Chapter 5
E-Portfolios and History Teaching: Supporting the Development of Information Literacy and Research Skills

Catherine Ladds

Abstract This chapter explores the utility and limitations of student academic e-portfolios in learning and assessment in the humanities. Whereas a substantial literature exists on the benefits of e-portfolios in education, language learning, and writing courses, the potential usefulness of e-portfolios in humanities education is lightly trodden ground. Using two case studies of the implementation of student academic e-portfolios in Hong Kong-based university history courses, this chapter considers how the e-portfolio format can support the development of both discipline-specific research ability and cross-curricular skills, such as information literacy. Furthermore, because of their online nature, e-portfolio assignments are well positioned to exploit recent developments in the digital humanities. Nevertheless, student feedback on the experience of creating an e-portfolio suggests that, while non-history major students were receptive to the low stakes and graduated nature of the assignment, a significant shift in disciplinary cultures of learning and assessment is required in order to implement e-portfolios successfully in advanced-level history courses.

Keywords Humanities education · Research portfolio · Information literacy

Introduction

Over the past ten years, e-portfolios have gained increasing acceptance as a means of showcasing learning in vocational subjects and traditional portfolio fields such as the creative arts. E-portfolio platforms enable the user to demonstrate the achievement of specific competencies by both uploading evidence in the form of 'artefacts' and reflecting upon their learning, thereby making it a useful tool for

C. Ladds (✉)
Department of History, Hong Kong Baptist University,
Hong Kong, Hong Kong
e-mail: cladds@hkbu.edu.hk

assessing competencies in teacher and healthcare education (Boulton 2014; Peacock et al. 2012; Zinger and Sinclair 2014). Beyond vocational subjects, language and writing portfolio assignments can showcase increasing proficiency over time, while also presenting learners with an opportunity to reflect upon this journey (Desmet et al. 2008; Acker and Hasalek 2008). Furthermore, the combination of concrete evidence of achievement and reflection in e-portfolios make them beneficial to graduate jobseekers (Moretti and Giovannini 2011), meaning that constructing an e-portfolio that integrates evidence and experiences from across the entire period of degree study is now a graduation requirement at certain universities. Yet, the potential applications of student e-portfolios in humanities classes have so far been neglected, perhaps because of the perceived gulf between the training of IT specialists and scholars in the arts and humanities (Bartscherer and Coover 2011). Furthermore, the traditional focus on long research papers as the primary method of assessment of student learning in humanities teaching cultivates a perception that portfolio-based assessment is incompatible with the aims and methods of humanistic inquiry. However, the structure of e-portfolios, which enable the user to compile source materials, ideas, and commentary gradually over time, makes them an appropriate platform for conducting and demonstrating in-depth preparatory work for research projects (Källkvist et al. 2009; McGuinness and Brien 2006). Similarly, the reflective component of the e-portfolio compels users to consider the merits and demerits of different learning approaches, thus potentially leading them in creative research directions.

Beyond augmenting conventional history papers, e-portfolio users are poised to take advantage of the learning opportunities proffered by recent developments in the digital humanities, a subfield which marries humanistic inquiry with computing methods. In the discipline of history, digital humanities projects have created vast digital repositories of textual, visual, and audio primary sources, including more than 50 collections published by Adam Matthew Digital, while also pioneering new methods of historical analysis. For example, text mining tools use algorithms to extract data, such as language patterns, from historical sources. These text mining techniques can be combined with GIS mapping to create spatial histories (Schwartz 2015). Visualizing past environments using computational techniques, such as the 3D scanning of historical artefacts, can aid museum conservation and enable a more precise analysis of material cultures (Warwick et al. 2012). As an online platform equipped with tools to create hypermedia, e-portfolios encourage and enable learners to engage with digital humanities projects and incorporate these initiatives into their own work. Furthermore, e-portfolios provide learners with an opportunity to develop their own digital humanities projects by incorporating a range of simple digital tools into the portfolio in order to, for example, record oral histories or analyze visual maps of the content of historical documents. As Lauren (2011, 38) observes, although the digital humanities are usually associated with large-scale projects such as the Google Ngram Viewer, 'the ideas and methods associated with digital humanities research can now be implemented by sole practitioners, and in individual classrooms, by utilizing an array of off-the-shelf tools' in a way that can 'reintegrate ways of teaching and knowing in the digital age.'

