FOSTERING COOPERATION
IN THE EUROPEAN UNION ON SKILLS,
TRAINING AND KNOWLEDGE TRANSFER
IN CULTURAL HERITAGE PROFESSIONS

REPORT OF THE OMC (OPEN METHOD OF COORDINATION)
WORKING GROUP OF MEMBER STATES' EXPERTS

EUROPEAN UNION

OUR HERITAGE:
WHERE THE PAST
MEETS THE FUTURE

2018
EUROPEAN YEAR
OF CULTURAL
HERITAGE
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EXECUTIVE SUMMARY

A NEW EUROPEAN LANDSCAPE FOR HERITAGE PROFESSIONS

For the first time, the Council of the European Union has invited a group of national experts to investigate skills, training and knowledge transfer in the heritage professions in Europe [1]. The group was operational in 2017 and 2018 under the Work Plan for Culture 2015-2018, with the support of the European Commission [2].

This report is intended to be a resource for the European Union (EU) to ensure the long-term sustainability of Europe's cultural heritage. It aims to do this by contributing to the European Year of Cultural Heritage 2018 objective 'to support the development of specialised skills and improve knowledge management and knowledge transfer in the cultural heritage sector, taking into account the implications of the digital shift' [3]. It will also contribute to the European Framework for Action on Cultural Heritage [4], launched by the European Commission with the aim of leaving a policy imprint beyond 2018.

A new European landscape for heritage professions

In the space of just a few years, the European policy framework on cultural heritage has been completely overhauled, moving towards a people-centred and holistic approach, and eliminating the divisions between the tangible, intangible and digital dimensions. It sees cultural heritage as a shared resource, highlighting that all stakeholders share responsibility for its transmission to future generations. It stresses the need for a more integrated approach to conservation and management, across different policy areas, in order to maximise the benefits to economy, culture, environment and society as a whole. It acknowledges the opportunities that new technologies offer to preserve cultural heritage, and to enhance the visitor experience and public engagement at heritage sites and museums. This new framework changes the way in which cultural institutions manage, protect and provide access to their heritage. It changes the way in which citizens and communities engage with their cultural heritage and also naturally influences the way that professionals deal with it.

Why publish this report?

The most effective way to manage, protect, promote and enhance Europe's irreplaceable cultural heritage is to ensure that the people who do this work (and all stakeholders who make decisions affecting cultural heritage) have the traditional and emerging skills required to fulfil these complex, challenging and necessary roles.

What are the key messages?

While Europe is renowned for its expertise in this sector, the transmission of knowledge and skills is impacted by the combined effect of Europe's age pyramid, cuts to public budgets, the digital shift and the academisation of society. New skills and competences are needed to progress towards a more integrated and participatory management of cultural heritage, and better use of the opportunities offered by new technologies. Europe urgently needs to enhance, promote and protect the technical and professional skills of the people who ensure the long-term sustainability of its cultural heritage. People are central to the transfer of knowledge and skills, so it is important to invest in them in order to safeguard Europe's heritage.

Who is this report written for?

This report targets the main stakeholders: policymakers (at national and EU level); education and training institutions; cultural institutions; and professional associations.

How was the content created?

The experts discussed and developed the many issues affecting the current supply of, and demand for, cultural heritage training and employment. The group drew up national SWOT (Strengths, Weaknesses, Opportunities and Threats) analyses and combined these to identify themes. They also widely consulted reports published by the European Commission and other sources. The group particularly benefited from study visits and the reflections of a group of heritage stakeholders working under the Voices of Culture initiative[5].

The analysis focused on the four development phases of potential heritage professionals: raising awareness; education and training; lifelong learning and knowledge transfer.

Tom and his family: They enjoy visiting museums, heritage sites and craft fairs during their holidays, but they have no idea what goes on behind the scenes. How can we help them discover the world of heritage work? Can we motivate Tom to start a career as a craftsperson or even inspire Tom's granddad to volunteer?

Miriam and her friends: Miriam studies architecture but the curriculum includes very little on the repair and conservation of buildings and monuments. Her boyfriend, Mo, who studies digital technology, has no idea that the heritage sector is desperately looking for his skills. How can we help these students to make the link with heritage work?

David and his colleagues: They care about cultural heritage and collections, and have been working in the field for several years now. They want to deepen their skills and innovate in their work, but they have no professional development plan and little time. How can we help these heritage workers to upskill and develop a new heritage practice?

Laura and her network: Laura is a conservator-restorer with a lot of experience and a high level of skills and knowledge. She is very well connected to other colleagues, experts and skilled craftspeople. This network would like to share their knowledge and skills, especially as many of them are nearing retirement age, but there are few opportunities to do so. Time and financial restraints limit the possibility of recruiting young professionals.

5
Ateca Amestoy, V. et al, *Brainstorming Report. Towards an integrated approach to cultural heritage for Europe – Prospectus on skills, training and knowledge transfer for traditional and emerging heritage professions* (www.voicesofculture.eu/skills, 2017).

Wouldn't it be great if Laura and her network could share their passion with Tom and his family? If they could inspire Miriam and her friends to make the link with heritage work? And what if they could support David and his colleagues to deepen their skills and innovate? Wouldn't it be even better if this knowledge exchange was two-way? If Laura and her network could also learn a lot of new skills in the process?

Tom, Miriam, David and Laura represent the four phases in the development of people who could choose to further their interest in the knowledge and skills involved in cultural heritage. Each phase affects the others: people in Laura's phase could directly influence young children like Tom, and his family.

RECOMMENDATIONS

The recommendations in this report draw on practical examples, good-practice case studies and lessons learned. They aim to maximise the benefits and value that Europe could gain from improving the transfer of skills, training and knowledge in cultural heritage professions. They are summarised under the four pillars of the European Year of Cultural Heritage: engagement, sustainability, protection and innovation, as well as the transversal dimension of international relations[6].

Engagement

Cultural heritage professionals are best placed to communicate, to the whole community, the vital benefits that cultural heritage has for the economy, culture, environment and society.

Recommendations
- Devise innovative engagement and communications skills training for professionals, mediators and policymakers, to improve mutual understanding and holistic approaches to increase participation and access for all.
- Increase digital access through online information portals and networks to raise awareness, and to transmit knowledge and skills for the common purpose of safeguarding heritage, and for interpreting and implementing the Faro Convention[7].

Sustainability

The expertise of cultural heritage professionals is a unique public asset that is essential to achieving quality, value and sustainability in heritage protection and preservation.

Recommendations
- Promote increased mobility by enabling cultural heritage professionals to validate the full breadth of their formal and non-formal knowledge and skills.
- Support evidence-based assessment processes and specialist certification schemes to aid the recruitment of skilled and experienced professionals.

Protection

Cultural heritage professionals continuously maintain and enhance their core and transversal knowledge and skills in order to adapt to current and future skills demands, with the support of professional associations and public policymakers.

Recommendations
- Cultural heritage professionals and public policymakers should collaborate to identify and map cultural heritage professions (including skills at risk).
- Improve data collection and analysis in order to classify heritage occupations and assess current and future skills needs.

Innovation

Cultural heritage professionals work in interdisciplinary and cross-sectoral environments. They combine traditional, creative and innovative approaches to safeguarding Europe's irreplaceable heritage for future generations.

Recommendations
- Support and enhance education, training and centres of excellence to provide: entry-level and advanced cultural heritage training; post-graduate research programmes; lifelong learning opportunities; and structured knowledge-exchange for the cultural heritage workforce, policymakers, mediators and the public.
- Promote EU and national cultural heritage standards, where appropriate.
- Provide EU funding for innovative and integrated training and research, in association with sector representative bodies and through cross-sectoral cooperation.

International dimension

Europe is renowned for the quality of its training institutions, research centres and cultural heritage professionals. These professionals can help build bridges between people, communities and countries, reinforcing intercultural dialogue and mutual understanding, thereby contributing to an EU strategy for international cultural relations[8].

Recommendations
- Reinforce and promote EU cooperation with international organisations such as ICCROM[9] on training for heritage professionals.
- Create opportunities and provide funds for the education, training, knowledge-exchange and mobility of European cultural heritage professionals at global level.

[8]
http://www.europarl.europa.eu/legislative-train/
theme-europe-as-a-stronger-global-actor/
file-eu-strategy-for-international-cultural-relations

[9]
International Centre for the Study of the
Preservation and Restoration of Cultural Property
(ICCROM): https://www.iccrom.org/

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INTRODUCTION

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INTRODUCTION

1.1 Mandate of the working group

The working group on skills, training and knowledge transfer in heritage professions was in operation from March 2017 until the end of 2018. Operating under the Work Plan for Culture 2015-2018, the group also contributed to the European Year of Cultural Heritage, which focused on specialised skills, and knowledge management and transfer in the cultural heritage sector, including the implications of the digital shift.

The group was given a mandate by the EU Council to: *'examine capacity building for heritage professionals, focusing on the transmission of traditional skills and know-how and on emerging professions in the tangible, intangible and digital heritage field, including in the context of the digital shift, and to produce a manual of good practices for cultural and education institutions'* by the end of 2018. [10]

When discussing the mandate, the group took into account the European Commission's 2014 Communication *Towards an integrated approach to cultural heritage for Europe*. It identified the following challenges for heritage professions that needed to be addressed to ensure the sustainability of Europe's cultural heritage:

- the age pyramid and cuts to public budgets;
- increasing international demand for heritage expertise;
- new governance and management models;
- the new areas of visitor experience, audience development and participatory approaches;
- cultural mediation;
- the digital shift;
- the lack of professionals in 'traditional' and 'emerging' occupations [11].

In light of this communication, the main subjects that the OMC group focused on in 2017 and 2018 were: traditional professions and skills at risk; the digital shift; the development of new professions; and the need for new competences, both in intangible and tangible heritage.

10
2014/EC/436/02, Priority Area B: cultural heritage, p.11.

11
European Commission, *Towards an integrated approach to cultural heritage for Europe*, 2014 (COM/2014/0477).

1.2 Composition of the working group and working method

The group consisted of national representatives from 22 countries of the EU [12], who offered expert views on the 'state of play' in cultural heritage professions in Europe. Besides the main goal of the work, the group shared the view that fostering European cooperation is a valid purpose. In view of the constructive discussions and the network created, the Open Method of Coordination (OMC) [13] system has been tried and tested as a good tool to achieve that objective.

