Developing Digital Literacy with Virtual History Excursions

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Introduction

The advent of the new Australian Curriculum (Version 9.0) has pinpointed a strong emphasis on the relevance and significance for students to develop their digital literacy skills. In the new curriculum, digital literacy involves students 'critically identifying and appropriately selecting and using digital devices or systems; [and] learning to make the most of the technologies available to them...'.¹ The renaming of the ICT capability to 'Digital Literacy' highlights the necessity to teach students about the relevance and usefulness of digital technologies in their everyday lives, now and in future. Further, the emphasis on digital literacy as a general capability is a testament to the urgency for teachers to teach students how to digitally *create*, *communicate*, *investigate*, *manage*, and *operate* with digital technologies across the curriculum.²

The refocus on digital literacy in the curriculum is timely given the disruptions and struggles faced by students and teachers alike during the COVID-19 pandemic. Lockdowns and restrictions prevented teachers and students from partaking in excursions, and teachers were compelled to reimagine learning experiences, many using different online spaces, software, and digital means of communication. Many teachers found virtual excursions to be an appealing alternative. In the past few years, there has been a surge of research focusing on the benefits and challenges that were faced by schools during the lockdowns - a testament to the pandemic's lasting impacts. The focus of this article is to reflect on the value of virtual excursions in the History curriculum, especially following the disruption caused during the pandemic. We also wish to consider the ways in which teachers can be better prepared for similar disturbances in a post-pandemic world, through an understanding of how we can seize opportunities to develop students' digital literacy through increased use of virtual excursions.

Onsite and virtual learning benefits

An obvious benefit of excursions is that they enable a change in teaching and learning modes - they move the teacher and students out of the classroom and provide a change of scenery, which can help with student engagement.³ Sharp et al. state that '[the excursion] can further assist with engagement as the teacher can lead from the guide when back in the classroom, building on what students learnt at the museum or cultural site.⁴ The potential of these learning experiences is significant, as students can gain a 'real world' appreciation for the subject and realise a sense of relevance and meaning. For example, a student whose grandfather received a medal for serving in World War II will have a personal connection to a war memorial excursion. A visit to such a place may assist students with feeling a sense of appreciation and empathy related to the importance of the artefact.5 As an added benefit when teaching the History curriculum, teachers may take advantage of incursions, where an external educator visits the school to run an educational activity relevant to the unit's historical focus. It is recognised that incursions can be 'of great interest to students and often questions will be encouraged ... students are often very engaged with the speaker's experience.²⁶

While excursions and incursions are seen as very beneficial to the learning experiences of students, the COVID-19 pandemic largely disrupted these opportunities. Schools essentially became distributors of distance education packages for varying lengths of time. Teachers would typically display lesson plans in online platforms, for example on Google Classroom. Potential challenges ensued for teachers, as they were compelled to consider the rationale for excursions and how students could best access excursions, given the range of restrictions and potential logistical challenges. It was important that these learning experiences were purposeful and achievable, particularly in terms of students being able to safely access them. These excursions would be aligned with the lesson plan and propose that students could visit local areas, as permitted.

The pandemic presented opportunities to enhance students' digital literacy, through the extended expectation to make use of digital technology to access learning experiences; however, this certainly brought with it many challenges. As virtual excursions can be defined as 'a tour through some digital context by teachers and pupils on a given topic that is attractive and has educational purpose',⁷ an added benefit of their use during the lockdowns was to offer opportunities to enhance students' digital literacy using these digital contexts. Suggested virtual excursions meant that students could appropriately select digital devices and 'make the most of technologies available to them', as per the *General Capabilities* paper produced by the Australian Curriculum Review.⁸

The opportunities for students studying History to engage in virtual excursions satisfies the requirement to become familiarised with digital technologies, while also promoting ethical and appropriate use of these technologies. Virtual excursions support the need for strong computer literacy in the twenty-first century, as they engage students in the practise of effective web-browsing and research, online tool navigation and reading of digital information. Currently, there are several excellent virtual excursions available online which align with units taught in Stages 4 and 5 History. A selection of these is presented below.

