Digital applications in archaeological education and excavation training: the case of project DELTA

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Abstract
Despite the fact that over the last two decades there has been a considerable increase in the adoption of digital applications in archaeological excavations, the application of digital educational tools in the excavation training of Archaeology students has not made commensurate progress. As a consequence, it is still difficult to integrate in Archaeology curricula the physical space of an archaeological excavation with that of the university classroom. The impact of the limited use of digital educational tools became even more apparent during the recent COVID-19 pandemic, which created serious problems in conducting face-to-face excavation training in both the classroom and the excavation site. Within this context, the integration of these two physical spaces through the digital "space" of online training is the main objective of project DELTA (Digital Excavation through Learning and Training in Archaeology), a transnational project funded in the context of Erasmus+/KA2 EU programme that is coordinated by the DAISSy research group of Hellenic Open University, Greece. The partnership also includes the Department of Archaeology of the National and Kapodistrian University of Athens (Greece), the Masaryk University (Brno, Czech Republic) and the post-graduate School of Archaeology of the University of Basilicata (Matera, Italy). Through the DELTA project, students of Archaeology will be able to improve their subject knowledge and develop digital and 21st century skills.

This paper presents the results of the first phase of the DELTA project, during which we conducted extensive desk and field research aiming at recording the existing situation in the three countries regarding: (1) the use of digital applications in archaeological excavations, (2) current courses on excavation practices, methods and techniques and (3) the use of digital educational tools in such courses. By analyzing the results from Internet search and a survey using online questionnaires, we present (a) the most recent trends in the university curricula of Archaeology, (b) the current level of digital skills and expertise of students and professionals and (c) the needs and expectations of students and professors regarding the use of digital

applications in excavation and Archaeology education. The results of this research were particularly revealing, especially when comparing the situation between the three countries, but also when contrasting the existing digital skills and the aspirations of the various categories of responders (e.g. educational level, current position etc.).

This research provided us with the necessary evidence for the design and development of a blended training course that will combine the use of an online platform with face to face and on-site learning in a joint excavation in Marathon, Greece; the ADDIE model will be adapted in course design. In addition, it allows us to discuss the level of integration of digital applications in Archaeology education and make suggestions for future actions, particularly within the context of the recent pandemic and the problems it created in students' excavation training.