Across seven meetings, the OMC participants added value primarily through mutual learning and the exchange of best practices and experiences. The work itself consisted of interaction and discussion in four subgroups, concentrated around the four development phases in the workforce lifecycle. These are awareness raising (the first steps when people encounter cultural heritage); formal education (almost always needed to be a professional in cultural heritage); lifelong learning (how professionals maintain and enhance their specialisation); and succession planning (how they successfully transmit their knowledge to the next generation).

The group benefited from the expertise of external experts and civil society representatives at their meetings (see Appendix I). As part of that cooperation, the OMC group organised meetings in five participating countries (Romania, Belgium, Sweden, Portugal, Austria), in order to see examples of good practice first-hand and learn directly from the people delivering on the ground (see case studies in Chapter 5).

12
All 28 Member States were invited to nominate two experts, respectively from the heritage and education sector.
13
The Open Method of Coordination (OMC) method (https://ec.europa.eu/culture/policy/strategic-framework/european-coop_en) is anchored in the European Agenda for Culture. It is a flexible but structured way for EU Member States to cooperate in the field of culture, supported by the European Commission. Through an exchange of good practices between EU countries, it contributes to improving the design and implementation of policies, which are outside regulatory instruments.

2

GENERAL RECOMMENDATIONS

2 GENERAL RECOMMENDATIONS

Overarching recommendation

EU and Member State Action Plans for Cultural Heritage should prioritise the recommendations made in this report to develop skills, training and knowledge transfer in cultural heritage, both in new and traditional professions.

Recommendations

There are detailed recommendations for each theme in this report (awareness raising, education and training, lifelong learning and knowledge transfer). Here are the overall composite recommendations, which link to the European Year of Cultural Heritage pillars and provide detail to support the summary recommendations in the executive summary.

Engagement

National policymakers, educational institutions and the sector's professional associations should cooperate to stimulate multi-directional communication between cultural heritage, other sectors and new audiences to foster the demand for and supply of cultural heritage skills, by:

1. Ensuring that training for professionals from other sectors whose work impacts on cultural heritage provides learners with the competences and transversal skills required to work on cultural heritage.

2. Disseminating information about cultural heritage to wider and new audiences. Use traditional media and new technologies to develop knowledge banks, promote local and traditional materials and techniques, support knowledge transfer and promote careers in cultural heritage.

3. Developing closer links between national and regional cultural authorities and other relevant sectors. Themes related to training within the heritage professions can then obtain attention and be coordinated at the highest level.

4. Improving cross-sectoral exchange, particularly with the creative and digital industries as well as education and training providers and research institutes, employer bodies, employment and tourism.

5. Learning from other sectors, to research and develop best practice and innovative ways for involving and managing volunteers in cultural heritage.

Sustainability

European and national institutions and policymakers, education and training institutions, and sector professional associations should encourage a wider pool of better skilled and qualified cultural heritage professionals with the tools and skills to share their knowledge. They should do this in the following ways.

1. Supporting professionals to share their knowledge and skills across Europe and internationally through a range of means, including digital, face-to-face and work-based exchange such as mentoring, apprenticeships and creating a Living Human Treasures Programme.

2. Supporting succession planning by encouraging heritage organisations, institutions and government agencies to include knowledge and skills transfer in their job descriptions, allocating this vital requirement time and resources.

3. Promoting greater commonality and clarity around the recognition of knowledge, skills and competences across Europe to raise the quality of practice and mobility of professionals by:

   (a) researching and mapping existing cultural heritage personnel recognition schemes (accreditation, certification, attestation or registration) to develop best practice guidance for cultural heritage staff certification schemes;
   (b) developing guidance for educational institutions and professional associations on methods of validating non-formal and informal cultural heritage learning acquired;
   (c) developing a digital skills profile (e.g. using the EURES European Job Mobility Portal) to enable professionals (all skill types and levels) to demonstrate cultural heritage competences acquired formally and non-formally to potential employers and clients, and aid workforce mobility throughout Europe;
   (d) researching existing models that have developed formal descriptions and competency profiles for cultural heritage professionals, to enable recommendations to be developed that can be applied across Europe.

4. Developing a lifelong learning toolkit to help cultural heritage professionals to map a path for lifelong learning, and encourage continuous development of their core and transversal competences in cultural heritage.

5. Developing and implementing cultural heritage standards at EU level that are freely available, to: raise quality in procurement; ensure the recruitment of competent specialists; and enable small companies and individual professionals to be involved projects. Examples include the standards of the European Committee for Standardization, the Common Procurement Vocabulary codes and other relevant systems.

Protection

European institutions, European and national policymakers and sector professional associations should address skills gaps and shortages, foster professionalism and raise the visibility of cultural heritage professions. This requires the a strong evidence base to be developed for this purpose in the following ways.

1. Mapping all active cultural heritage professions and developing a relevant occupational classification for them in the standard systems (International Standard Classification of Occupations (ISCO) and the statistical classification of economic activities in the European Community (NACE)), to improve Eurostat's collection of strategic data on cultural heritage.

2. Encouraging each Member State's National Action Plan for Cultural Heritage to include researching and mapping skills at risk, and developing plans to safeguard and augment these skills.

3. Generating strategic data for the cultural heritage sector, including traditional crafts and small and micro-companies, through the European Centre for the Development of Vocational Training (Cedefop) or others.

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Innovation

European institutions, European and national policymakers, and sector professional associations should stimulate a more integrated approach to education, training and lifelong learning for cultural heritage professionals, taking into account the digital shift. They should do this in the following ways.

1. Building closer links between vocational and higher education, cultural heritage institutions and the workplace in the design and delivery of training. This will maximise vocational and work-based learning (practical and in the workplace) as part of academic courses, dual education and apprenticeships to create work-ready professionals.

2. Launching a call for projects under EU funding programmes (such as the EU research programme Horizon 2020 and Erasmus+) that specifically target cultural heritage, with the focus on existing and emerging skills (digital and other), training and knowledge transfer needs.

3. The European Institute of Innovation and Technology (EIT) should set up a Knowledge and Innovation Community on cultural heritage (and creative industries) to support a holistic vision of cultural heritage research and to establish an innovation community.

4. Supporting the EIT to develop an information exchange portal for heritage professions. This could be used to share material on the competences and skills needed for those professions and the options for formal and vocational training, informal skill acquisition, knowledge exchange and communication networks. It should highlight learning resources, formats, databases and other tools for formal education and training. It should also promote the dissemination of good practices and case studies, and publish or co-host reference manuals on materials and intervention techniques.

5. Encouraging the establishment of European centres of excellence while acknowledging and supporting existing centres that bridge the gap between research and practice in various fields of cultural heritage. This would link these centres together and result in wider audiences using the information exchange portal.

Specific recommendations for consideration in the European and National Action Plans for Cultural Heritage are set out in Chapter 5:

Raising awareness	Section 5.2.2
Education and training	Section 5.3.2
Lifelong learning	Section 5.4.2
Knowledge transfer	Section 5.5.2

3

STRENGTHS, WEAKNESSES, THREATS AND OPPORTUNITIES (SWOT) ANALYSIS

3
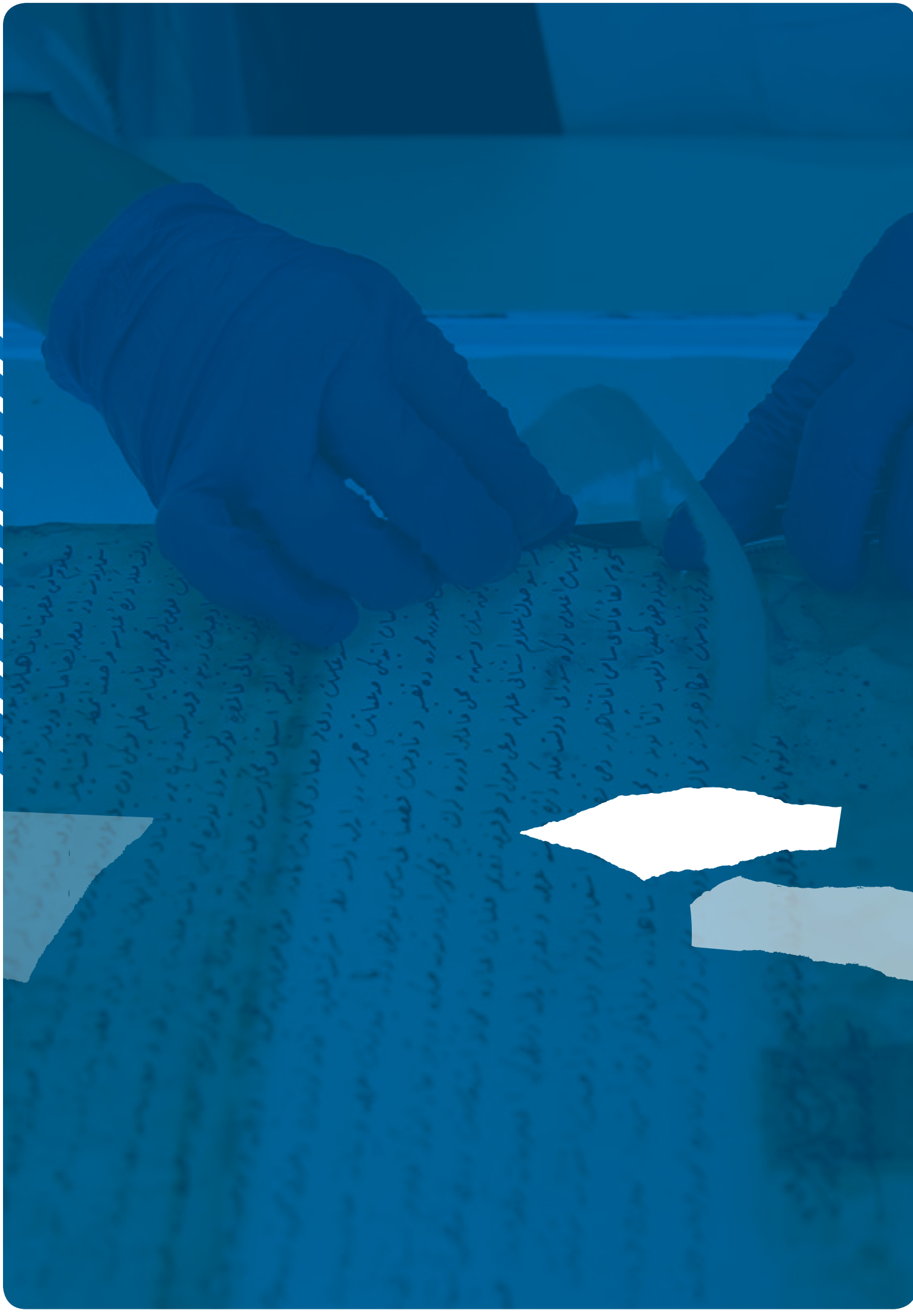
STRENGTHS, WEAKNESSES, THREATS AND OPPORTUNITIES (SWOT) ANALYSIS

3.1   Why a SWOT?

The mandate of the OMC group was to 'identify emerging skills and training needs in the tangible, intangible and digital heritage field.'[14] The group soon realised that its members had a range of professional backgrounds, expertise and expectations of this mandate and that there was a risk of holding endless discussions. It was important to focus and prioritise in order to deliver the group's objectives. The group wanted to identify shared challenges and common aims. It decided that a SWOT was the best tool to achieve this.

