

Innovative teaching in a new normal: creating new ways to deliver virtual information literacy and research support training

Best practice article

Keziah Gibbs, Hannah Crago*

University of Essex

Abstract

With the pandemic bringing unprecedented circumstances for us all, at the University of Essex we moved our in-person information literacy (IL) and research support (RS) training online. We wanted to see the unexpected situation as an opportunity for improvement, which required innovation and creativity. In this paper, we will share the lessons we have learnt in our shift to online teaching. We begin by giving a brief background of the training we offered prior to the pandemic, highlighting how this training was rarely online, with a greater emphasis on in-person support. We then give an overview of the technologies we used to develop our virtual offer of IL and RS training in a range of different formats, including online tutorials using LibWizard, mixed-media webpages using LibGuides, YouTube videos, and running virtual workshop sessions using Zoom. We then discuss what has and hasn't worked in our aim to increase the scope and interactivity of our IL and RS training, before considering the feedback we received from participants. Finally, we explore how we intend to broaden our offer further in the future based on the lessons learned and reflect on how this will influence future decision making. Ultimately, we aim to make the most of the positives we've seen and offer a mix of online and in-person IL and RS training, with consideration toward how we do this sustainably amongst the continued uncertainties around the 'new normal'. Overall, we hope that our paper demonstrates how challenging situations can lead us to innovate in new and interesting ways.

Keywords: information literacy, research support, teaching, virtual, online learning

***Contact:**

e-mail: h.crago@essex.ac.uk and k.gibbs@essex.ac.uk

Background

Prior to March 2020, we ran a variety of in-person information literacy (IL) and research support (RS) workshops at the University of Essex (UoE). Our IL workshops were primarily aimed at undergraduate students, and our RS workshops at early career and postgraduate researchers. Both types of training centred around weekly or termly programmes of workshops.

The UoE has three campuses, Colchester, Southend, and Loughton; however, our workshops were all delivered at Colchester. For those on our other campuses, individual embedded sessions were the norm for undergraduate and master's students, while early career and postgraduate researcher support usually came from one-to-one sessions.

At the beginning of 2020, consideration around extending our offer had begun. Some online support was being developed using Springshare's LibGuides platform, with mixed-media webpages focusing on search skills and the basics of RS. We had also begun delivering some RS workshops at Southend, but attendance was low.

When COVID-19 hit, our tentative moves toward transforming training were accelerated. The 'new normal' brought a need for innovation, as we needed to deliver virtual IL and RS training. This paper will explain how we met this need and will offer an analysis of these new approaches. Consideration will then be given to how our training is likely to continue to change in the future.

Technologies

To address the sudden need for online teaching, we utilised a range of different technologies including Springshare's LibApps, YouTube, and Zoom. Given the tight deadlines, the technologies used were largely driven by availability and institutional support. However, for the tools we had we considered why we used one over another, asking ourselves each one's benefit.

For example, webpages are easily accessible, and the use of multiple media helps meet the diversity of users' needs. Interactive tutorials allow engagement with teaching material without guidance and offer an opportunity to gamify teaching where appropriate. Synchronous Zoom sessions provide a discursive element and flipped classroom approaches allow the facilitation of peer learning. Videos are an accessible way of absorbing information for those that struggle with dense text, with visual stimulation helping to capture the attention of viewers. These considerations highlight why we decided to make use of a variety of technologies for our training.

The majority of content created was delivered to users asynchronously, providing help when needed. Additionally, we redesigned our workshops for synchronous online delivery. Through the development of these online resources, we reached our users in various locations and situations, including those working across campuses, outside of the UK, and who have other commitments alongside their studies.

Online tutorials. Springshare's LibWizard enabled us to produce interactive tutorials. LibWizard allows you to write text and ask different question types, then embed various content alongside – such as webpages and videos. This allows users to interact with information whilst answering corresponding questions.

The objective for tutorials was to generate stand-alone asynchronous content; users could complete tutorials without guidance. Tutorials covered various topics, including evaluating resources and referencing. We also used LibWizard tutorials for library inductions, supporting students both on- and off-campus; there were separate tutorials for the online library, and a self-guided orientation tour for the physical library. All tutorials aimed to take 30 minutes maximum to complete, as we anticipated longer activities might lead to distraction and thus less successful learning.

LibWizard tutorials also enabled gamified teaching. Previously, we have explored gamification to make training more engaging, particularly within RS training (Sundsbo, 2019; Pyman and Sundsbo, 2021). We therefore created 'The Puzzling Hunt for Open Access', an online tutorial based on an open access escape room designed by a colleague (Sundsbo, 2018). The tutorial involves a series of puzzles that introduce open access concepts. We chose LibWizard for this as the embedding of mixed-media content described above allowed incorporation of game-based activities in an engaging and varied way.

Online tutorials therefore enabled us to create interactive and diverse teaching materials that were accessible, and kept users engaged through different learning techniques.

Mixed-media webpages. Springshare's LibGuides platform was also used to develop online content. As static text-heavy webpages can be overwhelming, we included various media within our LibGuides to increase visual appeal: written content, images, documents, videos, calendars of events, and more. This diversity allowed us to better support the diversity of our users' preferences and needs.

