring techniques that are easy to understand and replicate, Arts Skills for Teachers features a range of ideas for the non-specialist art teacher to discover, recreate and teach. It offers clear explanations of a range of techniques in action, exemplified in school contexts.

The aim is to inspire teachers and children to experiment with and achieve artwork beyond their own expectations, using unusual and easily-accessible techniques to make art a truly inclusive activity for all members of the school community.

The ideas and techniques can also be used to create works in response to the other Ben Uri resources on this page.

[artskills.lgfl.net](http://artskills.lgfl.net)



# LONDON SCHOOLS SYMPHONY ORCHESTRA ARCHIVE

Behind the scenes at a world-class youth orchestra's rehearsals and live performances. Check it out – it might just strike a chord!

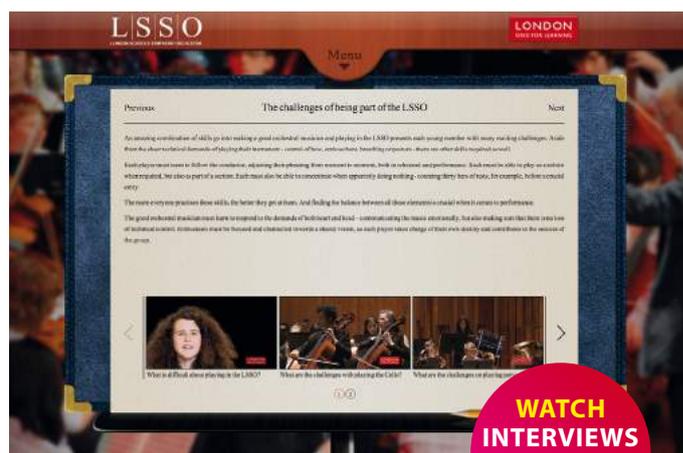
Hailed by Sir Simon Rattle as “an incomparable ambassador for the dynamism and excellence of British youth”, the London Schools Symphony Orchestra (LSSO) has for over sixty years been regarded as a potent symbol of the talents and achievements of London’s finest young musicians.

LGfL has worked with the LSSO to build an archive of the orchestra’s output over the past sixty years, with programmes, articles, newsletters and press clippings.

For the past five years, the archive also includes professional audio and video recordings of the tri-annual concerts held at London’s Barbican Centre. This amounts to over 50 separate orchestral works to watch, listen to and study with pupils.

What greater inspiration for Key Stage 2 pupils than to see what hard work and talent can lead to over the next few years of their musical education?

[lssolgf.net](http://lssolgf.net)



## AUDIO NETWORK & AUDIO NETWORK TV

This online music database features over 60,000 professionally-recorded audio tracks, licensed for educational use and fully searchable – even by mood. So how are you feeling today?

As explained in the full article on pages 16-17, Audio Network has applications way beyond the music room.

But a music resource it most certainly is. In combination with Audio Network TV, which takes a look behind the scenes with famous sound engineers, composers, conductors and musicians in the studio, the potential for the music specialist is significant.

The tracks can be downloaded in manageable .mp3 format or as high-quality .wav files, depending on your needs, and are all licensed for educational use.

[audionetwork.lgfl.net](http://audionetwork.lgfl.net)  
[audionetworktv.lgfl.net](http://audionetworktv.lgfl.net)



# FEATURES

WHAT GOES ON BEHIND THE SCENES?



**LGfL TRAINING HUB P60**



**ONLINE SAFETY P56**



**SEND P58**



**MATHS P62**

# LET'S TALK ABOUT SEXT

“Oh the shame! A plague upon our houses! Woe is me!” How else could anyone possibly respond to an incident of self-generated sexual imagery (that’s sexting to you and me)? Surely no self-respecting young person would simply shrug their shoulders, or even worse, revel in the attention... Or would they? How can we support the digital citizens we care for in 2017?