Members of the group provided examples of strengths, weaknesses, threats and opportunities from their experiences. Representatives from Belgium and the Netherlands analysed the results and identified common themes to compose one shared SWOT at EU level. This allowed the group to look at the broader Europe-wide themes.

The advantage of the SWOT methodology was that it focused attention, helping to compare the sometimes quite different contexts in each country. There was also some confusion about where to place an item: was it an opportunity or strength; a challenge or threat? The taskforce tried to resolve these contradictions to make it a consistent exercise. In doing so, the group also realised that each country could add more information and good practices, inspired by the entries others had made.

3.2   Results – Key themes

The SWOT was created at a certain point in time and filled in by a selected group of persons and associations. It therefore does not pretend to cover all possible aspects or to be fully representative. But the analysis drew out a number of interesting themes.

STRENGTHS

1. INCREASING ACCESSIBILITY
- Databases, web portals, manuals, applications, 3D, new techniques.
- Projects to make information digitally accessible (maps, cadastral plans, books, heritage sites).
- E-learning.

2. NATIONAL COOPERATION/NETWORK
- Excellent networking in movable and immovable heritage.
- Knowledge exchange.
- Shared principles.

3. FORMAL EDUCATION
- Work-based placements and internships.
- Strong formal education and research in traditional fields (restorers, art historians).
- Sectoral practical training centres.
- Interdisciplinary learning in training centres.

4. CONTINUED PROFESSIONAL DEVELOPMENT/LIFELONG LEARNING/ NON-FORMAL EDUCATION
- Non-formal training programmes for building management professions, museums and traditional crafts.
- Interdisciplinary training programmes.
- Succession planning for museums.
- Courses and seminars outside of schools, networking days.
- Innovative research projects.

5. ACCREDITATION AND CERTIFICATION
- Grant schemes and legislation stimulate conservation accreditation.
- Formal descriptions of heritage professions.
- National systems of recognition, validation, certification and qualification for arts, crafts and museums.

6. ENGAGING SOCIETY
- Stimulation of folklore trades, fairs, festivals, workshops and competitions.
- Projects to stimulate interaction between heritage professionals and the general public.
- National events like European Heritage Days, museum weekends, monument and mills days, and special years dedicated to heritage.
- Involving unemployed people in the conservation and restoration of cultural heritage.

7. ENGAGING YOUNG PEOPLE
- Early contact with heritage increases opportunities for young people to engage and decide to follow a career.
- Youth competitions, festivals, workshops, interactive activities to involve scholars.
- Prizes: Dutch Young Talent Monument Prize and Young Talent Museum Prize.
- Projects to help young professionals to get a job in the heritage field.

8. LAW AND REGULATION, AND FINANCIAL SUPPORT FROM THE GOVERNMENT
- Policy to stimulate the safeguarding of heritage.
- Policy to stimulate the participation of the public.
- Subsidies for programmes, supporting organisations and activities.

9. INTERNATIONAL COOPERATION
- Peer friendships and job-shadowing.
- Involvement in the activities of UNESCO, ICCROM, ICOMOS, ICOM, the European Heritage Heads Forum, Blue Shield, NIPOS, HEREIN and Cedefop, ENCoRE.
- Participation in international fairs, websites and publications.
- Implementation of international conventions (e.g. Faro Convention on the Value of Cultural Heritage for Society, Convention for the Safeguarding of the Intangible Cultural Heritage, etc.).

10. INCREASE THE IMPORTANCE OF INTANGIBLE HERITAGE
- Increasing attention is being given to intangible cultural heritage.
- Pilot initiatives have been developed to promote the transmission and renewal of crafts.
- Ancient traditions and worldviews are encouraged and supported through heritage communities.

11. FLOURISHING CRAFTS AND SKILLS
- Traditional skills and crafts (for buildings and structures, intangible heritage, archaeology, arts and crafts, etc.).
- General communication and digital skills.

12. HERITAGE BOOSTS THE ECONOMY
- Significant effects of the heritage sector on the economy.
- Interaction between craftworking and design.

13. FUNDRAISING
- Crowdfunding and private giving.

WEAKNESSES

1. SKILLS AT RISK
- Tangible heritage: skills related to craftsmanship are in danger.
- Archaic traditions and traditional skills in intangible cultural heritage are disappearing.
- New digital heritage skills are underdeveloped and there is a skills gap in digital skill among heritage professionals.

2. EDUCATIONAL GAPS
- Minimal formal education programmes for heritage.
- Training for heritage professionals is insufficient, too theoretical, not interdisciplinary enough and often low quality (education and teachers).
- Gap between content and the realities of the labour market.

3. PROBLEMS WITH QUALITY ASSURANCE IN PROFESSION
- Lacking occupational profiles/no formal organisation of sector.
- No standards and guidelines in the field are not known about or not used.
- No structural financial investment in knowledge transfer.
- Low inflow of professionals.
- Gap in the connection between academics and communities/tradition bearers.

4. NO POLICY TO PROMOTE CRAFTS AND HERITAGE PROFESSIONS
- Plans to promote crafts and heritage professions have not been developed or are underdeveloped.
- Lack of markets for craft products.

5. LACK OF COMMUNITY ENGAGEMENT OR/AND VOLUNTEERING
- Communities are not always involved in an effective and consistent way.
- Low levels of awareness among young people.
- Lack of interest from society in volunteering in cultural heritage.

OPPORTUNITIES FROM OUTSIDE THE HERITAGE SECTOR

1. EUROPEAN QUALIFICATIONS FRAMEWORK (EQF) AND VALIDATION OF PRIOR AND INFORMAL LEARNING
- Validation and appreciation of tacit knowledge and prior learnings.
- The International Standard Classification of Occupations (ISCO).
- European Qualification Assurance in Vocational Education and Training (EQAVET).

2. NEW DIGITAL TECHNOLOGIES
- Digitalisation policies: open access databases and the use of algorithms.
- New tools: 3D models and 3D printing, GPS, photo scanning.
- Games, virtual reality and mixed or augmented reality.
- Born-digital heritage.

3. NEW LEARNING APPROACHES AND TRAINING FORMATS
- New learning theories: informal learning, lifelong learning, experiential learning.
- New training formats: dual education, apprenticeships, crossover training.
- E-learning and blended learning.
- New networks for knowledge sharing – face-to-face and digital.

4. WORKING WITH VOLUNTEERS
- Increasing numbers of volunteers.
- New types of volunteering: micro-volunteering, online, virtual, crowdsourcing volunteering.
- New skills in volunteering management.

5. INCREASING INTEREST AND PARTICIPATION IN HERITAGE
- Increasing visitor numbers at heritage sites; successful heritage fairs, days and weeks.
- Growing interest in crafts, intangible heritage and born-digital heritage.
- Growing public awareness of cultural heritage values.

6. CROSS-SECTORAL PARTNERSHIPS
- Partnerships between heritage institutions and the public and private sectors.
- New connections with cultural and creative industries.

7. HERITAGE AS A KEY FACTOR IN SUSTAINABLE DEVELOPMENT
- Traditional crafts and materials are a source of inspiration for environmentally sustainability.
- Faro Convention: increasing participation of local communities (social sustainability).
- Heritage as an economic asset for a country (economic sustainability).

8. COOPERATION BETWEEN HERITAGE SECTOR AND FORMAL EDUCATION
- Join forces with higher education.
- Better heritage education in primary and secondary schools.
- Better links with adult education.

9. LEGISLATION TO SUPPORT TRANSMISSION OF KNOWLEDGE AND SKILLS
- Legislation supports knowledge sharing in the field of intangible heritage and crafts, like the Convention for the Safeguarding of the Intangible Cultural Heritage.

THREATS FROM OUTSIDE THE HERITAGE SECTOR

1. ACADEMISATION OF SOCIETY
- Vocational careers do not attract young people: decreasing status for executive roles.
- The education system favours academic training over vocational training.
- Academic programmes have reduced the time allocated to practice.
- Lack of formal recognition of professions in the field.

2. DEMOGRAPHIC IMPACT ON WORKFORCE: RECRUITMENT PROBLEMS
- Ageing of cultural heritage professionals and lack of generational replacement.
- Emigration: brain drain and loss of skills.
- Poor representation of social diversity in heritage organisations.

3. HARMFUL VOLUNTEER DEVELOPMENTS
- Volunteers cannot replace professionals.
- Volunteering initiatives can damage heritage.

4. REDUCTION OF PUBLIC FUNDING AND INSTITUTIONAL INSTABILITY
- An uncertain and underpaid sector.
- No continuity of skill transfer.
- Increasing competition for additional funding.

5. MARKET CONDITIONS AND COMMERCIAL PRESSURE
- The principles of a free market are universally and automatically applied in cultural heritage.
- Strong focus on projects and events.
- Pressure to create cheap products that sell.
- Strong focus on the economic impact of heritage organisations.
- Entertainment and popularisation preferred over scientific research.

6. NEGATIVE VIEWS ON HERITAGE
- General image of heritage as dull, boring and dying.
- Questioning of the social and economic added value of heritage and skills.
- Heritage as an obstacle to development, growth and prosperity.
- Close association of heritage with nationalism.
- Misuse of heritage by populists and radicals.

7. CONFLICTING INTERESTS PUT PRESSURE ON HERITAGE ASSETS
- Mass tourism: heritage 'attractions' are unable to cope with visitor flows.
- Conflicting interests with other public sectors.
- Urban rehabilitation strategies.

