

Digital Skills for Heritage:

Getting Started with Online Learning

Produced by
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Introduction

The heritage sector has a wealth of knowledge to share with the world. It plays a vital role in enabling people of all ages to learn about and understand the UK's fascinating and complex history. Whether visiting sites and monuments, exploring stories and exhibitions, or participating in events and activities, your visitors already experience a wealth of education opportunities.

Online learning resources and activities can help to bring heritage to a wider audience than ever before, in new and innovative ways.

Online learning can include:

- free digital courses that anyone can join, sometimes called Massive Open Online Courses or MOOCs
- structured activities aimed at groups of learners such as schoolchildren
- community learning and engagement, which might involve collaborative practice or 'crowdsourcing' resources
- self-paced online learning materials
- virtual tours and exhibitions
- blogging and social media activities, including digital storytelling and quizzes

Online learning provides opportunities to make heritage education accessible to people from all walks of life. You don't need specialist expertise and expensive applications to create effective learning experiences. This guide covers a range of free, easily accessible tools and resources that you can use to create innovative and engaging online learning opportunities. It provides examples of ways many commonly used technologies can be used to support online learning.

It also contains practical resources and details of expert organisations you can turn to for additional information and guidance.

Understanding your learners

Put your learners at the heart of the process from the outset. This will enable you to design more effective, fit-for-purpose learning resources and opportunities that encourage participation and engagement with heritage.

For example, consider how you will provide ways for learners to share their own ideas or opinions and how you will support collaboration and group work.

Questions to consider:

- Do you have a specific number of participants in mind, for example, individual learners or groups? Or are you aiming to provide resources and activities for as many people as possible?
- What is your expectation of your learners' digital skills level, such as their ability to use online tools and resources for learning?
- How will people learn from your resource or activity online? Will they learn together at a specific time (synchronous learning) or at their own pace (asynchronous learning)?
- Are your learners in an indoor setting designed for learning, like meeting rooms, classrooms or computer labs, or in indoor or outside spaces that are open to the public? At the moment, it's likely many people will be at home.
- What kind of devices are your learners likely to have access to (for example, mobile phones, tablets or desktop computers), and how often? Do they have good network connectivity?

Additional resources:

- The [Enhance Digital Teaching Platform](#) from the Education & Training Foundation provides bite-sized information on understanding learners' needs including [digital context](#) and [accessibility](#).
- The free [Blended Learning Essentials](#) course from the University of Leeds and the Institute of Education provides a clear introduction and many practical tips on using digital tools.
- [Building a taxonomy for digital learning](#) published by the UK's Quality Assurance Agency includes a useful section on the digital learner experience.
- [The UFI VocTech Trust](#) introduce beginners to the basics of how to design for virtual learners, one of a series of webinars focusing on [getting started with online learning](#).
- The Open University's free course, [Take your teaching online](#), introduces concepts and tools that can help you understand how to teach and learn online.

Key concepts in online learning

“Pedagogy” is the method and practice of teaching in general, both online and in physical spaces. There are many different kinds of pedagogy. We can make our practice more effective by considering what the best methods for teaching might be for the people we are supporting.

Some of the key pedagogical approaches you could use for online learning include:

- **Collaborative learning** – a form of active learning that prompts learners to explain their ideas or their work and communicate with others, encouraging them to reflect and learn from each other.
- **Constructivism** – a form of collaborative online learning at scale. It is often the dominant approach in online courses with large numbers of learners. Constructivist learning emphasises the social construction of knowledge and really focuses on the learner, for example learning through dialogue with other learners and the teacher. It often places importance on the context of learning and encouraging collaboration.
- **Narrative-based learning** – this model can help make subjects more memorable by providing a structured learning experience in a familiar, story-based format. This helps contextualise learning and makes the content more engaging. The focus of the narrative is a problem that must be solved.
- **Resource-based learning** – a flexible structure where the learner can use a wide range of resources to develop their understanding according to their own needs. This approach helps expose learners to different perspectives and engagement with technology. It also promotes active learning.
- **Problem-based learning** – a learner-centred approach which turns the conventional teaching process on its head, supporting learning through the experience of solving an open-ended problem. This helps participants to develop problem-solving skills, collaborate and actively engage in their own learning.
- **Situated learning** – this model aims to involve learners in realistic problem-solving situations while providing guidance. An active, contextualised approach to learning.