Using two case studies of the implementation of e-portfolio-based assessment in university history classes, this chapter demonstrates how student e-portfolios can both enhance the development of conventional research papers in advanced courses and provide a low-stakes method of assessing the attainment of basic historical skills in learners who have little-to-no background in the discipline. In both cases it emerged that e-portfolio assignments support the acquisition of both cross-curricular skills, such as information literacy, and discipline-specific methodologies. Furthermore, the online nature of e-portfolio platforms means that they are well situated to take advantage of the explosion of digital humanities resources, which can be easily incorporated into the portfolio content. Nevertheless, student feedback on the experience of creating an e-portfolio suggests that, while non-history major students were receptive to the low stakes and graduated nature of the assignment, a significant departmental—or even disciplinary—shift in cultures of learning and assessment is required in order to implement e-portfolios successfully in advanced-level history courses.

Fostering Information Literacy and Learner Autonomy Through E-Portfolios

Above and beyond their potential use as a tool for assessing student understanding of course content, e-portfolios are most useful as a means of fostering non-discipline-specific skills and learning habits. Besides demonstrating the attainment of learning objectives, most e-portfolios have a reflective component, which usually entails reflection upon the examples of work showcased in the portfolio ('artefacts') or deliberation on the learning process. The value of reflective journals in promoting deep thinking about the learning process is well documented (McGuinness and Brien 2006). As Moon (1999) summarizes, reflective journal-writing requires higher level engagement with the material rather than the simple restatement of fact, leads students to a greater understanding the advantages and disadvantages of their individual learning approaches, and enables students to explore and form new ideas through the process of informal writing. In an e-portfolio, which is usually designed as an ongoing project constructed over a period of time ranging from several weeks to several years, the author's reflections should ideally form a narrative identifying changes, continuities, and setbacks in learning over time. As Abrami and Barrett (2005) have observed, ongoing reflection in portfolios enables students to 'evaluate their own growth over time as well as discover any gaps in their development.' This process of reflection and self-monitoring prompts learners to take responsibility for her or his own learning, (Kennedy et al. 2011) thereby fostering the autonomous learning strategies that are essential to practicing the discipline of history, the cornerstone of which is the writing of independent research papers.

E-portfolios can be a powerful tool for developing and showcasing digital literacies, particularly information literacy, the significance of which has increased in the face of the information overload that has accompanied the digital age. In the discipline of history, the conventional practice of which involves collecting, analyzing, and synthesizing large amounts of textual material, information literacy is especially important. When used as a method of formative assessment over a period of time, e-portfolios encourage learners to explore multiple methods of searching for information, evaluate these methods, reflect on the credibility and biases of different materials, and discuss appropriate usage of different types of source materials (Fourie and Niekerk 1999). By emphasizing the *process* of developing a research project in addition to the final product, e-portfolios can introduce discipline-specific methods of academic research in a structured way, thereby preparing learners for higher level work.

Designing E-Portfolio Assignments for History Learners

E-portfolios can be used for both formative and summative assessment, although, as Abrami and Barrett (2005) suggest, using them for high-stakes assessment is problematic. The author designed two e-portfolio assignments for two different undergraduate history classes at Hong Kong Baptist University, the first being an advanced-level course called International Relations since 1945 and the second a general education class called Modern China and World History. Rather than seeing an opposition between the reflective and assessment components of an e-portfolio (Kennedy 2011), the assignments emphasized both the process of creating the portfolio (formative assessment) and the end product (summative assessment). Each portfolio was designed to support the acquisition or enhancement of historical research skills through a process of analysis and reflection while also developing students' information literacy. Blackboard's My Portfolios was selected as the platform because of its technical simplicity and its integration into a Learning Management System that was already familiar to students at HKBU. In order to provide formative feedback, the instructor commented on each e-portfolio halfway through the semester and conducted a final assessment at the end of the semester.

