Editorial. Educational technology and Tangible-Intangible Cultural Heritage

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This issue of IJET includes a special dossier on Educational technology and Tangible-Intangible Cultural Heritage. The decision to explore this topic was driven by the growing interest it is currently attracting both in Italy and abroad. This can be seen in numerous political initiatives and research projects in support of cultural heritage, especially in the area of education.

It is no coincidence the European Community has declared 2018 "The European Year of Cultural Heritage"[1]. This move is designed to «*encourage the sharing and appreciation of Europe's cultural heritage as a shared resource, to raise awareness of common history and values, and to reinforce a sense of belonging to a common European space*»[2].

It's worth pointing out here that the term cultural heritage covers all the cultural expressions of different peoples in different periods, including things like architecture and physical objects of various kinds, but also languages, folklore, traditions, artistic output, etc. These tangible and intangible expressions embody both our past and our future; they influence us as individuals and constitute a priceless treasure trove to preserve.

It comes as little surprise that, ever since the establishment of the 1972 World Heritage Convention, education has been recognised as a key factor for safeguarding and promoting cultural heritage. In recent decades, policies for the preservation and transmission of cultural heritage have been issued both in Italy and abroad, leading to the establishment of guidelines and funding programmes. To take just one example, each year Italy now issues an annual National Plan for Cultural Heritage Education. At European level, cultural exchange programmes like Erasmus+ have been in place for some time; in 2018 these efforts have been extended with a series of initiatives designed to raise awareness about cultural heritage among people of all ages and also to support the development and exchange of skills and know-how in this field.

Against this background, there has been growing interest in employing digital technologies to preserve cultural heritage. European Commission Recommendations 2011/711/EU highlight the need to digitalise cultural heritage so it can be enjoyed by a broader swathe of the community for both entertainment and educational purposes. This was the thinking behind *Europeana*[3], an EU-financed online portal that makes available a vast collection of digital resources in cultural heritage. In addition, the Horizon 2020 programme

[1] https://europa.eu/cultural-heritage/about_en

[2] Council and EP Decision no. 864/2017 Art 1.2

[3] https://www.europeana.eu/portal/en

offered specific research funding opportunities in this area (EU, 2017).

Digital technologies are already being employed within (formal and informal) cultural heritage education. In recent years, research investigating new technology-driven opportunities has been intensifying. These efforts are reaching beyond simple digitalisation of digital heritage and looking into areas like virtual interaction and the scope for immersive experience of societies and cultures that are distant in both space and time. Prime examples include virtual and augmented reality applications, as well as videogames. At a major symposium called *VideoGameLab*[4] recently held at Rome's *Cinecittà* film studios, a special session was dedicated to the subject "Videogames, Research and Cultural Heritage"[5]. The idea was to discuss the overlap between digital technologies, cultural heritage and scientific research.

Cultural heritage presents a number of new technological and methodological challenges that are of considerable interest in the educational technology field. The three contributions selected for this dossier not only examine the technological dimension of innovation, but also the methodological and pedagogical implications of designing and running technology-enhanced learning activities. Mortara and Catalano explore the educational potential of 3D virtual environments, specifically virtual and augmented reality applications, as well as serious games. They investigate these in terms of their affordances for supporting immersion, presence and motivation. By contrast, Dagnino and colleagues focus on intangible cultural heritage, examining tools and methods that may prove effective for teaching and learning in this field. In the last of the three papers, Dias and colleagues also look at the role digital technologies can play in intangible cultural heritage education, but in the particular area of dance. Here they propose the adoption of fuzzy logic techniques to support the design of online learning scenarios.

Looking beyond the dossier itself, this issue of IJET also contains a paper by De Rosa in which the author proposes a research agenda for investigating the social impact of MOOCs. In particular, she investigates the changes MOOCs are bringing to education policy, academic culture, and the evaluation of learning.

REFERENCES

European Commission (2017). Mapping of Cultural Heritage actions in European Union policies, programmes and activities.
Retrieved from http://ec.europa.eu/assets/eac/culture/library/reports/2014-heritage-mapping_en.pdf

[4] http://www.romevideogamelab.it/ (in Italian)

[5] https://www.cnr.it/it/evento/15631/videogame-ricerca-patrimonio-culturale (in Italian)