8. IMPACT OF DIGITALISATION, ROBOTICS, AUTOMATION AND NEW TECHNOLOGIES
- Replacement of manual skills with digital crafts and greater standardisation.
- Uncritical digitalisation and open-access policy.
- Gap between digital and analogue professionals.

9. LEGISLATIVE RESTRICTIONS
- Complex standards and requirements.
- Copyright restrictions and legal deposit legislation.
- Too much control by the government.

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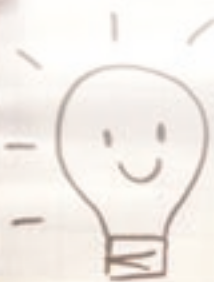
SKILLS → IN RISK
→ EMERGING

≠ MAPPING EVERYTHING

INFORMAL LEARNING PATHS ?!

F.E. APPRENTICE SHIP DOCUMENTATION EXCHANGE

PORTRAIT INTERVIEWS STORIES TYPICAL

PERSONA
EXAMPLES OF PEOPLE

BALANCE
* F.E. CRAFT DIGITAL ARCHIV TANGIBLE
* Levels PUBLIC PRIVATE
* 10 ACTIVITIES

VIDEOS?

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4

THE CONTEXT
FOR EDUCATION
AND TRAINING
IN CULTURAL HERITAGE

4

THE CONTEXT FOR EDUCATION AND TRAINING IN CULTURAL HERITAGE

This chapter sets out the foundation for Chapter 5 on the four phases of development. It reviews the regulatory and sectoral contexts (which are intrinsic to cultural heritage and interact with it) of cultural heritage capacity building and its underpinning concepts, and which inform the ethics and approaches to conduct and practice. All four working groups contributed to the content.

4.1 Frameworks and standards

Education and training

The Communication on European Identity states that

… a key aspect to ensure quality education is to make sure that the education systems, including vocational ones, impart all the knowledge, skills and competences that are deemed essential in today's world. As skills needs are changing rapidly, work-based learning, as apprenticeships or in a larger context of lifelong learning, is essential and businesses have an important role to play through education-industry partnerships [15].

The EU has developed many initiatives to support the training and mobility of the workforce, including: Recommendations on the Establishment of the European Qualifications Framework for Lifelong Learning (2008, revised 2018 [16]); Europass (the European Skills Passport) [17]; the European Credit Transfer System (ECTS) [18]; the recognition of some professions [19]; the *European Skills/Competences qualifications and Occupations* (ESCO) Strategic Framework, 2017 [20]; A New Skills Agenda for Europe [21]; and the recent Blueprint for Sectoral Cooperation on Skills [22].

The objective of the European Qualifications Framework (EQF) is to create a common reference framework to serve as a translation device between each national qualifications framework and harmonising learning outcomes at all levels to support recognition of the competences that employers and educators have. The EQF essentially consists of eight reference levels, from compulsory education at level 1 to doctorate at level 8 [23].

Vocational education and training (VET) may take place in secondary school, further education or higher education, and may also interact with an apprenticeship system. This is known as a 'dual education system' and extends to level 5. The European Qualification Assurance in Vocational Education and Training (EQAVET) is a reference instrument designed to help EU countries promote and monitor their VET systems based on commonly agreed references. It is also designed to make it easier for skills and competencies to be recognised between countries.

The general structure of higher education (HE) proposed in the Bologna Declaration of 1999 defines HE as consisting of three cycles of education [24]. The system is widely implemented and facilitates student mobility in Europe. Higher or third-cycle education starts at EQF level 5 with diploma degrees, level 6 with bachelor's degrees and level 7 with master's degrees. The third cycle leads to a doctoral degree. There are variants within the framework but in most cases, it takes three years to earn a bachelor's degree, another two years for a master's and an additional three years for a doctoral degree.

15
European Commission, *Strengthening European identity through education and culture* (EC COM(2017) 673 final), 17 November 2017, p. 6.

16
European Commission, *The European Qualifications Framework for lifelong learning,* 2008 (2008/C 111/01). European Commission, *Council Recommendation of 22 May 2018 on key competences for lifelong learning,* 2018 (2018/C 189/01).

17
https://europass.cedefop.europa.eu/documents/european-skills-passport

18
https://ec.europa.eu/education/resources/european-credit-transfer-accumulation-system_en

19
Directive 2005/36/EC on the recognition of professional qualifications, as amended by Directive 2013/55/EU.

20
https://ec.europa.eu/esco/portal/home

21
Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *A New Skills Agenda for Europe*, 2016 (COM(2016) 381 final).

22
European Commission, *Blueprint for sectoral cooperation on skills – Responding to skills mismatches at sectoral level*, Publications Office of the European Union, Luxembourg, 2017. The blueprint is an action of the New Skills Agenda. EQF Recommendation 2008/C 111/01, p. 2, paragraph 12.

23
EQF Recommendation 2008/C 111/01, p. 2, paragraph 12.

24
Joint declaration of the European Ministers of Education, *The Bologna Declaration,* 19 June 1999.

The UK and Ireland stand out with a range of one-year 'taught master's', post-graduate diploma and certificate programmes. Many post-graduate programmes are structured to be flexible for students to attend on a part-time basis, enabling them to combine training with regular work. They are frequently used for formal continuing professional development (CPD), which supports the aims of lifelong learning.

The EQF is being implemented and coordinated through the open method of coordination (OMC) mode of governance, but it has not been as pervasive as the Bologna Process. By 2012, all European educational programmes were required to articulate their goals in terms of EQF learning outcomes, meaning the knowledge, understanding and ability to do something after completing a learning process. Even though learning goals are now articulated by most formal education providers in Europe, the actual knowledge, skills or competences required for each profession, or for sectoral tasks, are not cross-referenced or aligned with the EQF's accredited levels.

Only Sweden and the Netherlands have EQF instruments to evaluate informal competences. Flanders in Belgium is possibly the only member region that has started to adopt the EQF in a regional framework for the cultural heritage sector. The EU's New Skills Agenda was launched in 2016 to enhance the process from policy to reality, 'to make the right training, skills and support available to people in the EU'[25] The suggested actions are still under development.

The EU published recommendations on the validation of non-formal and informal learning in 2012, noting that the validation of learning outcomes (namely knowledge, skills and competences acquired through non-formal and informal learning) can play an important role in enhancing employability and mobility. It can also increase motivation for lifelong learning, particularly in the case of socio-economically disadvantaged or lower-qualified people[26].

Guidance on validation was published in 2015 by the European Centre for the Development of Vocational Training[27].

The European Credit Transfer and Accumulation System (ECTS) is a mechanism intended to promote workforce mobility. The 2012 Council recommendation includes the principle that synergies should exist between validation arrangements and credit systems such as the ECTS and European Credit System for Vocational Education and Training (ECVET)[28]. The ECTS makes it possible to merge different types of learning in the same study programme or to accumulate credits over time to aid participation in lifelong learning.

25
http://ec.europa.eu/social/main.jsp?catId=1223
26
European Commission, Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning (2012/C 398/1), 2012.
27
https://publications.europa.eu/en/publication-detail/-/publication/7a46c-c6f-e10e-11e5-8a50-01aa75ed71a1/language-en
28
European Higher Education Area, *Bologna Process and EC, ECTS users guide*: Publications Office of the European Union, Luxembourg, 2015.

Occupational classification

The **International standard for classification of occupation (ISCO)** asserts that it includes all occupations[29]. However, cultural heritage professions are not specifically defined by the ISCO and the International Standard Classification of Education (ISCED)[30]. Many traditional and emerging professions are covered and given alternative labels, with the essential and optional skills, competences and knowledge. However, these do not include the full spectrum of conservation and restoration competence requirements.

The hierarchical approach of the ISCO classifies roles according to skill levels and skill specialisation. The highest level, 4, requires complex problem-solving, decision-making and creativity competences. Role holders are likely to have a primary degree or higher qualification (3-6 years study). Craft and related trades workers (major group 7) belong to Level 2. This classification is connected to the manual tasks and duties typical of these occupations, which usually require 1-3 years of post-secondary education. It should be noted that the ISCO structure does not allow for roles such as conservator-restorer. Conservation tasks and duties span the breadth of skill levels, from manual tasks carried out with tools to the application of complex theories and requirements analysis. They also require high levels of communication skills. This structural problem within the ISCO must be addressed for a number of cultural heritage professions that combine practical skills with academic knowledge.

The activities of conservator-restorer professionals in cultural heritage are framed in different sections of the Statistical Classification of Economic Activities in the European Community (NACE-09)[31]. These classifications are periodically revised according to a European classification, the use of which is mandatory throughout the EU. The criteria used in the classification depend on the type of asset that the particular activity involves. This statistical normalisation causes a disaggregation of professional activities in the conservation-restoration of cultural heritage. This prevents statistics being produced at national level and therefore makes it difficult to conduct a census of professionals[32].

European Skills/Competences, qualifications and Occupations (ESCO) is a pilot project to support the Europe 2020 strategy and the New Skills Agenda for Europe[33]. Skills mapping is available in 26 languages and is accessible in a database that contains descriptions for around 3 000 occupations and 13 500 knowledge, skill and competency concepts[34]. The work is based on national skills classifications that have been assessed and mapped in a 'semantic web'. ESCO's vision is to provide a shared understanding of occupations, skills, competencies and qualifications to 'build an integrated European labour market and support bridging the communication gap between the world of work and the world of education and training[35].' The classification of occupations follows the ISCO hierarchy.

29

International Labour Office, *International Standard Classification of Occupations*, Geneva, 2012.
http://www.ilo.org/public/english/bureau/stat/isco/

30

For example, Unit Group 7311: Precision-instrument Makers and Repairers. No reference can be found in the ISCO to the terms 'conservation', 'preservation' or 'restoration'. The phrase 'maintenance and repair' is used for a number of occupations.
http://uis.unesco.org/en/topic/international-standard-classification-education-isced

31

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32006R1893

32

Galan-Perez, A (ed.), *Monograph of heritage professions*, Spain, 2018.