Our LibGuides pages also aimed to increase the discoverability of our content. We developed a 'Skills Guides' page, which signposts users toward our online resources. We shared this page on social media, highlighted it to departments to share with students, and some module tutors linked to it through the Virtual Learning Environment. Since this, we have also developed a similar landing page for our RS guidance.

Mixed-media webpages can also support synchronous teaching sessions. Prior to March 2020, we ran 'speed-databasing' sessions to introduce users to academic databases. This was run in-person, where we circulated 'dating profiles' with database information before students explored these databases. We adapted this session for online delivery using a LibGuide, uploading the 'dating profiles' and links to the databases. During a synchronous Zoom session, the LibGuide page is shared, allowing attendees to work through the activity in breakout rooms.

Mixed-media webpages proved crucial to hosting and promoting content, but also offered an opportunity to deliver a large amount of information in a digestible way, both within and outside of synchronous teaching sessions.

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Initially, most videos were replicas of live workshop sessions and were 30-60 minutes long. We soon found this wasn't ideal for learning; viewing figures were low, and verbal feedback indicated learners didn't have time for longer videos. Instead, we made the videos shorter (5-20 minutes), and thus more appealing. When shortening videos, we aimed to break the subject into bite-sized chunks so that students could easily find relevant information. We did not want to compromise on content, and the shorter versions allowed further benefits as they were embedded into appropriate points of our LibGuides and tutorials. Since this change, we have seen higher views, and hope this translates into more successful learning.

An important aspect retained within our asynchronous videos is demonstrations. This includes demos of databases and the library website. Initially, including demos complicated editing, as Zoom recordings were imported into Camtasia before screen captures were added. We have since streamlined this approach, using PowerPoint to record the video and embedding screen captures into the slides. This has saved time and brings a more professional end result. It also allows for easier editing should the screen capture need updating.

Our videos all have transcripts, as this is essential for accessibility. However, creating transcripts is time-consuming. To streamline this process, we now write scripts when recording videos to be copied directly into the transcript and used for closed captions. This approach also keeps the finished video more succinct. However, it is important to ensure the speech sounds natural when recording. Keeping elements of informality when writing the script is therefore important, as we want the videos to be easy for our users to listen to.

Creating and improving our YouTube videos has been a learning curve, however we now feel we have reached a successful balance between creating digestible and engaging content, whilst having a sustainable creation process.

Virtual workshop sessions using Zoom. Maintaining the synchronous elements of teaching has also been essential. From March 2020, we continued delivering live workshops, but switched to online using Zoom. We initially retained the content of the majority of our workshops, but have since reimagined sessions for online delivery.

One method we have used is a flipped classroom approach (FLN, 2014). This has proven successful for our evaluating resources session, whereby we designed a LibWizard tutorial introducing the basics of evaluating resources, which attendees completed before the session. The live session then used breakout rooms to enable attendees to evaluate resources in groups. This allowed attendees to put the knowledge gained from the tutorial into practice, better utilising the time during the live session. It also enabled us as facilitators to better understand the level of learning achieved from the tutorial, and tailor the support we gave in the session accordingly. We were able to achieve this in breakout rooms by having two facilitators in the session, one to remain in the ‘main room’, and one to jump between ‘rooms’ to speak to attendees. This has proven a useful technique, and better reflects an in-person teaching experience.

We also adapted our live sessions to translate gamified teaching online. In our ‘referencing made easy’ workshop, pre-pandemic we used Lego to demonstrate the importance of record keeping when creating references. When online, we kept the same activity but asked individuals to draw instead of build with Lego. We used a similar approach when translating our Copyright Dough game (Pyman and Sundsbø, 2021), which usually uses play dough, to an online format. In both situations, keeping the elements of play and active learning (Walsh, 2018) have been welcomed, especially given so much teaching is now online.

Virtual workshop sessions have allowed us to continue to deliver a personal approach to teaching, and using tools such as breakout rooms and tutorials, alongside concepts such as flipped learning, have brought an ability to tailor our teaching to the needs and expectations of our students.

What has and hasn’t worked

What has worked. When considering what has worked with our development of new ways to deliver online training, the fundamental positive has been the expansion of our virtual IL and RS offer. We provided better support for our users at a difficult time, and hope for increased engagement with our resources in the long term. Additionally, we now have a greater ability to reach a wider range of users. Our offer has expanded across all of our campuses, across countries and time zones, and to students who have other commitments outside university. This has had an impact on the engagement with our resources, specifically in terms of video views and completion of tutorials. Our synchronous workshops have also seen an increase in uptake, with higher average attendance across our teaching sessions compared to pre-pandemic. This has been seen both in terms of the numbers of attendees, and the turnout percentage (i.e., the percentage of those who registered and attended).

An incredibly positive outcome is the increased accessibility of our teaching materials to meet UK web accessibility standards. We've considered accessibility whenever designing new online content. We included elements such as alt-text and headings, and created transcripts for all video content. Having multiple formats of content on a topic – text-based, tutorials, and videos – also gives users greater choices, matching individual preferences and needs. We believe accessibility should be a core principle in everything that we do. This shift to online learning has been an opportunity to learn more about how we can apply these principles in practice, and although this is a learning curve it is something that we will take forward in our work.

