

Knowledge and decay assessment to manage a restoration plan and to define a valorisation program for a sustainable CH conservation: the experience of the ADELE-RS project

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Abstract – The Adele-RS Project, funded by the Erasmus+ Programme (measure VETKA2020), develops a homogeneous solution, called the Adele-RS System, which integrates the most advanced technologies for e-Learning with the most transversal ones aimed at e-Work.

To this transversal objective, the Project adds a more specific goal that applies the Adele-RS System to the specialization of a particular and interesting target of users: the graduates in the Restoration, Conservation and Valorisation of Cultural Heritage in order to fill the gap in knowledge and sectoral skills when students leaving university in relation to the needs of the field, so as to consolidate their employability, also in the transnational and international dimension.

Erasmus+ supports the priorities and activities set out in the European Education Area, the Digital Education Action Plan, and the Adele-RS Project is aimed to apply these objectives in Restoration Project Management and in Valorisation on Cultural Heritage field.

I. INTRODUCTION

ADELE-RS is a project funded by the Erasmus+ Programme under the measure VETKA2020 implemented by eight organisations from four European countries (Italy, Malta, Portugal and Romania) [1] [2].

The project, which starts at the begin of 2022, has been promoted by the Association "Arte e Fede" of Gerace (RC) and the general aim is developing an innovative eLearning and Smart-Working system that allows the realisation of advanced training and distance learning interventions for the specialisation of graduates in the fields of restoration and conservation of Cultural Heritage.

The specialist courses have been aimed at guaranteeing the consolidation of their professional skills and

knowledge; the acquisition of advanced restoration, analyses and cataloguing techniques for specific types of Cultural Heritage; participation in a large community of practice at European level; professionalising language learning in the field of advanced Cultural Heritage restoration; an easier approach to the world of work. Moreover, the project aims at development of the digital transition in Europe of the sector of Heritage Science, Restoration, Conservation and Valorisation of Historical, Artistic and Cultural Heritage through a holistic approach that addresses in an integrated way both the issue of specialisation of sectorial competences and that of transversal skills. This approach provides those working in the sector with both advanced specialised competences able to identify digital solutions in working practice, and transversal competences in learning and working based on an advanced use of ICT.



Adele-RS

Advanced e-Learning for Cultural Heritage
Restorers Specialisation



Fig. 1. ADELE-RS project partnership.

The target group of the project is graduates in disciplines such as: Archival Art History, Archaeology, Heritage Science, Architecture, Conservation, Advanced Communication, Project Management.

The partners involved in European working group are (Fig. 1):

- University of Calabria, Arcavacata di Rende (CS), Italy;
- Distretto ad Alta Tecnologia per i Beni Culturali S.C. a R.L., (DATABENC) Naples, Italy;
- University of Malta, Msida, Malta;
- Fondazzjoni Belt Victoria - Heart of Gozo Museum and Cultural Centre, Gozo, Malta;
- Universidade de Evora, Evora, Portugal;
- Direcao Geral do Patrimonio Cultural - Museu Nacional de Arte Antiga, Lisbon, Portugal;
- Universitatea Politehnica din Bucuresti, Bucharest, Romania.

II. AIMS OF THE ADELE-RS PROJECT

To develop an innovative e-Learning and Smart-Working system [3] and related contents that allows to carry out advanced training interventions and distance internships for the specialization of graduates in the fields of Restoration and Conservation of Cultural Heritage, the project activities aimed at ensuring:

- the consolidation of professional skills and knowledge;
- the acquisition of new conservation, restoration and enhancement techniques;
- continuing education based also on non-formal and informal learning;
- professionalizing language learning in the CH field;
- a smoother and more inclusive approach to the world of work.

Because of these general purposes, the objectives of the project are to:

- use innovative technological solutions for the virtualization of training processes, including internships carried out using remote work, also to limit or eliminate the physical mobility of learners, using “virtual mobility” and carry out formal, informal and non-formal learning processes;
- promote the professional growth of restorers, through their specialization on advanced restoration methodologies and techniques and professionalizing language skills of restorers;
- create a community of practice at European level of operators in the field of restoration of cultural heritage, to favour continuous learning;
- facilitate the training of those with fewer opportunities to access the labour market,

through truly inclusive education and training environments.