Digital inclusion, data protection and safeguarding learners online

Digital inclusion

Inclusion is key when designing online learning.

The National Lottery Heritage Fund's Accessibility Online guide [published in summer 2020] helps organisations understand their legal obligations and create accessible digital materials.

The Disability Collaborative Network for Museums' [Digital Inclusion: Standards resource](#) list provides practical help for ensuring your online learning content is accessible.

GDPR

[General Data Protection Regulation \(GDPR\)](#) is the legal framework that sets guidelines for the collection and processing of personal information from individuals.

In line with these obligations it is important to consider what personal information you will collect from your participants. You must also consider how you will securely store and dispose of this information.

The National Lottery Heritage Fund's [Digital guide: online privacy and security](#) helps organisations to manage data in line with their legal obligations.

The Information Commissioner's Office has [GDPR FAQs](#) for charities and businesses.

Keeping children and young people safe online

NSPCC Learning provides [Safeguarding Standards](#) and a checklist that any organisation can use.

The National Lottery Heritage Fund's [Digital guide: working with children and young people online](#) helps organisations understand online safeguarding practice.

Modes, formats and delivery

There are many different modes and formats of delivering online learning. These can be combined to create innovative and engaging learning activities and experiences.

Think about:

- Where learning takes place. **Synchronous learning** takes place in real time, with all learners working together. **Asynchronous learning** takes place over an extended period of time, with learners working at their own pace.
 - Where learning takes place. **Face-to-face** learners are located in the same physical space (for example, a classroom or resource centre). **Distance learners** work remotely from each other in different locations (for example, from home).
 - How learning is structured. **Guided learning** is led by a tutor, or follows a set path. **Autonomous learning** is where people work on their own, or choose their own path through learning activities.
 - How learning engages the learners. **Interactive learners** actively engage with the learning activity or content, for example through quizzes and simulations. **Didactic teaching** provides content for learners to listen to, view or read.
- If learning is formally recognised. **Formal learning** is designed to support learners in gaining formal qualifications. Informal learning, which may be self-directed, is undertaken for personal reasons or benefit and may include learning from experience.
 - How learning is designed. **Personalised learning** is tailored to individual learners. **Generic learning** is designed for a broad group of learners. From bite-sized microlearning content such as short videos or animations, to longer courses that may lead to formal accreditation, the time required to complete the learning experience is important to consider.

Commonly, you might design learning in one of these formats:

- **Learning resources.** These are individual resources that cover a single topic, for example, a video, a puzzle or a worksheet. Individual resources may be used on their own or as part of a module.
- **Modules.** These are self-contained units of learning that focus on a specific topic. They usually include narrative text, resources and activities for learners to complete.
- **Courses.** Courses contain multiple modules of learning combined together, for example into online courses or courses that form part of a school or university's curriculum.

Additional resources:

- You can see some [example learning resources created by the Cambridge University Press](#) shared on the quiz platform Kahoot!
- This [course from the National Maritime Museum, Greenwich](#), is an example of a course that is created in partnership with a commercial digital education platform. Popular platforms in the UK include FutureLearn, EdX and Coursera. These platforms host free Massive Open Online Courses, also referred to as MOOCs, created by partner organisations including universities, museums and other public heritage bodies. Museum Next has also compiled a [list of MOOCs created by museums](#).

Content licensing

Think about how you will license your materials. The National Lottery Heritage Fund requires the materials it funds to be openly licenced. Open licenses ensure that your learning resources can be used and reused as widely as possible, enabling them to benefit as many people as possible.

Creative Commons provides a range of introductory materials to help people understand how open licenses work, including this [guide to the different types of Creative Commons licence](#).

UK Copyright Literacy provides practical resources and help for using copyright for learning. This includes free chapters from [Copyright & E-learning: A guide for practitioners](#) by Jane Secker and Chris Morrison on:

- e-learning and copyright: background
- using digital media: video, images, sound and software
- copyright education and training

The University of Edinburgh has compiled a useful guide to [Where to find Open Educational Resources](#) that can be used to create openly licenced learning resources and activities.

Building learning communities

One of the best ways to engage learners online is to build a shared sense of community.

Learning communities are groups or networks that connect people through learning activities and interests, helping them to work together towards a common goal. Commonly used social media platforms (such as Facebook, Twitter and Instagram), and formats (including webinars, blogging and podcasts) can be used to support learning communities.