## JUST SAY NO

Few issues illustrate the generational digital divide better than sexting. "It didn't happen in my day," we are prone to declare. All the evidence would indicate that it did though – just not in such an easily sharable format.

"That's not the point – adults don't do it." Errrm... a US study revealed 88 per cent of adult Americans admitted to having sent sexually explicit images or messages. Even if the statistic is only half true, it is still quite significant.

So if adults do it, and did it when they were younger as well, does that mean the #justsayno message is totally wide of the mark?

## PLENTY TO WORRY ABOUT

Changes to Home Office and College of Policing guidance have finally addressed the legal anomaly whereby two consenting 17-year-olds sharing intimate photos with each other could end up with criminal records and on the Sex Offenders' Register.

And what's more, schools no longer need to refer every incident to the Police (the go-to advice document for schools from UKCCIS makes things very clear for Heads and DSLs). But these changes do not mean that mention of the risks is mere scaremongering. There is plenty to worry about.

Even before you consider the many issues related to child sexual exploitation (which definitely need consideration but are too complex and serious for a superficial exploration here), there are still many issues, dangers and potential for upset relating to sexting between young people. But as with most online-safety issues, the important thing is to have open and honest conversations about the risks, and to ensure that everyone knows where to turn if problems arise.

## YOU WANT ME TO TALK ABOUT WHAT?!

Rather than reinvent the wheel, teachers and other professionals are well advised to turn to the many excellent materials that have been produced to facilitate non-confrontational sexting discussions. CEOP ThinkUKnow's 'Nude Selfies' video series, SWGfL's 'So You Got Naked

Online...' resource and the NSPCC's 'I Saw Your Willy' are ideal conversation starters; ChildNet and ChildLine are just two of the places to turn to for help and advice (and remember 'The Mix' for older students up to the age of 25).

LGfL has collated and curated key sexting resources (for teachers, parents and students) and made them available for teachers to browse within its open-access online-safety portal.

## COMMON-SENSE APPROACH

Most online-safety experts agree that a common-sense approach to sexting education is the best starting point. So for example, CEOP's ThinkUKnow site recommends teaching students to apply these seven simple tests:

1. Why am I doing it?
2. What if I don't do it?
3. Would I do it face to face?
4. Am I under the influence?
5. Does it pass the Billboard Test?
6. Could I send something else?
7. Is this abuse?

## TOO LATE?

It is vital that young people are aware

that the new advice for schools does not change anything when it comes to sharing other people's images.

You are still just as likely to end up in a police station if you pressure others into sexting or if you share someone else's intimate images. It is vital to understand as well that a staggeringly high proportion of these pictures are shared between friends, and that the distress caused by naked images going viral has even led to young people taking their own lives.

Top of the list, but needed (not needless!) to say: any sexual approach by an adult is totally illegal and should be reported immediately to CEOP

But at the same time, adults need to communicate that nothing is too embarrassing to talk about, and thanks to the fabulous work of ChildLine, Safer Internet Centre, CEOP and the Internet Watch Foundation, it is sometimes possible to take action and have images removed from certain sites.

So let's keep those old-fashioned communication channels open! At the end of the day, it's still good to talk.

[sexting.lgfl.net](http://sexting.lgfl.net)  
[os.lgfl.net](http://os.lgfl.net)

The screenshot shows the 'ONLINE-SAFETY RESOURCE CENTRE' website. At the top, there's a navigation bar with 'About', 'News', 'Services', 'Learning resources', 'Online safety', 'SEND', 'Training', 'Support', and 'Login'. Below the navigation, there's a search bar and a filter section with 'Teachers', 'Sexting / messaging', and 'KS3'. The main content area displays a grid of resource cards. A red circular callout in the bottom right corner says 'VISIT THE LGfL ONLINE-SAFETY PORTAL os.lgfl.net'.

# USING LGfL TO SUPPORT LEARNERS WITH COMPLEX NEEDS

LGfL resources, if you're not accessing them, access them. They are a wealth of resources that will help you. James Brownlie, Head teacher of Little Heath School.