What hasn't worked. While we have seen a great number of successes, some elements have been problematic. For example, asynchronous content can quickly become outdated. This is especially true when using website demonstrations, and it can be difficult and/or time-consuming to update videos and tutorials. As mentioned earlier, we have streamlined the creation of this content, lessening this problem. Nonetheless, monitoring of our asynchronous content is needed to ensure we are not teaching outdated material.

The main problems with the shift to online are more difficult to overcome. The first is a lack of interaction, which can be seen in various forms. For example, when delivering live workshop sessions via Zoom, many attendees switch their cameras off. This makes it difficult to judge if learning outcomes are being met and makes it harder to interact compared to in-person sessions. To overcome this, we use Zoom chat, Zoom polls, and PollEverywhere, but not everyone interacts with these. Of course, in-person teaching does not guarantee interaction, however it's important for us to consider other ways of judging levels of interactivity when cues such as eye contact, facial expressions, and nodding aren't available.

Exacerbating this problem is the lack of feedback we receive from our online training. For asynchronous content, while we encourage participants to provide us feedback about our resources, it is difficult to incentivise. We have therefore received all but no feedback about our asynchronous resources, and instead have to rely on view counts and verbal comments we may receive from students and/or staff. For synchronous sessions, we have created online forms for attendees to complete, circulating these forms in the chat on Zoom and via follow-up emails to attendees. While we have received some completed forms, the response rate is low. This is a problem we need to think more about, as receiving feedback about our training is essential for us to continue to respond to the needs of our users.

Feedback

Nonetheless, it remains important to consider the feedback we have collected. In some cases, feedback has proven assumptions we had made. For example, live demos in our synchronous Zoom workshops have been found to be helpful to attendees who can work along on their devices. We can also easily share links in the chat to relevant resources for our users to follow, and this is something feedback has shown is welcomed. We have extended the implications of this feedback to our asynchronous content too, ensuring that we include as many relevant links as we can when developing LibGuide pages, YouTube videos, and LibWizard tutorials.

One area where feedback has been mixed is in our use of breakout rooms on Zoom. As mentioned previously, we have found breakout rooms can be beneficial for smaller group discussion and flipped-learning approaches, and some feedback we have received has reflected this. However, we have also found in some sessions that when breakout rooms are mentioned several students leave the meeting. Breakout rooms therefore appear divisive, as while those who stay and participate in activities often seem to benefit, for others it's a cue to leave. The way in which we use these in the future is subsequently something we're still contemplating. However, generally it seems postgraduates and early career researchers tend to benefit from, or enjoy, breakout rooms more than undergraduates. It therefore may be that we focus our use of this tool toward our RS sessions more than our general IL sessions.

The future

Looking forward, we expect that our approaches to IL and RS training are likely to change further. We aim to continue developing our asynchronous online content, taking forward the positives that we've seen in terms of increased accessibility of content, the reach to wider groups of users, flexibility of asynchronous delivery, and the increase in user choice. However, we need to consider how we can do this sustainably, as content needs updating regularly; we need to decide how we can regularly audit content and think about factoring in the time-consuming nature of making required updates.

Although we are not yet sure what form teaching will take in academic years going forward, we need to plan for a blended approach to delivery. The decisions that we make will be partly driven by the University's wider decision making, and the direction taken institutionally with the delivery of teaching. Ultimately, we are a campus-based University, and want to bring back our in-person teaching offer. However, we also want to balance our in-person offer with a continued online offer, ensuring that we don't miss out on the discussed benefits.

One option is to repeat synchronous sessions for in-person and online delivery, but the time required to do this would need to be considered. Other ideas include utilising Zoom Rooms, meaning we could present in-person but allow users to join us online via Zoom. In contrast, we have considered running online sessions and hosting 'live screenings' in a teaching room so that users could attend in-person.

Ultimately, there are many uncertainties that remain around what the 'new normal' is going to look like with regard to our IL and RS training. What we do know, however, is that continuing to deliver innovative solutions that match with our users' needs is something that will continue to be essential.

Reflection

Creating new ways to deliver virtual IL and RS training has brought an opportunity for the Academic and Research Services team to come together. Throughout the initial stages of the pandemic, we worked as a team to rethink our teaching offer and reach innovative solutions. As well as sharing ideas within our team, we also presented at an event sharing good practice more widely within the University. This allowed us to promote ourselves as developers of good teaching, demonstrate forward-thinking in terms of blended learning approaches, and position ourselves as partners in teaching and learning.

That said, it is clear on reflection that our decisions during the initial stages of the pandemic around delivering virtual IL and RS training were primarily reactive. We were operating in a time of short deadlines and high pressure, and strategic thinking had to be somewhat put aside. While it has become clear our actions brought many positive outcomes for our learners, as we move forward into the ‘new normal’ it is important that we strive toward a better connection between strategic decisions, intended outcomes, experiences, and feedback. It is this goal that will drive our development of innovative teaching in this continually changing ‘new normal’.

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