33
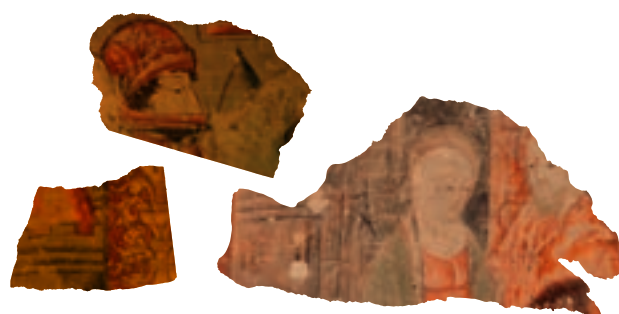
European Commission, *European Skills, Competences, Qualifications and Occupations – ESCO Strategic Framework*, 2017

34

https://ec.europa.eu/esco/portal/occupation?resetLanguage=true&newLanguage=en

35

ESCO *Strategic Framework*, p.5,

Culture statistics

Eurostat[36] has built a consistent, cross-sectoral database that is publicly and permanently available on its website (Eurobase)[37]. It contains various statistics on culture at EU level, covering social and economic aspects of: cultural employment; international trade in cultural goods and services: enterprises in the cultural sectors: cultural participation; use of the internet for cultural purposes; and private and public cultural expenditure. Culture statistics are included in a dedicated culture section on the Eurostat website[38] and have been the subject of several thematic articles[39].

EU culture statistics are not collected through a single stand-alone survey on culture but come from different Eurostat data collections. The methodology of collecting culture statistics from those data collections was proposed by the European Statistical System Network on Culture (ESSnet-Culture)[40] in 2012[41]. Since 2015, data collection has been continuously improved by *Eurostat*, in the framework of the European Statistical System (ESS)[42]. Since 2015, slight adjustments have been agreed with the countries represented in the working group on culture statistics. These concern the scope of 'culture' in a few statistical domains, mainly for the sake of better alignment with UNESCO's Framework for Culture Statistics[43]. Moreover, other surveys available from Eurostat have been searched to extract culture-related data, and some additional statistical areas have been further explored[44].

However, tangible and intangible cultural heritage are areas of culture statistics that needs to be developed further, and the availability of data on cultural heritage professionals, education and training is particularly limited[45]. In order to address this gap, Eurostat is cooperating with organisations such as the UNESCO Institute for Statistics and networks like the European Group on Museum Statistics.

The limited occupational statistics for cultural heritage is a critical gap, as the data that the ISCO and NACE (the statistical classification of economic activities in the European Community) use to code occupational classifications is derived from statistical data generated at national level. If data is not collected, it is not possible to make a political or economic argument to address the anticipated skills needs in the cultural heritage sector.

Sector standards

Cultural heritage professions are not recognised by European Directive 2005/36/EC as doctors or pharmacists are[46]. Nevertheless, there is an agreed European standard for the conservation of cultural heritage. Standardisation in the field of cultural heritage can help sector professionals to improve the quality of their work and can set benchmarks for education and training content. The European Committee for Standardization (CEN) is the European body (recognised in Directive 98/34/EC) for the development of standards in all areas, with the exception of the telecommunications and the electro-technical fields[47].

In 2004, the CEN Technical Committee (CEN/TC) 346 on the conservation of cultural heritage was founded and began to develop standards for tangible cultural heritage. CEN/TC 346 experts exchange information using a common vocabulary. The committee's work aims to enhance standards for the categorisation of materials and the processes, practices, methodologies and documentation for the conservation of tangible cultural heritage to support its preservation, protection and maintenance, and to enhance its significance. It includes categorising deterioration processes and environmental conditions for cultural heritage, and the products and technologies used to plan and implement its conservation, restoration, repair and maintenance. By mid-2018, more than 30 European Standards (EN) and one Technical Specification had been published by CEN/TC 346[48].

36
Eurostat is the statistical office of the EU and its mission is to provide high-quality statistics for Europe.

37
The database can be accessed at:
https://ec.europa.eu/eurostat/web/culture/data

38
https://ec.europa.eu/eurostat/web/culture/overview

39
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Category:Culture

40
The European Statistical System Network on Culture (ESSnet-Culture), coordinated by the Luxembourg Ministry of Culture until 2012, aimed to assess and improve cultural statistics at EU level.

41
ESSnet-Culture *Final Report*, Luxembourg, 2012.

42
The ESS is a partnership between Eurostat, national statistical institutes and other national authorities for the development, production and dissemination of particular European statistics.

43
See https://unesdoc.unesco.org/ark:/48223/pf0000191061

44
The methodology used in the different areas of Eurostat culture statistics available from harmonised EU data collections is described in the *Guide to Eurostat culture statistics* . See also
https://ec.europa.eu/eurostat/web/culture/overview

45
KEA European Affairs, *Feasibility study on data collection and analysis in the cultural and creative sectors in the EU*, 2015 (prepared for the European Commission).

46
The conservation specialism within the architect profession is referred to in Directive 2005/36/EC on the recognition of professional qualifications. The Directive notes (Preliminaries, paragraph 27) that 'Mutual recognition of qualifications should therefore be based on qualitative and quantitative criteria which ensure that the holders of recognised qualifications are in a position to understand and translate the needs of individuals, social groups and authorities as regards spatial planning, the design, organisation and realisation of structures, conservation and the exploitation of the architectural heritage, and protection of natural balances.'

47
European Committee for Standardization:
https://www.cen.eu/Pages/default.aspx

48
https://standards.cen.eu/dyn/www/f?p=204:7:0::::FSP_ORG_ID:411453&cs=11079A55D-70F8377E3942E1C6704C7664

Public procurement

The Public Procurement Directive (Directive 2014/24/EU) states that:

Wherever the quality of the staff employed is relevant to the level of performance of the contract, contracting authorities should also be allowed to use as an award criterion the organisation, qualification and experience of the staff assigned to performing the contract in question, as this can affect the quality of contract performance and, as a result, the economic value of the tender. This might be the case, for example, in contracts for intellectual services such as consultancy or architectural services. Contracting authorities which make use of this possibility should ensure, by appropriate contractual means, that the staff assigned to contract performance effectively fulfil the specified quality standards and that such staff can only be replaced with the consent of the contracting authority which verifies that the replacement staff affords an equivalent level of quality [49].

This can be achieved through a combination of standard pre-qualification questionnaires and tender price/quality award criteria [50].

Public authorities can engage in socially responsible public procurement by buying ethical products and services. They can also use public tenders to create work and training opportunities, decent work, social and professional inclusion and better conditions for disabled and disadvantaged people. This makes socially responsible public procurement a strategic tool to drive social and labour policies forward effectively. The European Commission guide *Buying social – A guide to taking account of social considerations in public procurement* contains guidance and case study examples [51].

49
Directive 2014/24/EU, Article 94. (b).
50
A range of examples from heritage projects in the UK are available at:
https://historicengland.org.uk/services-skills/training-skills/heritageskills-cpd/building-skills-and-training-into-conservation-projects/
51
https://ec.europa.eu/info/policies/public-procurement/support-tools-public-buyers/social-procurement_en

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4.2 Organisations and networks

Council of Europe

The Council of Europe supports cultural heritage activities across Europe. The Council is the architect of the European Conventions and recently published a European Cultural Heritage Strategy for the 21st Century (Strategy 21). It operates a Steering Committee for Culture, Heritage and Landscape (CDCPP) with responsibility for activities related to culture, heritage and landscape, and to follow up on their implementation, monitoring and evaluation[52].

The Council's cultural heritage conventions and declarations describe how the responsibilities of nation states should be implemented. These are ongoing responsibilities requiring a variety of professional competences, as well as political and civil society leadership and participation. The European Cultural Convention (1954), the Convention for the Protection of the Architectural Heritage of Europe (1985), the European Convention on the Protection of the Archaeological Heritage (1992), the European Landscape Convention (2000) and the Convention on the Value of Cultural Heritage for Society (2005) (Faro Convention) all stress the importance of education and training[53]. The Faro Convention encourages Member States to enable cultural heritage to be included at all levels of education, and to strengthen the link between cultural heritage education and vocational training.

Strategy 21 states (II, Scope) that: 'Heritage is a non-renewable common good whose conservation, protection, restoration and enhancement are the responsibility of society as a whole, including in the political, legal and administrative spheres. Consequently, there is a need to define the roles of everyone involved and to give citizens in particular the means of shouldering their responsibilities'[54].

The strategy has three components: the promotion of social participation and good governance (S); territorial and economic development (D); and knowledge and education (K). Several recommendations in the K component concern formal education and training, such as:

- (K4) 'Provide optimum training for non-professional players and for professionals from other sectors with a connection to heritage';
- (K5) 'Diversify training systems for heritage professionals';
- (K8) 'Guarantee the competences of professionals working on the listed heritage';
- (K9) 'Develop study and research programmes that reflect the needs of the heritage sector and share the findings'.

The strategy recommends that training should focus on the relationships between heritage and shared knowledge, covering awareness raising, training and research[55].

The strategy is intended to be implemented by both governmental and non-governmental stakeholders, as well as professionals and civil society. All stakeholders are invited to provide concrete examples of actions to be included as best practices in Strategy 21. This report from the open method of coordination (OMC) workgroup on skills, training and knowledge transfer in the heritage professions adds another layer to a long-standing series of recommendations for enhancing education and training in the field.

[52] Council of Europe, *Recommendation of the Committee of Ministers to Member States on the European Cultural Heritage Strategy for the 21st Century*, 2017. https://www.coe.int/en/web/cdcpp-committee; https://www.coe.int/en/web/culture-and-heritage/home

[53] All of these conventions are listed at https://www.coe.int/en/web/culture-and-heritage/standards

[54] Council of Europe, 2017, p.5.

[55] *European Cultural Heritage Strategy for the 21st Century*, 1, VI.III; knowledge and education component, 2017.

UNESCO

The United Nations has also prioritised the area of lifelong learning. The UNESCO Institute for Lifelong Learning has published several major guidelines on the recognition of non-formal and informal learning [56].

European Union

The EU policy framework on cultural heritage has been recently enhanced by several policy documents. In 2014, the Council of the European Union [57] began by issuing its Council Conclusions on Cultural Heritage as a Strategic Resource for a Sustainable Europe, followed by the European Commission with its Communication, *Towards an integrated approach to cultural heritage for Europe*. Both pointed out the value of cultural heritage for Europe and its 'transversal' presence in many of the EU's policies and programmes, identifying an integrated approach as the best means of obtaining the maximum possible benefits. The Commission's 2014 Communication identified several challenges for heritage professions that needed to be addressed to ensure the sustainability of Europe's cultural heritage. These were: the age pyramid; cuts to public budgets; increasing international demand for heritage expertise; new governance and management models; the new areas of visitor experience, audience development and participatory approaches; cultural mediation; the digital shift; and the lack of professionals in 'traditional' and 'emerging' occupations [58].