**MORE  
SEND  
INFO ON  
PAGE 50**

## THE SCHOOL AND TECHNOLOGY

Little Heath is a successful and well established school for pupils with a wide range of needs, including moderate and severe learning difficulties and communication needs (including a number with autistic spectrum conditions). The school has 165 pupils on roll, and support 65 pupils in mainstream settings. Little Heath recognises and utilises the benefits of technology and LGfL resources to support the learning and development of their learners.

*"With the increasingly complex needs of our learners, ICT plays a greater and greater role in their learning. We have an investment in ICT.....and the LGfL*

**“ Money is tight....A good place to start is use what you have already. LGfL resources, if you're not accessing them, access them. They are a wealth of resources that will help you do a lot of the sort of things you want to do... If you can, use the technology, use the opportunity to resource it because it is a way in for all of us. ”**

*James Brownlie Headteacher - Little Heath School*

*resources are really part of that push on ICT to support the leads of our learners".  
Joe Sieber, Assistant Headteacher and SENCO*

## WHOLE SCHOOL TRAINING

The school arranged a 2 hour hands on training session for all staff to learn about the range of LGfL resources

available to support learners with SEND, try them out and feed back their experiences in using the resources to other staff. Their assistant head reported that staff *“were really enthused in what it had to offer in terms of how alive the resources were, the variety of subjects and activities they covered and they felt ready the next day to start using them in lessons”*.

### **ACCESSING THE CURRICULUM WITH BUSY THINGS**

One of the most well used resources at Little Heath is Busy Things due to the fact that it covers such vast areas of the curriculum, is multisensory and supports many different learning styles. Jo Martin, ICT teacher reports that *“The children love using the resources....They're short sharp activities that the children get instant feedback on.”* Staff use it to support many curriculum subjects and it is used individually and in small groups.

### **WORK RELATED LEARNING AND EMPLOYABILITY**

One of the biggest areas of need for older learners is work related learning and the link from school to the world outside. Little Heath staff utilise all sorts of technology, including virtual reality technology when pupils can practice tasks in different work environments, to prepare their young people for the future. The school also uses the LGfL Employability programme to support work experience and preparation:

*“We've used the Employability resources from LGfL which (include) some great video simulations including dealing with problem customers, how to apply for a job, and what's it going to be like to go for a job interview (to) give the children the opportunity to see what it's going to be like when they grow up, the world of work and preparing them for independence in that respect”*.

Jo Martin, ICT teacher

### **AUDIO NETWORK**

Little Heath also recognises the benefits of Audio Network, LGfL's database of thousands of music tracks which can be searched by keyword, category, genre, and mood and



atmosphere and then downloaded. It has been used to support video editing in school, for background music and in teacher resources. Staff describe it as an *“absolutely amazing resource with a phenomenal amount of tracks”*.

### **WORDQ SPEAKQ**

Staff at the school also recognise the potential of WordQ SpeakQ, a new literacy toolbar that can be used to support those with literacy difficulties, including dyslexia. A small number of pupils at the school have begun to pilot the use of this technology and the school *“is hoping that a lot of our pupils will see the potential of this software to help them extend their writing and to be able to express*

*themselves further”* (Jo Martin, ICT teacher).

### **ADVICE FROM LITTLE HEATH**

*“Money is tight....A good place to start is use what you have already. LGfL resources, if you're not accessing them, access them. They are a wealth of resources that will help you do a lot of the sort of things you want to do... If you can, use the technology, use the opportunity to resource it because it is a way in for all of us”*. James Brownlie, Head teacher

**[busythings.lgfl.net](http://busythings.lgfl.net)  
[employability.lgfl.net](http://employability.lgfl.net)  
[audionetwork.lgfl.net](http://audionetwork.lgfl.net)  
[wordqspeakq.lgfl.net](http://wordqspeakq.lgfl.net)**





# LGfL TRAINING HUB: CPD AT ITS BEST

September saw the launch of the LGfL Training Hub – an extensive continuing professional development programme for teachers in LGfL TRUSTnet schools. The aim of the cross-curricular programme is to support teachers in the effective delivery of their curriculum areas through the use of technology and LGfL resources.