Using E-Portfolios to Support a History Research Project

'International Relations Since 1945,' introduces students to recent historical events and contemporary political theories pertaining to the conduct of international politics. Twelve students completed the class, comprising eight history majors ranging from their second to fourth years of study and four non-history majors, majoring, respectively, in creative writing, government and international studies, sociology, and business studies. Nine students were pursuing degrees at Hong Kong Baptist

University, while three were overseas exchange students hailing from the Netherlands, Sweden, and the United States. Each student designed and completed a research project, consisting of an e-portfolio, presentation, and paper, which analyzed the historical roots of a contemporary international issue of his or her choosing. Each project required the synthesis of secondary historical accounts, primary sources, and international relations theory.

The aims of the e-portfolio component, which accounted for fifteen percent of the final course grade, were to support the research project by providing a repository for source materials and reflection. In particular, the assignment was designed to:

a. enhance information literacy skills by locating relevant source materials and critically evaluating their arguments and biases. Learners were also asked to reflect upon the differences between academic, mass media, textual, visual and discipline-specific materials and their appropriate uses. Periodic reflection upon the process of conducting research, such as the difficulties encountered and potential solutions to these difficulties, was also encouraged.
b. encourage a departure from the institutional and departmental culture of summative, semester-end assessment by introducing students to a graduated, reflective method of conducting a research project that mirrors the practice of professional historians and can thereby prepare learners for higher level history work.

The assignment was loosely structured, requiring each student to include some critical evaluation of both mass media and scholarly sources related to their research topic and reflection upon at least two academic 'artefacts', including a bibliography of sources and a video recording of his or her presentation. Students were also strongly encouraged to engage in general reflection on the research and writing process.

Using E-Portfolios to Support General Education History Learning

General education students without a background in history required a more structured e-portfolio assignment, which would build confidence through a series of low-stakes segments. Modern China and World History introduces students to a multifaceted history of China's interactions with the wider world in the modern period. In order to emphasize the diversity of these interactions, students were required to construct an e-portfolio consisting of six of more segments, each of which analyzed a different category of primary source: a photograph, a historical simulation game, a secondary narrative, an oral history, a cartoon, and an artwork or decorative object. 38 mainly first-year students, none of whom were history majors and all of whom were enrolled in full-length degree programs at Hong Kong Baptist

University, completed the e-portfolio. The major learning objectives of the assignment were to:

a. foster information literacy and autonomous learning in first year students by requiring them to locate, analyze and cite historical sources. A library workshop run by another member of the community of practice lent practical support to this objective.
b. engage with recent digital humanities initiatives by incorporating these materials into the e-portfolio. By creating a multimedia portfolio, students would also become digital humanities practitioners.
c. develop core skills of historical analysis by asking students to use appropriate methodologies in discussing each source and to evaluate the uses, limitations, and misuses of different types of sources.

The e-portfolio built upon a series of in-class activities, each of which was directly linked to a specific portfolio segment, which introduced different categories of sources and the skills needed to analyze them. Periodic instructor feedback during the semester enabled students to revise previous work and incorporate advice into future posts.