National Nordic Museum Virtual Tour

The National Nordic Museum in Seattle, Washington, US, offers a virtual tour that showcases the world of the Vikings, encompassing learning about the Vikings' weaponry, their longboats and daily living conditions. The tour provides great insight for Australian students studying the Vikings unit in Stage 4 History. Students are provided with an immediate glimpse into a museum setting. The tour includes multiple images of the actual museum displays, where the user can zoom in for a closer examination of the artefacts. They can also rotate to different aspects, which adds to the authentic museum experience. The viewer is transported from a position of merely looking at an online page to one where they have mobility and can investigate further through manipulation of the artefacts. The user can immerse themselves in a real museum experience, as the museum objects assume a more three-dimensional feel. Students are transported from merely looking at a flat computer monitor to a position of walking around the floors of a real museum, with the option of moving in multiple directions and observing from a range of angles. The user can do this with ease, using the zoom in or zoom out controls, as well as clicking on the view rotation option to add to their mobility. Given that the museum offers numerous display cabinets, well-stocked with artefacts, it is ideal that the user can examine items closely and appreciate the detail. This format offers flexibility and options and allows the user to take advantage of the vast visual offerings. The virtual tour website also includes links to a series of YouTube clips, which provide an overview of key information relating to specific museum items of interest.9

Relevant outcomes:

- HT4-5 A student identifies the meaning, purpose, and context of historical sources.
- HT4-8 A student locates and organises information from sources to develop an historical inquiry.
- HT4-10 A student selects and uses appropriate oral, written, visual and digital forms to communicate about the past.¹⁰

National Museums Liverpool – Ancient Egypt Virtual Tour

Provided by the National Museums Liverpool, UK, this tour provides excellent insight into many aspects of Ancient Egypt, from animals to canals. It is a comprehensive display offering genuine 'hands-on' quality. The user experience begins with a three-dimensional aerial building plan of a museum, which can encourage a sense of exploration in students and an appreciation of the scope and scale of the exhibition. From there, the student need only click on a particular point of the exhibition, and it will zoom in, allowing the user to read posted information about items on display (such as bronze statues and painted bowls). Users can also swivel to various angles to view from different aspects, likening this experience to physically being at a museum or exhibition.¹¹

Relevant outcomes:

- HT4-6 A student uses evidence from sources to support historical narratives and explanations.
- HT4-10 A student selects and uses appropriate oral, written, visual and digital forms to communicate about the past.¹²

China Online Museum

The China Online Museum website offers comprehensive galleries on a range of aspects of ancient Chinese life from ceramics to calligraphy. The site also provides excellent depth in terms of supporting textual information which explain the displays. While it does not possess the threedimensional qualities of the National Museums Liverpool Ancient Egypt Virtual Tour, the China Online Museum is worthwhile, as it offers a comprehensive range of display topics, showing detailed items in terms of calligraphy, painting, ceramics, bronzes and carving. The display menu is clear and navigable, and the student simply needs to click on, for example, 'Ceramics', and they will be given a range of detailed images of ceramics, which are categorised into the Chinese dynasties. Ease of use and clarity of the information make this site ideal for secondary History students; however, this site could benefit from a greater presence of the threedimensional aspect, as seen in the Egyptian exhibition, to give a greater impression of being in a physical location.¹³

Relevant outcomes:

- HT4-6 A student uses evidence from sources to support historical narratives and explanations.
- HT4-10 A student selects and uses appropriate oral, written, visual and digital forms to communicate about the past.¹⁴

Conclusion

Excursions, whether physical or virtual, play a role in enlivening course material taught in History. As another consideration, it has become increasingly important for teachers to be mindful of the broad cross-section of students exhibiting a variety of strengths and approaches to learning. In consideration of the use of virtual excursions in the History classroom, prescribed learning adjustments – set out for teachers prior to the commencement of the unit – may include measures such as:

- Visual tools such as charts (these are often used, if not in virtual excursions, then throughout a range of websites, complementing the use of virtual excursions).
- The use of various supportive technologies, such as alternative keyboards, literacy support software and graphic organisers.
- Captioning of audiovisual material, such as that available in the YouTube clips, which supplement the information available in the National Nordic Museum Virtual Tour.
- Use of computer software, including the use of assistive technology, to select text or pictures from the screen.