The new European policy framework moves towards a holistic approach that is centred on individuals and communities, in line with the Faro Convention [59]. It eliminates the divisions between the tangible, intangible and digital dimensions. It also encourages people to see creation and conservation as elements of the same cycle, as looking after cultural heritage also means promoting its regeneration by supporting contemporary creativeness. It invites the cultural heritage sector, including professionals, to take a new look at its own role in society, which also involves mediating between different disciplines. The Council then highlighted that, for this integrated approach to work, it would be necessary to have efficient multilevel cross-sectoral governance, involving all the different stakeholders [60]. This approach was supported by the Committee of the Regions [61] and the European Parliament [62].

This is the context in which the Council of the European Union has mandated this report in its Conclusions on a Work Plan for Culture 2015-2018. The decision to declare 2018 the European Year of Cultural Heritage [63] kept momentum high with one of its objectives being to 'support the development of specialised skills and improve knowledge management and knowledge transfer in the cultural heritage sector, taking into account the implications of the digital shift'. In its conclusions on the need to bring cultural heritage to the fore across policies in the EU, the Council invites Member States and the Commission to 'foster cooperation among European researchers, professionals and education and training bodies with a view to promoting high quality skills, training and knowledge transfer in the traditional and emerging heritage professions.'

The 10 European initiatives run by the European Commission to implement the European Year of Cultural heritage focused on specialised skills, knowledge management and knowledge transfer in the cultural heritage sector. This included the implications of the digital shift (European Initiative No 8 – Heritage-related skills) [64]. This report contributes to this initiative. Heritage professions are also an important component of European Initiative No 6 – Cherishing heritage: developing quality standards for intervention on cultural heritage [65], led by the European Commission with the International Council on Monuments and Sites (ICOMOS). It aims to produce an updated document on quality principles and guidelines for EU-funded cultural heritage interventions in Europe [66].

56
www.uil.unesco.org

57
Council of the European Union *Council conclusions of 21 May 2014 on cultural heritage as a strategic resource for a sustainable Europe* (2014/C 183/08), 2014

58
European Commission, *Towards an integrated approach to cultural heritage for Europe* (COM/2014/0477), 2014.

59
Council of Europe *Framework Convention on the Value of Cultural Heritage for Society* (Faro, 2005).

60
Council of the European Union *Council conclusions on participatory governance of cultural heritage* (2014/C 463/01).

61
Committee of the Regions, Opinion: *'Towards an integrated approach to cultural heritage for Europe'* (2015/C 195/04), 12 June 2015

62
European Parliament, Resolution: *'Towards an integrated approach to cultural heritage for Europe'* (2014/2149 INI), 8 September 2015.

63
Decision (EU) 2017/864 of the European Parliament and of the Council of 17 May 2017 on a European Year of Cultural Heritage (2018), 2017.

64
See https://ec.europa.eu/culture/content/heritage-related-skills_en
and
https://ec.europa.eu/culture/sites/culture/files/8-skills-for-heritage-10-european-initiatives-factsheet.pdf

65
See https://ec.europa.eu/culture/file/6-cherishingheritage-10-european-initiatives-factsheetpdf_en

66
The key role of heritage professionals has been highlighted at the conference on Cherishing Heritage – Quality Principles for Intervention on Cultural Heritage, organised by the European commission to discuss and validate the document on quality principles: see https://europa.eu/cultural-heritage/cherishing-heritage-quality-principles-intervention-cultural-heritage_en

The European Framework for Action on Cultural Heritage[67] was launched by the European Commission to ensure the legacy of the Year of Cultural Heritage beyond 2018. Under Pillar 4 – 'Mobilising knowledge and research' it includes Cluster of Actions 12 'boosting skills in cultural heritage professions', which will draw on this report.

Building on the recommendations that EU Member State experts presented in December 2018, from 2019 the European Commission will support the initial and continuing development of qualified professionals, and the improvement of knowledge management and transfer in the cultural heritage sector. It will do this through projects, including under the Erasmus+ programme, where the objective will be to map skills that are at risk, gather statistical evidence, define occupational profiles, and develop frameworks for raising awareness and attracting younger generations to heritage professions.

EU training agencies and initiatives

The European Centre for the Development of Vocational Training (Cedefop) develops and implements vocational education and training (VET) policies. It encourages a system of national reports on the status of national VET activity and qualification frameworks, and produces aggregated strategic data at EU level[68].

The European Higher Education Area (EHEA) is a collaboration between Member States with various initiatives to make higher education systems more compatible[69]. The European Association for Quality Assurance in Higher Education (ENQA), functions as a European umbrella organisation to contribute to the maintenance and enhancement of the quality of European higher education[70]. These European organisations have no particular agenda for cultural heritage, and there is no European agency for cultural heritage to advocate these important transversal aspects. There are, however, several influential funding and cooperation programmes from which the cultural heritage sector can benefit, such as Erasmus+, Marie Skłodowska-Curie initiatives and the Horizon 2020 research programme[71]. The Up2Europe's database includes hundreds of projects related to cultural heritage, museums, heritage sites and traditional crafts[72].

Non-governmental bodies

Europa Nostra is a non-governmental membership organisation that aims to protect and celebrate Europe's cultural and natural heritage[73]. One of its central activities has been to manage the prestigious European Union Prize for Cultural Heritage/Europa Nostra Awards for good practices related to heritage conservation, and also recently for outstanding examples of management, communication, research and education[74].

There are many independent associations and networks in Europe in the field of cultural heritage that are concerned with education and training. Many of these are membership-based associations and partners in the European Heritage Alliance. Among the associations that are active in the development of future education and training are: the European Network of Cultural Administration Training Centres; European Museum Academy; European Association of History Educators; International Federation of Landscape Architects; European Association for Heritage Interpretation (Interpret Europe); and European Federation for Architectural Heritage Skills[75].

Engagement and initiatives on education and training vary across these organisations. The activity of the European Association of Archaeologists mainly revolves around scientific publications and conferences, and publishing codes of practice for fieldwork training[76].

The European Association for Architectural Education is a membership-based association for architectural schools in Europe. The association manages a Conservation Network whose activities are structured around recurrent workshops [77]. The network recently participated in an Erasmus+ project called Confronting Wicked Problems, in which the partners adapted architectural education to the new situation in Europe, and investigating and developing new learning goals and teaching methods.

The European Network for Conservation-Restoration Education has a certificate membership for educators who comply with the professional guidelines and qualification requirements developed in cooperation with the European Confederation of Conservator-Restorers' Organisations (ECCO) [78]. This organisation has taken the initiative of providing competence descriptions in European Qualifications Framework levels 6 to 8 for the conservator-restorer profession, which members may transform into learning goals in education curricula or national professional certificates.

There are also international cultural heritage organisations with a strong foothold and impact in Europe through national and scientific committees. The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) is an intergovernmental organisation supporting its Member States to promote the conservation of cultural heritage [79]. It offers, for example, the development of education programmes, tools and resources, as well as scholarships and continuous education for experts. ICCROM runs the project Tracking Trends. It aims to develop a system to 'gather strategic data on sector capacity, knowledge production, and emerging issues of concern to support data informed policies for heritage conservation; and provide evidence of its capacity to contribute to sustainable development' [80].

The **International Council of Museums (ICOM)** is an international non-governmental organisation of museum professionals committed to conservation, with 30 000 members around the world. ICOM's European alliance provides a forum for the exchange of information and cooperation between ICOM's National Committees in Europe. The Committee for Education and Cultural Action (CECA) is one of the oldest ICOM committees, with over 1 000 members who are interested in education and cultural action applied to a particular sort of heritage. CECA manages a journal on educational issues and provides a best practice guide to assist and focus the planning, development and evaluation of education and cultural programmes [81].

The **International Council on Monuments and Sites (ICOMOS)** is a global non-governmental organisation working for the conservation and protection of cultural heritage places. The ICOMOS general assembly has adopted several charters, declarations and guidelines, many of which have had a large impact on cultural heritage practice. Among the ICOMOS Committees is an International Training Committee (CIF), which aims to promote international cooperation in training and education on the protection, conservation and revitalization of monuments and sites [82]. In 1993, the general assembly's meeting in Colombo, Sri Lanka, resulted in the *Guidelines on education and training in the conservation of monuments, ensembles and sites*. ICOMOS is currently focusing on capacity building, which concerns all roles connected with cultural heritage conservation, not just the training and practice standards for professionals [83]. The UK Council on Training in Architectural Conservation operates an online educational resource to help built-heritage conservation professionals and others to develop their conservation skills [84].

77
http://www.eaae.be/eaae-academies/conservation-network/

78
ENCoRE, *On practice in conservation-restoration education*, 2014. Corr, S., Hutchings, J. D., van der Burg, J., Aguilella Cueco, D., Noll Minor, M., Gall Ortlik, A., and Dobrusskin, S., *Competences for access to the conservation-restoration profession*, European Confederation of Conservator-Restorers' Organisations, Brussels, 2011

79
https://www.iccrom.org/

80
https://www.iccrom.org/news/tracking-trends-closing-data-gap-heritage-conservation

81
http://network.icom.museum/ceca

82
http://www.icomos.org/en; http://cif.icomos.org/

83
ICOMOS, *Guidelines on education and training in the conservation of monuments, ensembles and sites*, Columbo, 1993. ICOMOS International Training Committee, Principles for Capacity Building through Education and Training in Safeguarding and Integrated Conservation of Cultural Heritage, 2013 (draft submitted to International Training Committee members).

84
http://www.understandingconservation.org/

4.3 Cultural heritage training content, delivery and quality assurance

Notes on formal training content and delivery

The content of lifelong learning activities, whether in formal or non-formal training, must both maintain and update core competences (the focus of formal training), and add or broaden transversal competences. The latter are generally gained on the job and help the cultural heritage professional to meet requirements that their client or employer has that are legitimately connected to the role. Where core competences are not learned before entering the cultural heritage profession, they should be addressed as a priority through further formal study or provider-accredited continuing professional development (CPD).

The training required to improve the transversal competences of cultural heritage professionals (and introduce focused 'synthesised' skills) should be tailored – in design and delivery – to the relevant audience, rather than focusing on general management or financial skills, for example. Using a sector-populated matrix to aid in the design of formal training, programme standards groups can extract a combination of related core and transversal competences, depending on the skills needs and levels of the learner group.