Instructor Evaluation of Student E-Portfolios

In terms of student achievement as evaluated by the instructor, the general education class e-portfolio was considerably more effective than the assignment designed for the advanced-level class, exhibiting both a higher degree of student success in achieving the learning objectives and a greater degree of enthusiasm for the project. Enhancing information literacy was an objective of both assignments. In International Relations Since 1945, the majority of students engaged in only cursory discussion of their sources, often describing rather than evaluating the materials. Similarly, while all students posted some form of reflection on the learning process, only a few engaged in deep reflection, which can be explained by history students' lack of experience at reflective writing coupled with a perceived lack of academic value in reflection within the discipline. Nonetheless, the assignment did prompt students to collect and engage with a range of sources, thereby confirming Snavely and Wright's (2003, 301) point that one of the most important results of using a portfolio to support a research project is 'the structure which it provides for students in developing a template for the present and future information gathering aspects of their research.' In the general education class, most students' information literacy skills improved markedly over the course of the project, partly because as first year students they began the project from a lower baseline of ability than the advanced-level class. For instance, while most students defaulted to using online search tools such as Google at the beginning of the semester, by the end of the project more than 50% had utilized the digital databases

introduced in the library workshop. The rigidly scaffolded nature of the assignment, which required students to locate specific categories of sources, combined with the opportunity to act upon mid-semester instructor feedback also accounts for this improvement.

In order to successfully implement e-portfolio assignments, especially in fields where assessment is usually paper-based, instructors and students alike must be convinced of the value added by the electronic nature of the portfolio. In the advanced-level class, the main advantages were that:

a. the online platform formed a digital repository of research materials that could be updated from any location and easily shared with the instructor.
b. the electronic format enabled the showcasing of mass media sources, such as video documentaries, radio broadcasts and photojournalism, in order to help students analyze the contemporary aspect of their research topics.

However, only around 60% of students utilized the multimedia capabilities of the e-portfolio, suggesting that more instructor support is needed to highlight the ways in which different types of media can enhance conventional text-based history writing. Perhaps because of their multidisciplinary backgrounds in largely non-text-based fields, students in the general education class were more receptive to the 'e' dimension of the portfolio. Despite experiencing an array of technical glitches, almost all students incorporated multimedia into their assignment, thereby successfully creating their own digital humanities projects.

Learner Responses to E-Portfolios

During the final week of the course, the instructor distributed a student feedback questionnaire designed by the community of practice in order to gauge student responses to using the e-portfolio. Students were asked to indicate whether they agreed or disagreed with ten statements about the appropriateness of e-portfolios as an assessment tool, the skills acquired by constructing an e-portfolio, its effectiveness at enhancing learning, and the overall value that it added to the course. Respondents selected one of five options on a sliding scale from 'strongly agree' to 'strongly disagree.' The seven statements deemed to correlate most closely with the objectives of the e-portfolio assignments have been selected for discussion here (see Tables 5.1 and 5.2). Additionally, students were given an opportunity to provide qualitative comments and were requested to furnish details of their previous experience of using e-portfolios, the frequency of their engagement with the portfolio during the course, and a self-assessment of their technological skills.

A striking disparity between the questionnaire results for the two courses is immediately apparent. While students in Modern China in World History reported a largely positive experience of creating an e-portfolio (with statement 1 about the overall value of constructing an e-portfolio receiving an average score of 4.2 out of 5),

Table 5.1 Student responses to the e-portfolio assignment in 'International Relations Since 1945'

Statement	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)
1. Overall, I found constructing the e-Portolio valuable to this course	11.1	22.2	22.2	44.4	0
2. Overall, I am satisfied with the way my learning is assessed using the e-portfolio in this course	11.1	22.2	33.3	22.2	11.1
3. I acquired useful skills in creating my e-portfolio	0	22.2	44.4	33.3	0
4. The process of creating my e-portfolio helped me to take responsibility for my own learning	33.3	33.3	22.2	11.1	0
5. Showcasing electronic media in my e-portfolio allowed me to demonstrate a more meaningful understanding of my course	11.1	11.1	44.4	33.3	0
6. Constructing the e-portfolio helped me to reflect upon my achievement	11.1	11.1	44.4	11.1	22.2
7. Using the e-portfolio enhanced my learning	22.2	22.2	0	33.3	22.2

