Digital Humanities Curation to the Cultural Heritage: Building Competencies from AI and digital Literacy

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Introduction:

Digital Humanities (DH) is a rapidly growing interdisciplinary field that merges traditional humanities research methods with technology and digital tools. In this regard, it is important to clarify how AI literacy is being integrated into the field of Digital Humanities and how it affects the curation and preservation of cultural heritage. This study is motivated by the need to understand how AI and digital literacy impact the approaches of students and researchers towards the curation and preservation of cultural heritage, as well as how these digital competencies can be effectively taught. By examining DH curricula, this research aims to investigate how Digital Humanities students use digital methods, tools, and technologies to curate, analyze, and preserve cultural heritage. This research will focus on the role of digital archives in shaping memory and history and how Artificial Intelligence (AI) literacy affects the curation, preservation, and interpretation of cultural heritage. According to Long and Magerko (2020), Al literacy is the ability to critically evaluate Al technologies, communicate and collaborate effectively with AI, and use AI as a tool in various settings. The research considered integrating various sources, such as images, maps, sounds, texts, and datasets, in processing cultural heritage and studying AI tools in digital humanities. Some authors, like Sabharwal (2017), argue that digital humanities require a framework for curation to ensure the preservation and accessibility of digital resources for future use. Cordell (2018) suggests that in order to successfully implement DH skills and courses in academic institutions, it is important to think locally and tailor them to the specific school, curriculum, and institutional partners. Scaffolding everything from the introduction of new skills to the progression of skills through a curriculum is necessary for students to engage in DH, as technological imagination is not innate. Furthermore, the research investigated the impact of digital literacy on the approach of students and researchers toward cultural heritage curation and how these digital skills could be effectively taught.

Methods:

This research applied a descriptive qualitative approach and employed a mixed-methods approach, combining documentary research and a literature review. The documentary research aimed to gather information on current teaching practices and methods in Digital Humanities by analyses of the curriculum. The literature review provided an overview of the current state of research on the topic and identified any gaps or areas needing further study. An analysis of the curriculum of 43 master's programs in Digital Humanities was conducted in the following

countries: Austria, Belgium, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Portugal, Russia, Scotland, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom. The programs were selected based on their geographical distribution and online information. The data collected were systematized in spreadsheets containing information about the master's name, university, country, link to the master's website, and curriculum. The analysis of the documents was performed manually based on the most recent program presented on the institution's website. The analysis focused on evaluating the extent to which the programs included studies in AI tools for digital curation and their impact on the field of Digital Humanities.

Results and discussion:

The documentary research and literature review results showed limited research on the most effective teaching methods for Digital Humanities. Of the 43 programs analyzed, only 28% had some information about the use of AI. The purpose of this analysis was to better understand how Al literacy is being integrated into the field of Digital Humanities and how it affects the curation and preservation of cultural heritage. The increasing use of AI in the field highlights the importance of equipping students with a strong understanding of its ethical, legal, and technical aspects and impact on the field. The results show that while only a few courses explicitly include Al in their curriculum, there are courses with interdisciplinary themes related to AI, such as ethics, linguistics, society, games, cyberspace, sustainability, culture, philosophy, technology, machine learning, and others. The mapping of digital methods and tools used in the outputs of Digital Humanities research can provide valuable insight into the current and future trajectory of the field. This information can aid in developing Digital Asset Management in cultural heritage institutions and Digital Humanities education. The analysis of the course curricula did not provide a clear insight into the study of AI. However, upon reviewing the projects showcased on the websites, it was evident that AI studies are starting to be integrated into the programs, particularly with respect to text and image generators. This suggests that AI is gradually being incorporated into the course offerings, though a more comprehensive understanding of the extent of its integration would require further investigation. The findings of this research suggest that there is a need for educators and researchers to explore and develop new teaching methods that can effectively convey the principles and practices of Digital Humanities to students. The importance of AI literacy in Digital Humanities cannot be overstated and must be a focus in the development of new teaching methods, considering new AI tools and AI literacy (Long & Magerko, 2020; Gefen et al., 2021; Ye, 2022). The results also emphasize the need to anticipate and plan for future advancements in the field of Digital Humanities by understanding the ways in which digital tools and methods are currently being employed.

Conclusion:

In conclusion, this research highlights the significance of Digital Humanities in the academic world and the need for effective teaching methods to convey its principles and practices to students. The results emphasize the importance of AI literacy in Digital Humanities and the impact of digital literacy on the approach of students and researchers toward AI. Further research is necessary to fully understand the potential of Digital Humanities in shaping the future of the field and to develop new teaching methods that can effectively convey its principles to students. The learning

objectives and detailed content topics of each curriculum were documented, and the data will be used as one piece of a cross-thematic analysis for future assessments that will lead to the development of broad curriculum goals for the master's programs in DH.

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