Best practice in decision-making processes should be central to formal, non-formal and informal training. The application of practical decision-making tools and information modelling from management and economic science would be useful in tackling some of the new and emerging challenges that cultural heritage is facing. These include monitoring and measuring to provide qualitative and quantitative evidence and statistics. Management tools are also useful for recording progress towards making decisions and implementing projects, for example to help facilitate, record and enhance the transparency of decisions (and the reasons for not selecting rejected options). Such management tools need to be simple, clear, flexible and practical, and adapted where necessary to be relevant to cultural heritage.

Long-term planning and forecasting skills should also be developed in formal and non-formal training, both as arguments for funding and mechanisms to better define the goal or scope of programmes.

Training methods must foster a two-way, cooperative influence between ethics, principles and practice, and must be carried out in a multidisciplinary environment [85]. Training in shared decision-making should be prioritised, as meaningful stakeholder inclusion and engagement is a fundamental element of ethical practice. It includes the skills to recognise and expose typical assumptions about stakeholder groups' legitimacy, views, needs and short- or long-term concerns, and to develop a cooperative discourse [86].

Course design and delivery must identify how training is addressed and to whom, in order to design and package didactic materials and promote courses effectively. Ways of imparting or sharing knowledge, skills and attitudes outside of the classroom include: work-based learning and assessment; cross-sectoral exchange; interdisciplinary knowledge-sharing communities of practice; networking; mentoring[87]; on-site assessment; internships; webinars; podcasts; career coaching; delivering or attending presentations; writing or reading articles or blogs; and presenting on broadcast media. Whichever blend of methods are used, it is vital to include and foster a link between learners and approachable expert professionals. Trust in the individuals who are sharing their knowledge, and their availability for questioning and assisting, are key criteria for success.

85
Voices of Culture, Executive Summary p. 2, 2017.
86
Michalski, Stefan, 'Sharing conservation decisions: Tools, tactics and ideas', in Heritage, A., and Copithorne J. (eds.), S*haring conservation decisions – Current issues and future strategies*, ICCROM, Rome, 2018, pp.183-204.
87
See, for example:
https://libereurope.eu/our-activities/leadership/emergingleaders/

Methods of delivery should acknowledge a societal bias towards academisation and seek to counter it. For many roles, training delivery must focus on site, workshop or laboratory training with real-life situations presented to learners. The live issues that create difficulties in cultural heritage professional practice must not be avoided. These include obtaining ethically sourced materials or acknowledging the damage done to cultural heritage by past practices.

Many competences reside within the general population and are often unacknowledged. To foster greater awareness of the value of intangible cultural heritage skills among those who hold them, these skills must considered within the key lifelong learning competence 'cultural awareness and expression'[88]. Intangible cultural heritage skills cannot be imposed, regulated or preserved rigidly, as the mark of success is the voluntary maintenance of living and evolving traditions.

Quality assurance of training providers and content

There should be quality assurance of education programme content, education and training provision (trainers and delivery methods), and professionals' operating standards. Formal training is subject to quality assurance at national level through application of the European Qualifications Framework learning outcomes. Content quality is addressed by validating the learning outcomes proposed by providers and assessing the quality of training delivery. Programmes are required to be revisited and updated periodically by standards development groups, or similar committees of education and professional stakeholders.

Quality assurance is critical to the training of competent cultural heritage trainers. To conform with ethical practice, the programme content should be within the boundaries of the trainer's competence and delivery should be formally assessed. Many trainers are also cultural heritage professionals in private practice. Not all those who share their knowledge with learners have professional training qualifications: part-time trainers should upskill in pedagogy as part of their CPD obligations.

The participating countries' SWOTs analyses have identified quality assurance weaknesses that affect training content and delivery, and which should be addressed. Many of these have been referenced elsewhere in this report, and include:

- A lack of occupational standards for cultural heritage professions and assessment frameworks;
- too few qualified and expert trainers coupled with greater administrative workloads for trainers;
- a shortage of subject matter experts to advise on programme development;
- old-fashioned, inflexible teaching methods, which do not teach digital skills or combine them with traditional knowledge;
- reduced time spent teaching practical skills;
- little emphasis on conservation science;
- insufficient use of interdisciplinary training;
- absence of collegiate and didactically stimulating training environments;
- few centres of excellence;
- insufficient emphasis on cultural heritage principles, standards and norms;
- absence of cultural heritage content in 'general' built-environment and culture training programmes;
- intangible cultural heritage absent from training content; and
- limited contact or co-ordination with businesses or the State to reduce the knowledge and skills gaps between training and professional life.

Non-formal training is, by its nature, descriptive rather than prescriptive: there is no require-ment for the content or delivery to meet an externally mandated standard. This can be a positive characteristic – lifelong learning through non-formal channels can be the quickest to react to internally or externally driven changes. However, cultural heritage professionals should be able to rely on the veracity and completeness of the content, and should be able to learn it well enough through their chosen delivery method and ability of the trainer.

The SWOTs have revealed a common need for quality assurance principles or agreed oper-ating benchmarks, based on role profiles and best practice requirements. This is to assure training stakeholders (trainers, providers of training content and delivery, and professional representative bodies) that their work meets and maintains the necessary standard.

5 KEY PHASES OF DEVELOPMENT
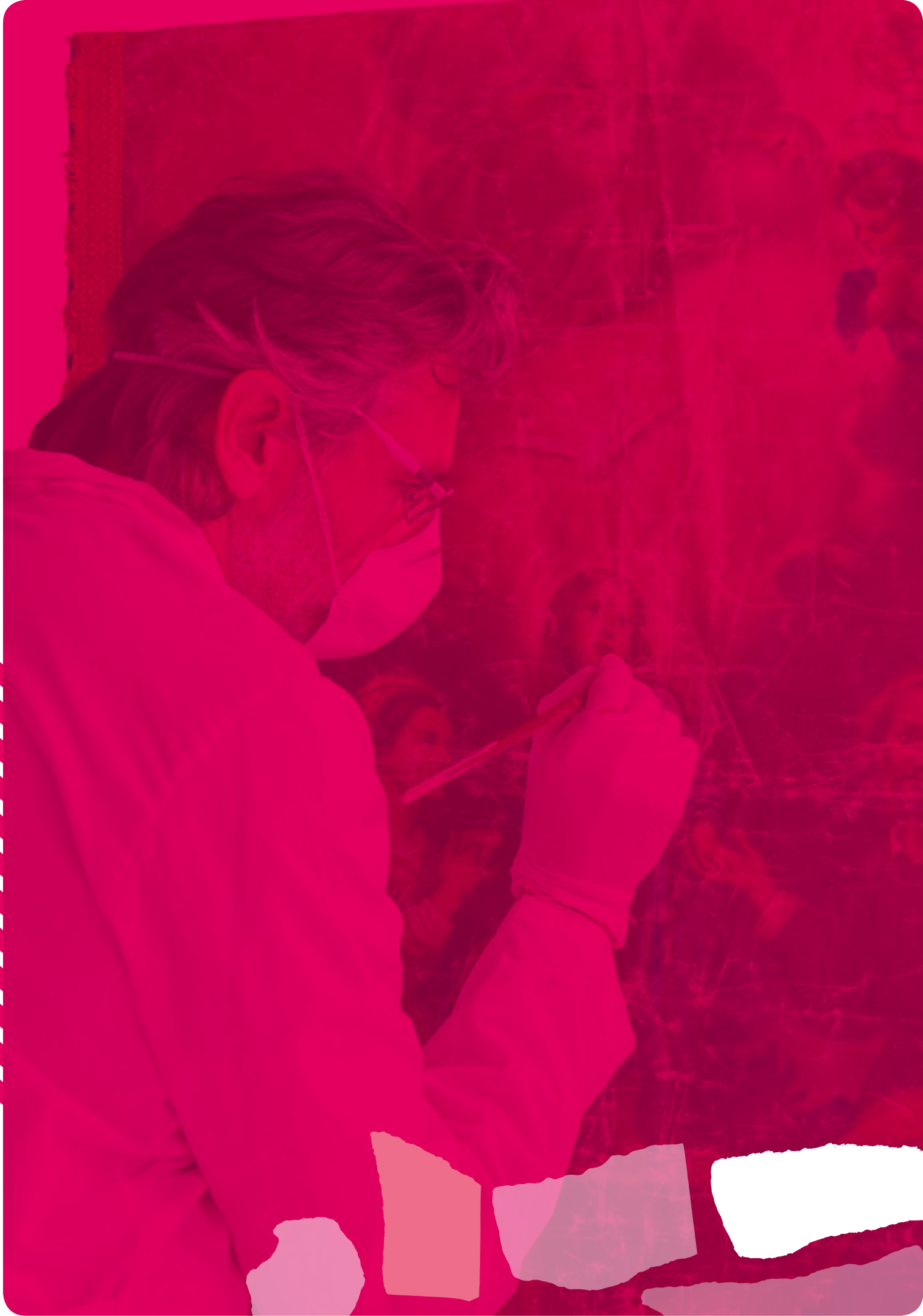
5 KEY PHASES OF DEVELOPMENT

5.1 Introduction

As mentioned in the general introduction, the open method of coordination group decided to concentrate on four phases of development: awareness raising, education and training, lifelong learning and knowledge transfer.

Awareness raising is about the first steps of people coming into contact with cultural heritage. Often, young children in school who develop an interest ask their family to visit places that are of cultural heritage interest. Education and training deals with the qualifications needed to be a cultural heritage professional, but education does not stop there. Once in the job, employees want to develop their knowledge and skills, and many professionals want to specialise. They can also deepen and broaden their competence through lifelong learning. The final phase concerns professionals who have become specialised experts. Their expertise is so valuable that it should be passed on to younger generations. That way, each timeline forms a circle, from specialised experts to young people having their first contact with cultural heritage.

This chapter of the report focuses on these four phases and addresses questions such as what the needs of these professionals are, what training is available and what competences are required. Each main section of this chapter includes recommendations that aim to improve the type, extent and quality of skills, training and knowledge transfer available to professionals during their career and lifetime.

5.2 Raising awareness

5.2.1. Introduction

This section addresses raising awareness and interest in cultural heritage itself and in the professional field. It focuses on children before they start their basic education and explores the subject of young people during their educational life, and adults in their general approach to heritage during their daily life and recreational time. The goal is to understand how heritage awareness is created, how it can be improved, and how this can engender interest and create a desire to access the training that would lead to becoming a heritage professional.