[Whose Knowledge](#) is a worldwide project that works to centre the knowledge of marginalised communities online. It provides a resource series including this [guide to building community knowledge](#).

Social documents

Shared or 'social' documents are a key tool for facilitating asynchronous collaborative learning online.

Microsoft Teams and [Google Docs](#) are tools that enable you to create and share learning resources and activities online so that they can be accessed from anywhere, and used and contributed to by multiple learners.

[Dropbox](#) is another free service that lets you bring your photos, documents and videos anywhere and share them easily. The [Dropbox screencast](#) and the [Dropbox in Plain English](#) video demonstrate how this works.

Blogs for learning

A blog is a website where content is regularly updated by one or more authors. Entries are generally short and informal and may include text, links, images, video and other media. Blog posts can be amplified by sharing them on social media platforms where they can reach a wide audience. Many heritage organisations already use blogs to engage with the public.

Popular free blogging platforms include [Wordpress](#), [Blogger](#) and [Medium](#).

As an informal medium of communication, blog posts are an accessible way for learners to engage with heritage organisations. [Whales in Wales](#) from Sea Trust in Pembrokeshire is a great example of engaging audiences of all ages in informal learning. The project explores the work of the trust, sharing updates on wildlife sightings, scientific data and learning resources.

Posting regular blogposts on different subjects, or highlights from your collections, enables learners to explore new topics and develop new interests. Blogs can also be used to bring a range of voices to your learners, for example curators and heritage professionals sharing their knowledge and experience, or by sharing voices from the past.

For example:

- [Stories of Scotland](#) podcast explores some of the forgotten or misrepresented events in Scottish history. A blog is used to share information about the latest episodes and bonus content.

- [Untold Lives](#) is a blog from the British Library that shares overlooked and forgotten lives and stories from around the world in order to inspire new learning and research. The blog contains links to information and other online resources.

Social media and hashtags

Social media platforms such as Facebook, Instagram, Twitter and Pinterest can be useful tools for facilitating learning online. Explore this [guide to getting started with social media for learning](#) by Dr Sue Beckingham.

A hashtag, introduced by the number sign or hash symbol, #, is a metadata tag used on social networks such as Twitter and other microblogging services.

- For example, the hashtag [#MuseumsUnlocked](#) is a project started during the coronavirus (COVID-19) lockdown. It was originally created by [@ProfDanHicks](#) and encourages museums, archives and heritage organisations to share images and artefacts on Twitter, enabling the public to explore collections and interact with curators. This allows museums and archives to share their knowledge and encouraged the public to engage with heritage at a time when they were unable to visit physical spaces.

Before getting started, check if your organisation has an existing social media policy. If one doesn't exist or cover your planned use of social media it might be worth considering developing one. The National Education Union provides a [Social Media Model Policy for Schools](#), which includes a useful checklist.

Podcasts and video

Podcasts and video help learners to engage with your content asynchronously.

Distributing this type of content on platforms such as YouTube, Vimeo, Apple Podcasts and Spotify, or on social media, are also effective ways to make the public aware of your content and collections.

For example, the National Museums Scotland [Panjab Connections project](#) included the production and sharing of several films on YouTube.

Podcasts

Digital audio shared as podcasts are a quick way to create and share content. They can be recorded using equipment you already have access to like desktop/laptop computers and mobile phones.

- Creative Boom offers a [step-by-step beginner's guide on how to start a podcast](#).
- Hannah Hethmon of Better Lemon Creative Audio provides a useful how-to guide: [Super Quick DIY Podcasting for Museums & Other Nonprofits Closed by COVID-19](#).
- This [two-week online course from FutureLearn](#) teaches you how to plan, write and publish your own stories in podcast form.

Video

- Discover how to combine the functionality of Zoom with the benefits of YouTube in [this PDF guide](#) produced by the Arts Council and Digital Culture Network. [See more Arts Council/Digital Culture Network resources.](#)
- Learn how to make video content using a smartphone with a [guide on hardware, software and distribution](#) by the Arts Council and Digital Culture Network. [See more Arts Council/Digital Culture Network resources.](#)



We got great feedback from participants who enjoyed the rapid and fun nature of this approach to networking. In just seven minutes you cut straight to the essential priorities of each partner, allowing quick and helpful decisions on future working.