The advanced technological-organizational system, “Adele-RS System”, allow to conceive, design, develop and deliver remote interventions for the specialization in the field of Cultural Heritage Conservation and Valorisation, which includes the management of:

- ✓ E-Learning Environments;
- ✓ e-Stage Environments (telework internship);
- ✓ A Virtual Educational Site;
- ✓ An encyclopaedia (WikiAdele-RS) and a library (e-LibeRS) specialized in the field of cultural heritage professions;
- ✓ A wide Community of Practice;
- ✓ An extensive package of training modules in e-Learning and in e-Stage;
- ✓ Specialization Courses for graduates in the field of Cultural Heritage;
- ✓ A specialist electronic journal entitled “AdeleRS e-Zine. Innovations in Cultural Heritage” (Fig. 2).

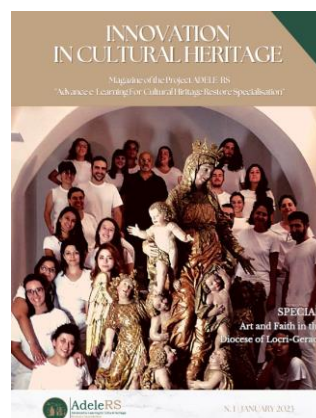


Fig. 2. First publication of “AdeleRS e-Zine. Innovations in Cultural Heritage”.

The access to these resources is allowed from two specific web environments: The Project Website and the Dashboard, Portal of the Services [1] (Fig. 3).

III. ACTIONS AND FORMATIVE PRODUCTS

The Adele-RS Project develops three macro-products:

1. An advanced technological-organizational system which allow to:
 - ✓ deliver and manage training activities;
 - ✓ conceive, design and implement distance learning interventions, for the specialization of Cultural Heritage operators, with particular attention to restorers, including telework internship activities;
 - ✓ manage all the components of the system itself.
2. A package of e-Learning training modules on various topics of specialization of the professional figure elaborated in part also using the CLIL methodology.

3. A package of e-Stage modules, to be combined with training modules, aimed at ensuring maximum virtualization of production processes in the field of preservation, conservation and valorisation of Cultural Heritage.

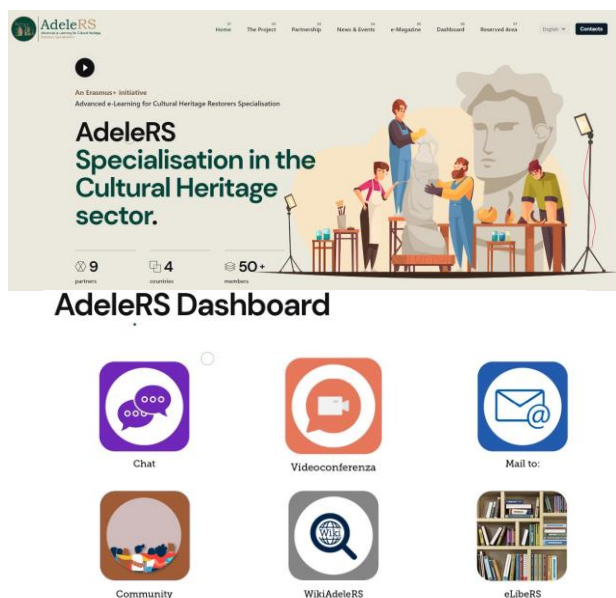


Fig. 3. The website and dashboard of ADELE-RS.

The Adele-RS System has been divided into four fundamental infrastructural components:

- an Advanced Communication Subsystem
- a Knowledge Management and Collective Intelligence (KMCI) subsystem
- an e-Learning subsystem
- a subsystem for the e-Internship.

The specialization to which the ADELE-RS Project refers concerns the complex of knowledge, skills and abilities that can enable this type of target groups, once they leave the educational path, in the specific case relative to Heritage conservation (Fig. 4), to equip themselves with skills that allow them to deal with the issues of complexity and digital transition by acquiring appropriate methods, strategies, techniques.

Therefore, to these target groups the project wants to provide a set of knowledge, skills, "additional" skills related to two major areas: "specialized design" and "digital transition".

The general purpose of the ADELE-RS Project includes the design, development and implementation of specialization training courses aimed at graduates in disciplines in the Cultural Heritage field. Indeed, the Partnership is developing two areas with two peculiar profiles of specialization (detailed as in the following):

- Expert in Project Management on Cultural Heritage;
- Expert in Advanced Valorisation of Cultural Heritage.

A. Professional profile 1

The Expert in Project Management on Cultural Heritage draws up, presents and manages projects in the field of conservation and valorisation of Cultural Heritage, identifying and responding to competitive calls on different scales and proposing fundraising activities. Starting from the requests for new products or technological innovations in the Cultural Heritage conservation field, the Expert identifies the resources and takes care of carrying out all the activities related to the development and implementation of a project, following it starting from the definition of the idea, approval of the financing, to the definition of the work plan, through the planning of the activities, the risk assessment, the drafting of a financial plan, the allocation of economic resources, up to the control of the planned activities and the achievement of the defined objective.