Table 5.2 Student responses to the e-portfolio assignment in 'Modern China and World History'

Statement	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)
1. Overall, I found constructing the e-Portolio valuable to this course	34.3	54.3	8.6	2.8	0
2. Overall, I am satisfied with the way my learning is assessed using the e-portfolio in this course	25.7	60.1	11.4	2.8	0
3. I acquired useful skills in creating my e-portfolio	22.9	54.3	20	2.8	0
4. The process of creating my e-portfolio helped me to take responsibility for my own learning	34.3	48.6	14.3	2.8	0
5. Showcasing electronic media in my e-portfolio allowed me to demonstrate a more meaningful understanding of my course	20	68.6	11.4	0	0
6. Constructing the e-portfolio helped me to reflect upon my achievement	40.1	45.7	11.4	2.8	0
7. Using the e-portfolio enhanced my learning	31.4	51.4	14.4	2.8	0

the responses of students enrolled in International Relations Since 1945 were variegated, but overall skewed towards the negative (an average score of 3.0 in response to the same statement). One explanation for this divergence is the differences in the assignment structures and objectives, suggesting that students creating an e-portfolio for the first time are more receptive to highly structured assignments with narrow parameters clearly defined by the instructor. Furthermore, the demographics of each group possibly influenced the responses, with the advanced-level class of mostly history majors proving less receptive to the assignment than mainly first-year, non-history major students in Modern China in World History.

International Relations Since 1945

The responses of the nine students who completed the questionnaire were variegated, mirroring the instructor's assessment of student achievement of the assignment's learning outcomes. As indicated in Table 5.1, only one third of students agreed or strongly agreed that constructing the e-portfolio was both valuable to the course as a whole and was a satisfactory way of assessing learning. One student elaborated on this negative response:

> Frankly speaking, I think the use of e-Portfolio is a good way if no research paper is added on it. This is because the addition of e-portfolio is a distraction for me to focus on research paper. The use of e-portfolio might be good if it used as the only major way to count my grade.

From the perspective of this respondent, rather than enhancing the development of the research paper by encouraging early reflection on source materials, the e-portfolio created an onerous burden of additional work.

When asked about their learning experiences, a majority of respondents (seven out of nine) indicated that the electronic aspects of the portfolio (for example, the ability to integrate multimedia elements) did not enhance student ability to demonstrate understanding, thus raising doubts about the value of the 'e' in e-portfolios for this type of assignment. Despite the fact that only two respondents had used an e-portfolio previously, most students indicated that they did not acquire useful skills by completing the assignment, a negative response that in part stemmed from technical frustrations with the Blackboard My Portfolios platform. As another student commented, 'it is too difficult for the beginners and I find that I use too much time for settling technical problems.'

Nonetheless, while most students disagreed that the assignment enhanced overall effectiveness in learning, two-thirds conceded that it helped them to take responsibility for their own learning, thus demonstrating the attainment of the assignment's objective of encouraging independent learning. The three international exchange students in the class demonstrated significantly more favorable attitudes toward the assignment than those enrolled in three- and four-year degree programs

at Hong Kong Baptist University, expressing appreciation for the gradual approach to completing the research paper and the reflection the e-portfolio encouraged. One student observed that:

> I especially liked working with an e-portfolio because it more or less forced me to work on the research project throughout the semester, instead of leaving it to the last weeks/days. It is useful because it made me reflect and analyse sources in an early stage of the project which now gives me confidence in actually writing the paper.

Similarly, another respondent commented that the assignment 'forced me to reflect upon the various sources,' while also appreciating the process of constructing the portfolio: 'you get a feeling of creating something!' The divergent responses of these two demographic groups suggest that the reception of Hong Kong-based students to the e-portfolio is filtered through deeply rooted conventions in assessing the learning of history majors in Hong Kong. As David Carless has demonstrated, the dual-pronged heritage of exam-oriented British colonial educational traditions and the Chinese civil service examinations have fostered an entrenched suspicion of formative learning and assessment in the Hong Kong higher education context (Carless 2011).