Rebecca Bailey,
Programme Director
Towards a National Collection

Conference platforms and live streaming

Communicating via video is an important element of synchronous learning – for example, learners working together in real time. Free online conferencing platforms such as Skype, Zoom or Google Meets support real-time video, audio, chat conversations and content sharing.

Video communication can also be useful for researchers and learning development. For example, [Towards a National Collection](#) from the Arts and Humanities Research Council switched from face-to-face workshops to using Zoom calls as a result of the coronavirus (COVID-19) lockdown. This allowed partnerships and projects to find potential collaborators.

Additional resources

The [Digital Heritage Lab](#) is a digital skills development programme for small and medium-sized heritage organisations in the UK. Supported by The National Lottery Heritage Fund, it provides opportunities for users to learn more about general skills in developing digital materials.

Creating learning content

Online tools can help you find, create and share resources and engaging learning content. Here are some popular tools:

Visual content

For visual content such as photos, collages or animations for social media advent calendars, “picture a day”, colouring books, etc

- [Flipgrid](#) is a free video-based platform for learning which enables you to record, share and interact with short videos.
- [Flickr](#) is an image and video hosting site where users can upload and share.
- [Biteable](#) is a free online tool that enables users to create video content quickly and easily using templates and images.
- [Wakelet](#) is a free content and curation tool that can create digital stories and newsletters and organise content from across the web.

Quizzes and polls

- [Mentimeter](#) enables you to run live polls and Q&A sessions.
- [Kahoot!](#) is a game-based learning platform used to generate multiple-choice quizzes. Kahoot! uses social learning where learners can compete against each other to answer questions, gaining extra points for quick correct answers.

- [Poll Everywhere](#) is an audience response system that enables learners to use mobile and web-enabled devices to respond to teacher-generated questions. These include open-ended and multiple-choice questions.

Presentations, ebooks and pinboards

- [Padlet](#) is a collaborative tool which creates online noticeboards, documents and webpages.
- [BookCreator](#) is an online platform for creating online learning resources and books.
- [Prezi](#) is a cloud-based presentation software. Users can collaboratively develop presentations.
- [Microsoft Sway](#) enables users to create visual presentations, documents and other communication content.
- [Zeetings](#) is a web browser-based presentation tool that can incorporate live dynamic content such as polls, voting, surveys and activity walls.

Video content

- [YouTube](#) is a video-sharing site where you can upload, share and view videos.
- [Vimeo](#) is another video sharing site. It restricts content uploads to only those created by the user.
- [TikTok](#) allows users to create short music and lip-sync videos of three to 15 seconds and short looping videos of three to 60 seconds.
- [Facebook Live](#) is an app within Facebook that allows users to instantly stream live video.
- [Periscope](#) is a live video streaming app owned by Twitter.

Audio content

- [Anchor.fm](#) is a free iPhone app that makes it easy to broadcast short audio clips to a global audience in seconds. Your listeners can talk back, sparking instant group discussions.
- [AudioBoom](#) is a public sharing audio platform. Free accounts can record up to 10 minutes per clip. You can share your clips with Twitter and Facebook.
- [SoundCloud](#) is a very popular podcasting platform. You can customise the colour of your audio player.

Good sites and services will provide user guides – be aware they can get updated quite frequently.

Evaluating your learning content

Evaluating the learning activities, resources and courses you have created will help you understand how effective they have been and how to improve them in future.

Start by thinking about what information you will need to collect, and how you will gather and analyse it.

- What do you need to know? For example, you can use polling tools like [Mentimeter](#) or [Poll Everywhere](#) to find out how learners rated the learning experience and if this differed depending on circumstances or demographics.
- What tools can you use to gather the information you need? For example, an online survey using tools like [SurveyMonkey](#) or [SmartSurvey](#).

Additional resources

[23 Things](#) is a useful free self-directed course that introduces 23 digital tools for a variety of uses. You can also [read a case study](#) outlining how 23 Things was used for professional development.

Members of the Association for Learning Technology have also shared [reviews of commonly used technologies](#) and [case studies](#).

Contribute to open knowledge initiatives

When resources are limited, you can create more engagement and impact by linking learning activities to existing initiatives such as open competitions, edit-a-thons or data visualisation projects.