**T**he training is delivered by a variety of LGfL trainers – all with an extensive and varied teaching background, and often curriculum specialists who have helped create LGfL

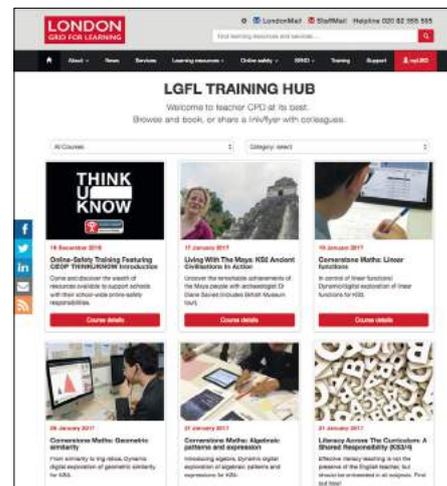
learning resources.

Trainers have an extensive understanding of the latest curriculum challenges and developments, and are experts in the effective use of LGfL

resources to raise attainment and achievement for learners in a variety of school contexts.

The LGfL Training Hub aims to provide relevant support for teachers across all Key Stages in a range of curriculum areas, including numeracy, literacy, humanities, safeguarding and specialist support for learners with complex needs.

The role of filming and blogging in raising literacy standards feature heavily in the programme, with a creative approach to teaching & learning encouraged throughout.



The majority of training takes place at the Camden City Learning Centre, a location chosen for its Central London location and school-focused facilities.

However, thanks to our wide range of development partners, we have also been able to provide training in venues including schools and even the Queen's Gallery at Buckingham Palace!

Courses are delivered in small groups, ensuring that attendees receive a high quality, responsive and relevant experience.

Training can even include visits to

cultural institutions, such as a guided tour of the British Museum with Dr Diane Davies, archaeologist and Maya expert.

To ensure as many teachers can attend as possible, all training is provided at no additional charge within the existing LGfL / TRUSTnet service.

Events are repeated if they are particularly popular or offer guidance that is regularly updated, such as our well attended online-safety / safeguarding course.

All CPD days are flexible and tailored to the needs of those who

attend. We always make sure that 'hands-on time' is planned into the day so that teachers have time to explore themes and resources with experts on hand to guide and answer questions throughout.

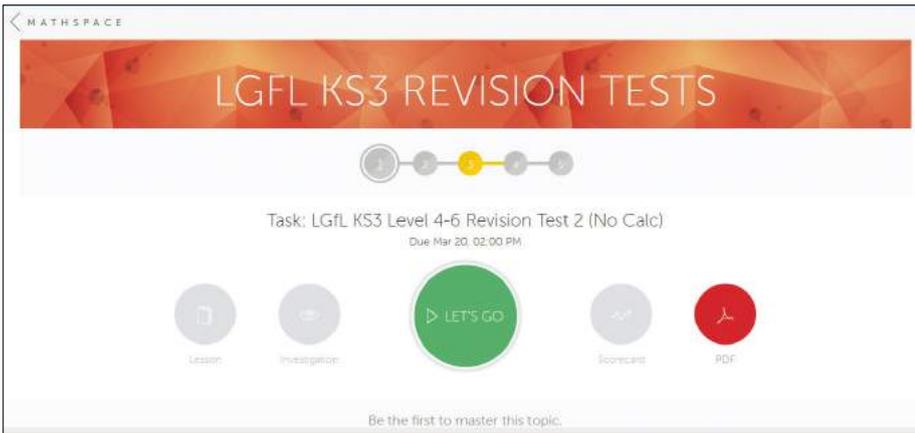
Why not visit the training portal today to see how your school can make better use of this excellent service enhancement? Supercharge your use of LGfL resources to boost achievement and attainment in your school.