During the planning of the project idea, the Expert determines the necessary resources, time schedule, methods and locations, and identifies the possible repercussions and impact on the territory in terms of economic, social and cultural development, also through the involvement of the reference communities.



Fig. 4. "Arte e Fede" of Gerace (RC) restoration course.

The Expert in Project Management on Cultural Heritage acquires managerial training that allows him to identify partners and coordinate the work group, as well as manage the various relationships with participants, representing a point of reference for the project.

In addition to its specific expertise to be acquired in the field of planning and management, the Expert uses its multidisciplinary background in the field of conservation and valorisation of Cultural Heritage, representing a link between different disciplines that cooperate in the cultural heritage field.

The Expert knows the institutional and social context to which his project idea is aimed, with particular regard to European policies, as well as the ability to build design paths transversal to the different levels (local, national

and community), with the creation of a shared participation process.

The Expert is a figure capable of developing ideas, drafting and presenting complex projects in the field, with particular expertise in the planning inherent in different types of competitive calls and in fundraising activities, dedicated to the conservation and valorisation of Cultural Heritage, also through the use of innovative technologies and ICT.

The Expert is a figure capable of organizing, managing and supervising a work team made up of different professionals who guarantee the coherence and success of the project, respecting the skills of each one. He is called to find solutions during the progress of the project should problems arise. The Expert is able to monitor the advancement of the work and to manage the resources assigned to the project, guaranteeing economic coverage and correct performance for the entire period of all the planned activities (documentation, historical-artistic and/or archaeological study, scientific research, conservation and, finally, enhancement of the cultural heritage object of the intervention, promotion of the results and analysis of the effects) knowing, in general, the characteristics, needs, timing and methods of carrying out the specializations involved

B. Professional profile 2

The Expert in Advanced Valorisation of Cultural Heritage accepts the requests for new solutions for CH communication and dissemination, identifies resources and recognizes possible areas of development; identifies the starting technological and economic characteristics; assesses the costs and strategies of the project idea in terms of feasibility and competitiveness; identifies the requirements for the realization of new valorisation tools, services and strategies and analyzes their effects and impact in terms of economic, social and cultural development and sustainability improvement, also through the involvement of the communities of reference. The Expert develops valorisation solutions for Cultural Heritage in different contexts and for different target groups and knows in depth the complex sector of innovative technologies for communication and information including those on based on the use of innovative Information and Communication Technologies (ICT) and Internet of Things (IoT).

The Expert also knows the use of social media and virtual communities applied to the context of cultural heritage communication. The Expert is also able to develop technological solutions for the virtual reconstruction of sites, works and finds. The Expert in Advanced Valorisation of Cultural Heritage is a figure capable of defining, drafting and implementing projects for the valorisation of Cultural heritage based on the use of innovative tools and strategies. The Expert solves problems and themes of the communication for Cultural

Heritage in complex and specialized contexts and for different audiences, finding solutions also aimed at dissemination of the Cultural Heritage.

The Expert finds solutions, in particular, to improve the "traditional" communication, learning methods and in general the fruition of Cultural Heritage, designing innovative strategies for training and educational purposes. The expert ensures the correct implementation of a project through the production of advanced contents for the enhancement of the cultural heritage.

In particular, he develops projects to create:

- thematic museum tours developed according to innovative approaches and methodologies;
- virtual museums;
- virtualization of specific CH and historical, artistic and cultural places;
- advanced guides for museums and other places of culture based on the use of AR and VR;
- innovative products also for commercial and marketing purposes;
- solutions for the CH valorisation and use of by the people with disabilities;
- solutions for the CH valorisation and use for learning and educational purposes.

IV. CONCLUSIONS

The results of ongoing Adele-RS Project are characterized by reusable, transferable, scalable and have a strong transdisciplinary dimension. Adele-RS Project, starting from the dialogue among different European institutes engaged in conservation and valorisation of cultural heritage during transnational meetings (Fig. 5), aims to support the development, transferring and/or implementation of innovative practices.



Fig. 5. Transnational meetings scheduled up to date into the ADELE project activities.

Moreover, the ADELE-RS project promotes the implementation of joint initiatives to promote cooperation, peer learning and the exchange of experience at European level in the Restoration and Advanced valorisation of cultural heritage to asses a correct evaluation of decay, a durable conservation ad to guarantee a effectives communication ad dissemination.

REFERENCES

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