Modern China and World History

The relative enthusiasm of students in this course toward the e-portfolio assignment was paralleled by the high number of written comments in response to the feedback questionnaire: 17 out of 35 respondents provided qualitative comments. As indicated in Table 5.2, the vast majority of students expressed a favorable attitude toward both the e-portfolio's value to his or her own learning and to the course overall, with over 83% of respondents agreeing or strongly agreeing with all statements except number three. Several students commented positively on the close integration of the e-portfolio assignment with in-class content, observing that the multi-pronged assignment helped learners to view historical events 'in wider perspective' and to 'understand history from different angles.' A recurring comment was that the assignment reinforced other teaching and learning activities by requiring students to put into practice and 'review the knowledge and concepts' learned in class. In contrast to the lukewarm response of the advanced-level history class to the e-portfolio, students with little-to-no background in history appreciated how the portfolio structure enabled them to test out new discipline-specific skills learned in class and to construct a multifaceted analysis of a historical topic in a way that a research paper with a singular focus might not. Furthermore, a few comments noted the cross-curricular skills developed during the project, particularly the technical skills needed to use the e-portfolio platform and the ability to locate sources and reference them accurately. Although the vast majority of respondents in both classes perceived themselves as intermediate users of technology in general, the mainly first year students in the general education class

appreciated the opportunity to develop unfamiliar digital literacies and technical skills specific to the higher education environment, such as the ability to negotiate library search engines and troubleshoot online learning management systems.

In a general education class consisting of students from various disciplinary backgrounds, multiple respondents appreciated the segmented structure of the e-portfolio and the formative nature of the assessment, which enabled less confident learners to hone their skills over time in response to instructor feedback. 'It is a gradual assessment and we can learn from our mistakes,' summarized one student. Learners who lacked a prior disciplinary knowledge appreciated the opportunity to 'test' their newly acquired skills through several low-stakes components instead of one high-stakes research paper.

While several students expressed similar technical frustrations with the My Portfolios platform as those noted by respondents in the advanced-level class, overall they exhibited a more positive attitude toward the 'e' aspects of the e-portfolio. 88.6% of those surveyed agreed or strongly agreed that showcasing electronic media allowed them to demonstrate a more meaningful understanding of the course, compared with only 22.2% of respondents in International Relations Since 1945. The library workshop, which introduced students to digital resources that could be incorporated into the portfolio, partly explains this positive perspective. Furthermore, we can speculate that students who are not acculturated into the text-focused conventions of the discipline are more ready to accept the use of digital media.

Conclusions and Future Directions

Contrary to received wisdom, which assumes that creative and relatively unstructured e-portfolio assignments are most effective at promoting learning, this case study found that a highly structured e-portfolio that was closely integrated with in-class activities was most successful in supporting history learners at Hong Kong Baptist University. A combination of regional, institutional, and entrenched disciplinary cultures can explain the resistance of advanced-level history majors to the e-portfolio. Many third year and fourth year history students are acculturated into the conventions of high-stakes, summative assessment common to university history teaching in Hong Kong, and therefore view the e-portfolio as a distracting sideshow from the main event of the semester-end research paper. By contrast, general education history learners, who were not acculturated into these disciplinary norms, valued the way in which the e-portfolio provided a highly structured, low stakes means of developing discipline-specific and cross-curricular skills. The segmented, reflective, and revisable nature of e-portfolio assignments builds confidence as well as competencies in novice learners.