**training.lgfl.net**



# MATHSPACE: PROBLEM SOLVED!

Mathspace is a very popular resource for LGfL schools. Here, Mathspace UK CEO Tim Stirrup tells us about the methodology behind the Maths.



## THE PROBLEM

Since the introduction of computers, mathematics software has suffered from problems that can damage how children learn mathematics.

Learners have had to put up with a diet of online mathematics that actually restricts their learning.

The OECD PISA tests of 2012 asked about the use of computers for practising mathematics. The results indicated that the more computers are used for practicing maths, the LOWER the students performed on the tests!

OFSTED also noted issues with online mathematics software in the report 'Mathematics: made to measure' (a really good read, by the way!) The problem is highlighted in the section on marking:

*"Concern emerged around the frequent use of online software which requires pupils to input answers only. Although teachers were able to keep track of classwork and homework completed and had information about stronger and weaker areas of pupils' work, no attention was given to how well the work was set out, or whether correct methods and notation were used."*  
(Paragraph 90)

Working out is important – and examinations demand it! In the classroom, working out and understanding can be monitored by the use of such things as mini-whiteboards.

The teacher can give instant feedback; misconceptions can be addressed immediately.

But this doesn't happen once learners move onto certain practice activities, and especially once they start doing homework, or revision tasks on web-based software.

## SO WHAT'S THE SOLUTION?

2016 saw the publication of the first long term, rigorous and large-scale research study that looked at how technology can support students working at home.

Researchers from Stanford Research Institute (the creators of 'Cornerstone Maths') looked at software that provides immediate feedback and guides students using step-by-step hints.

They found that regular homework using this kind of technology increased maths achievement – across the ability range! For those starting at a lower base of achievement, the effect was worth well over 1 year of extra maths.

Mathspace, which is available to LGfL schools via a suite of revision questions, is designed to give just such immediate and formative feedback to students via step-by-step marking, videos and hints for next steps.

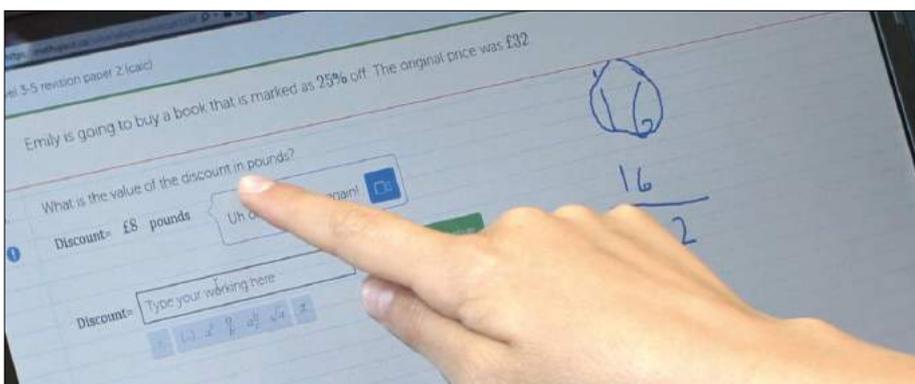
All this work is recorded and available for the teacher to see, just as if they were looking at a pile of books.

The major difference though, is that all the books are already marked, and students have already seen how they can improve.

This saves teachers time, but also provides more information for interventions and planning.

And for students, it means they can't get away with sloppy mathematical workings. They HAVE to communicate well and keep on doing so through demonstration, practice and repetition.

That can be the difference between success and failure, and that is why Mathspace is no ordinary online tool!



## WHAT ABOUT TABLETS AND SMARTPHONES?

The Mathspace app uses handwriting recognition technology to enable students to write as if they are writing in a book! The combination of handwriting recognition and step-by-step feedback is a world first!

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