Wiki Loves Monuments

[Wiki Loves Monuments](#) is an annual international photography competition which takes place in September. The competition brings together amateur and professional photographers to capture images of monuments and listed sites across the UK. It provides a great opportunity to learn about local sites, buildings and objects, and also share them with a global audience. Uploaded images are shared under an open licence via [Wikimedia Commons](#).

WikiData

WikiData is a free and open knowledge database that can be read and edited by both humans and machines. Projects can upload structured data, which can then be used in learning resources. Using WikiData helps people to explore data in a visual and engaging way.

- The University of Edinburgh's [WitchFinder General Project](#) makes use of WikiData to create an accessible [interactive map](#) using the Scottish Witchcraft Database.

Edit-a-thons

An edit-a-thon (sometimes written as "editathon") is an event where people can learn to edit Wikipedia or add content to other open knowledge projects (like [Wikidata](#) and [Wikimedia Commons](#)).

Sessions typically focus on improving and adding to knowledge on a specific topic or type of content. [Wikimedia UK](#) supports heritage organisations of all sizes. It can help projects understand and get started on working with Wikipedia and the other Wikimedia open knowledge projects.

- The [Dumfries Stonecarving Project](#) took a blended approach to learning with the aim of promoting the rich stonecarving heritage of the area. It included practical taster sessions, summer schools with local young people, an exhibition, workshops and stone-carving quests with photography groups to record examples of this heritage. Volunteers also took part in [Wikipedia Edit-A-Thons for the project](#), where they learned how to add photographs and information to Wikipedia. By using Wikimedia Commons and Wikipedia, the project is able to share Dumfries' stone-carving traditions with a global audience, while volunteers learn about their rich local heritage and gain digital skills.
- [Women in Red](#) is a global group of editors of all genders focused on improving content systemic bias in the wiki movement. Their project page includes essays and resources as well as ideas and outreach activities.

Additional resources

Wikimedia provides a guide on [how to run an edit-a-thon](#) and also [practical help on edit-a-thons](#).

Exploring online heritage learning projects

You can combine the approaches introduced in this guide to create innovative learning activities.

The Virtual Museum by the Irish Linen Centre & Lisburn Museum

The [Virtual Museum](#) was created while the museum was closed during the coronavirus (COVID-19) pandemic. It provides a wealth of educational opportunities including virtual tours and free teaching resources for all ages, including schoolchildren.

The Virtual Museum uses a range of social media and online tools to engage learners including worksheets, virtual jigsaw puzzles, craft activities and tours.

Digital river by 900 Voices of the Nene Valley

Learning project 900 Voices of the Nene Valley has created a [digital river](#). This is a great example of audio and video learning content that enables learners to explore heritage stories from people along the Nene Valley. This project invites contributions to help grow the digital river, providing opportunities for learners to collaborate and engage in a dialogue.



The lockdown challenge for Lisburn Museum was to transfer its participatory practice to the virtual world, concentrating on a wellbeing agenda. Our ethos is person centred, building on interactions with real people, real objects in a museum context.

“We met this challenge by offering interactive museum services, especially the [Covid 19 and Me project](#) online. The virtual museum will continue to be developed with schools and the communities we serve.”

Alderman Michael Henderson MBE,
Lisburn & Castlereagh City Council

Augmented and Virtual Reality

Learning projects and virtual museums can also be created through the use of Augmented Reality (AR) and Virtual Reality (VR).

- AR superimposes a computer-generated image on a learner's view of the real world or object.
- VR allows learners to interact with a computer-generated simulation.

Creating these kinds of learning projects requires careful planning, and for most heritage organisations will involve working with external contractors and hiring in specialist skills and equipment.

- The [Sikh Museum Initiative](#) has created an exciting project bringing to life Sikh artefacts and relics, including swords and jewellery, through 3D technologies,
- Historic Environment Scotland has created a 3D model of [Edinburgh Castle](#) which gives the virtual visitor an immersive digital tour of the Castle and a rare opportunity to explore hidden parts of this iconic site.

Additional resources

The [Enhance Digital Teaching Platform](#) from the Education & Training Foundation provides helpful starting points for using [Augmented Reality](#) and [Virtual Reality](#) in a learning context.

[The Museum as a Site and Source for Learning](#) is a free online course from the University of Glasgow that includes designing a virtual exhibition.



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