Virtual excursions provide opportunity for teachers to ensure they are catering to the learning needs of a broad cross-section of students – for example, online applications lend themselves to audio supports and noise-cancelling headphones, which can suit the learning needs of some students. Those who tend toward visual learning will also find these virtual tours beneficial, as the bulk of the information is not textual, but in the form of displays.

Virtual excursions can be a favourable prospect for such situations like the COVID-19 pandemic, should they occur again; and, further still, they offer teachers new opportunities to develop the digital literacy of their students. Thus, while virtual excursions were used by some teachers prior to the pandemic, the lockdowns brought these opportunities to the forefront of many teachers' minds as a possibility to engage students in the History curriculum through digital means, especially for teachers who may not have explored this possibility previously. While presenting significant strains and challenges for teachers, students and families, COVID-19 provided an opportunity for growth. For teachers, it meant a re-think of content delivery - a reimagining of how learning outcomes could be meaningfully achieved by students and how they could engage in relevant and purposeful learning activities. For students, it meant that they could use engaging learning tools and develop skills in digital learning. Virtual excursions align with the Australian Curriculum priorities associated with digital literacy; and they are an ideal way of integrating digital learning into the course, through promoting the use of technology. As digital literacy has become a priority in teaching across the curriculum, it is paramount that more emphasis is placed on the use of virtual excursions in the History classroom. To highlight this importance, it would be beneficial for schools to compile a database of possible websites (such as that compiled by Fiona Starr and included on page 67 of this issue) that could be used across all History units of work to ensure there is a wide range of possibilities across different topics. In a world where digital technologies and applications are ubiquitous, particularly for secondary school students, it is important for students to have enriching, constructive and informative learning experiences involving the use of online applications. Integrating virtual excursions into a unit of work in History is a way for schools to revitalise student engagement and encourage positive use of technology.

- ¹ Australian Curriculum, Assessment and Reporting Authority (ACARA), General Capabilities: Digital Literacy (previously ICT). Australian Curriculum Review (2021), https://www. australiancurriculum.edu.au/media/7024/gc_digital_literacy_ ict_capability_consultation_curriculum.pdf (accessed 8 December 2023).
- ² ibid
- ³ H. Sharp, 'Teacher-centred practice', in *Teaching Secondary History* (Cambridge: Cambridge University Press, 2022), 155-177.
- ⁴ ibid.
- ⁵ ibid.
- 6 ibid, 174.
- ⁷ B. Kieslinger, T. Holocher, C. M. Fabian, D. Gallego, S. Aguirre, E. Barras and G.Mihai, 'Virtual Excursions: A New Way to Explore Science in Class', Paper presented at *International Conference New Perspectives in Science Education 2nd Edition* (2013): 1.
- Australian Curriculum.
- ⁹ Joy of Museums Virtual Tour, 'National Nordic Museum Virtual Tour' (2023), https://joyofmuseums.com/museums/unitedstates-of-america/seattle-museums/national-nordic-museum/ (accessed 8 December 2023).
- ¹⁰ Board of Studies NSW, *History K-10 Syllabus* (Sydney, 2012).
- ¹¹ National Museums Liverpool, 'Ancient Egypt virtual tour', https://www.liverpoolmuseums.org.uk/virtual-tours/ancientegypt-virtual-tour (accessed 8 December 2023).
- ¹² Board of Studies NSW.
- ¹³ China Online Museum, 'China Online Museum' (2009-2013), https://www.comuseum.com (accessed 8 December 2023).
- ¹⁴ Board of Studies NSW.