In order to foster greater acceptance of the e-portfolio's uses in supporting research papers, a dramatic cultural shift, brought about through the department-instructor-library-institution nexus, is needed. Promoting the benefits of

the digital format of the e-portfolio, such as the ability to compile and reflect upon source material and integrate digital humanities initiatives into history work, is one potential path. Indeed, requiring students to create an online portfolio incorporating digital historical materials could foster a greater understanding of how technologies are transforming scholarly enquiry in the humanities (Bartscherer and Coover 2011). Integrating the e-portfolio into existing research projects which emphasize process as much as the final product, such as the final-year honors project, would legitimize this new form of assessment through departmental and institutional endorsement. Because the discipline of history is by its very definition focused on past events that are supposedly far removed from present-day experiences, personal reflection is not usually valued. However, an emphasis on the *process* of developing a project, as encouraged by e-portfolios, could lead practitioners to a clearer view of problems, solutions, and strategies in history research.

References

Abrami, P., & Barrett, H. (2005). Directions for research and development on electronic portfolios. *Canadian Journal of Learning and Technology, 31*(3), 001.

Acker, S. R., & Halasek, K. (2008). Preparing high-school students for college-level writing: Using E-portfolio to support a successful transition. *JGE: The Journal of General Education, 57*(1), 1–14.

Bartscherer, T., & Coover, R. (2011). *Switching Codes: Thinking through digital technology in the humanities and the arts*. Chicago: University of Chicago Press.

Boulton, H. (2014). E-portfolios beyond pre-service teach education: A new dawn? *European Journal of Teacher Education, 37*(3), 374–389.

Carless, D. (2011). *From testing to productive student learning: Implementing formative assessment in Confucian-heritage settings*. New York: Routledge.

Desmet, C., Miller, D. C., Griffin, J., Balthazor, R., & Cummings, R. E. (2008). Reflection, revision, and assessment in first-year composition E-portfolios. *JGE. The Journal of General Education, 57*(1), 15–30.

Fourie, I., & van Niekerk, D. (1999). Using portfolio assessment in a module in research information skills. *Education for Information, 17,* 333–352.

Källkvist, M., Gomez, S., Andersson, H., & Lush, D. (2009). Personalised virtual learning spaces to support undergraduate students in producing research reports: Two case studies. *Internet and Higher Education, 12,* 35–44.

Kennedy, F., Bruen, J., & Péchenart, J. (2011). Using an e-portfolio to facilitate the self-assessment of both language and intercultural learning in higher education: A case-study approach. *CercleS, 1*(1), 229–247.

Klein, L. (2011). Hacking the field: Teaching digital humanities with off-the-shelf tools. *Transformations: The Journal of Inclusive Scholarship and Pedagogy*, 22(1), 37-52.

McGuinness, C., & Brien, M. (2006). Using reflective journals to assess the research process. *Reference Services Review, 35*(1), 21–40.

Moon, J. (1999). *Learning journals: A handbook for academics, students and professional development*. London: RoutledgeFalmer.

Moretti, M., & Giovannini, M. (2011). E-portfolios as a jobseeking tool for universities. *Journal for Perspectives of Economic, Political and Social Integration, 17*(1–2), 87–104.

Peacock, S., Scott, A., Murray, S., & Morss, L. (2012). Using feedback and E-portfolios to support professional competence in healthcare learners. *Research in Higher Education Journal, 16,* 1–23.

Schwartz, R. M. (2015). Digital partnership: Combining text mining and GIS in a spatial history of sea fishing in the United Kingdom, 1860 to 1900. *International Journal of Humanities and Arts Computing, 9*(1), 36–56.

Snavely, L. L., & Wright, C. A. (2003). Research portfolio use in undergraduate honors education: Assessment tool and model for future work. *The Journal of Academic Librarianship, 29*(5), 298–303.

Warwick, C., Terras, M., & Nyhan, J. (Eds.). (2012). *Digital humanities in practice*. London: Facet Publishing.

Zinger, L., & Sinclair, A. (2014). Starting an E-portfolio: A multi-disciplinary approach. *Contemporary Issues in Education Research, 7*(4), 249–252.