Through increased participation by these audiences (children, young people and adults), it is hoped that they will benefit from greater enjoyment and understanding of cultural heritage and its values. Participating in the creation of cultural heritage awareness can lead to an increased perception of its value, be it economic, social, environmental or cultural. It can also strengthen our personal identity, sense of belonging and community citizenship. This sense of value should inspire a greater degree of care, ensuring better preservation of heritage for the enjoyment and understanding of future generations. It can also inspire a strong interest in heritage as a source of high-quality employment for young people and adults (including those in long-term unemployment) and foster a sense of guardianship of Europe's precious and irreplaceable heritage. The following recommendations have been produced by the working group on awareness raising.

5.2.2. Recommendations

To help people like Tom and his family to discover the world of heritage and stimulate an interest in cultural heritage work, the group makes the following recommendations.

1. Invest in educational departments and improve the pedagogical skills of cultural heritage professionals to enable them to reach out to a general (and especially young) public. Sharing and developing pedagogical expertise may be achieved through cooperation between (cultural and heritage) institutions.

2. Invest in managing and incentivising volunteers as the potential heritage professionals of the future, by offering them activities, learning opportunities and discounts. Pay special attention to the needs, capacities and limitations of volunteers, to ensure they can develop and be given the right kind of work, which encourages lasting commitment.

3. Stimulate the recruitment and management of volunteers by offering funding. This enables cultural heritage institutions to invest in volunteers.

4. Develop digital knowledge and intergenerational exchange projects, in which young people teach older experts how to use digital tools, and the experts pass their knowledge about heritage on to young people. This creates interactive projects to reduce the digital gap between generations.

5. Strengthen the dialogue and communication skills of heritage professionals, managers and administrators who deal with the public to attract more participants to activities and exhibitions.

6. Stimulate cultural heritage education at school. Use innovative and interactive methods of learning, like storytelling, gamification and learning by discovery for a more personal transmission of heritage by digital means. Review the success of these methods to learn what motivates and demotivates young people about cultural heritage.

7. Urge ratification of the Faro Convention and coordinate Member States' work with the Faro Convention Action Plan, in order to promote a wider understanding of heritage and its relationship to communities and society.

5.2.3. Discussion

This next section looks at how the recommendations listed above were devised and seeks to explain the questions that were raised and the conclusions reached on this topic.

1. Invest in educational departments and improve the pedagogical skills of cultural heritage professionals

Heritage professionals have considerable knowledge in the field of cultural heritage, particularly within their own specialisations. The ability to pass on this knowledge to the public (specifically to young people), and to involve and interest them in heritage, demands skills that are not part of a heritage professional's formal education. Pedagogical skills enable heritage professionals to understand what motivates and demotivates young people, and to bring educational measures into play. As stated in the SWOT, educational activities taking place in a historical setting should be seen a fundamental element in the system of caring for historic and cultural monuments, and for the guardianship of cultural heritage in general.

In The Netherlands, a group of school children, brought together in the Kidsmindz project[89], were asked to share their ideas on Dutch heritage policy and especially on how to attract young people to heritage. They responded that what attracts them to cultural heritage is when it is shown from a different, innovative angle. A suggestion they came up with was to build a glass bridge in a church, which would give them the opportunity to see the historical building from a new, spectacular angle. Good practice from the Netherlands also shows that cultural heritage building contractors[90] can make a difference in generating interest in heritage among young people, but they do need pedagogical skills to know how to do so. The project Monuments Are Amusing[91] in the Czech Republic is a good example of how to help cultural heritage organisations develop their educational role.

Considering that small cultural heritage organisations in particular do not always have the means to hire professionals with pedagogical skills, or to develop the skills of their employees, cooperation between organisations to share this knowledge could help overcome financial barriers.

2. Invest in the managing and incentivising volunteers

Citizen participation is part of the democratic process. It also gives people who have the time to offer a way to play a useful and active part in society. The SWOT and the discussion about this topic have shown that engaging volunteers in cultural heritage projects is considered both an opportunity and a threat at the same time. Some aspects of volunteering are considered a strength in one country, but a weakness in others, particularly the physical interaction between volunteers and heritage objects. Clearly, volunteers do not have the knowledge and training that professionals have, so volunteers may, for example, damage museum objects while handling them as a result of not knowing how to handle them correctly. That is why it is important to manage volunteers well, carefully consider the type of activities that are appropriate for them, and provide ongoing and supportive guidance. It is crucial that participants and volunteers are managed in a professional way, and that they receive proper instruction and support.

89
http://www.kidsmindz.nl/

90
https://www.erfgoedwerkplaats.nl/2018/04/17/
aannemers-gezocht-1-500-scholieren-bezoek-
en-restauratie-kerktoren-zutphen/

91
https://www.pamatkynasbavi.cz/cs

The Museu Nacional do Azulejo in Lisbon, Portugal, is a very good example of how the management of volunteers can be turned into a core activity for a museum. They take very good care of their volunteers, giving them develop opportunities, while also being aware that they might become their future heritage professionals or pass on their knowledge to a younger generation.

This type of learning depends on the intention of the learner and does not automatically lead to the certification of acquired knowledge and skills. The skills and attitudes developed by volunteers in this kind of non-formal learning include: interpersonal skills, teamwork, self-confidence, discipline, responsibility, planning skills, coordination and organisation, project management and the ability to solve practical problems. It enables people to enjoy heritage while acknowledging their individual and collective responsibility for it as part of the democratic process. The methods used are very different from the pedagogy used in formal education. In the case of non-formal education, the emphasis is on learning by action, peer learning and volunteering. Developing these skills helps volunteers to progress towards becoming heritage professionals.

3. Stimulate the recruitment and management of volunteers by offering funding

Policymakers can demonstrate the value of heritage in a practical way by making it a priority to fund cultural heritage organisations to engage volunteers. Small amounts of seed funding can help to encourage flexible and digital forms of volunteering, aid the involvement of more and younger members of the public, and ensure that heritage is an important aspect in school education. The Welsh Cynefin project operates online volunteering tasks including transcribing, geo-referencing and clipping, and organises volunteering workshops across Wales [92]. Stimulating citizen participation can be considered a government responsibility.

Examples seen during visits to Lisbon and Leuven (Belgium) illustrate that constructive volunteer management requires time and staff. Cultural heritage organisations, often with small staff and budgets, have difficulties developing this with existing resources. Targeted funding schemes would help to support the management of volunteer schemes, and could especially promote onsite training and operations where volunteers work alongside professionals.

[92]
https://www.library.wales/discover/projects/end-of-project/cynefin/cynefin-local-projects/

4. Develop digital knowledge and intergenerational exchange projects

The knowledge transfer survey that this group carried out (see Appendix I) shows that professionals are not currently using digital methods of knowledge transfer. Young people, on the other hand, live in a digital world and use the newest digital tools. It is a challenge to persuade older experts to adapt to digital ways of learning. One solution could be to call the process 'knowledge exchange' instead of 'knowledge transfer', in order to make it a two-way transfer of knowledge. The professionals pass on their knowledge of cultural heritage, and the younger people pass on to them their digital knowledge and skills.

The Italian project I Love Cultural Heritage[93] is a good example of the effect that younger people can have on the digital products of cultural heritage organisations. The participants developed board games, e-books, audio guides, videos, interactive and emotional maps, design objects, xylographs, didactical routes, websites, promotional tourism projects, virtual reconstructions, catalogues and exhibitions, monitoring every phase of the process closely. All of these useful outputs are now resources for heritage professionals in their work. Another interesting example that embraces digital technology is the Scottish building conservation centre, the Engine Shed, which serves as a central hub for professionals and the general public to learn about heritage[94].

5. Strengthen the dialogue and communication skills of heritage professionals, managers and administrators

In order to stimulate citizen participation, it is important to be inclusive and to make people feel welcome. Cultural heritage organisations should aspire to include all members of society. An important aspect of being inclusive is the ability to interact with the public and enter into a dialogue with all communities, especially those that do not normally visit heritage sites. Communication skills can help start that dialogue, while feedback strengthens it. Feedback enables an organisation to improve accessibility in many areas, for example by making changes to exhibitions or the information available online.

In summary, heritage professionals can contribute to awareness raising through the process of communication, by inquiring, determining and understanding cross-sectoral needs and facilitating intellectual and physical access to cultural heritage. This requires professionals to have transversal skills such as respect for diversity, a thorough knowledge of the potential target groups and their needs, and consideration of how citizens will interpret aspects of cultural heritage. It requires professionals to demonstrate listening skills and creativity in order to attract and broaden the audience and encourage them to become actively involved. Demystifying heritage makes it easier to access and the goal is achieved when a group of people develop a relationship and familiarity with a shared heritage.

93
https://ibc.regione.emilia-romagna.it/amm-trasparente/sovvenzioni-contributi-sussidi-vantaggi-economici/bandi/concorso-io-amo-i-beni-culturali-viii-edizione

94
https://www.engineshed.org/

6. Stimulate cultural heritage education at school

Primary and secondary school curricula are essential instruments for teaching young people about cultural heritage from a very early age. At this stage, the first skills can be developed, including basics such as looking, analysing, understanding and appreciating. These basic skills help children to understand what heritage professions and crafts are about, and stimulate the understanding of our shared history and the world in which we live. This heritage education can be part of an official school curriculum or organised as additional activities. The use of innovative and interactive methods of learning, such as storytelling, gamification and learning by discovery is very important to achieve a more personal transmission of heritage.

7. Urge ratification of the Faro Convention and coordinate Member States' work with the Faro Convention Action plan, in order to promote a wider understanding of heritage and its relationship to communities and society

According to the Faro Framework Convention, the recognition of heritage is conceived as a shared responsibility. Heritage is no longer limited to those elements that are officially recognised by as such by national authorities and experts (protected heritage). It now includes those elements that are regarded as heritage by the local population and local authorities. This development prompts new, participatory and more collaborative approaches to management. In order to respond to that change, governments should ratify the Faro Convention and develop a Faro Convention Action Plan. Such an action plan enables countries to translate the Faro principles into practice and helps them to develop Faro projects using a methodology.

Two examples of projects in the spirit of the Faro Convention are the botanical garden at the National Palace of Queluz in Sintra, Portugal, and Gunnebo House in Sweden. Both examples are very open to public involvement, so they illustrate and reinforce the positive attitudes of the general public towards cultural heritage (and ecology). They involve communities, exhibit the results of their work in public gardens and encourage people to interact actively with the environment as a whole. The National Palace of Queluz received the 2018 Public Choice Award in the European Union Prize for Cultural Heritage/Europa Nostra Awards, in the category of Conservation [95], rewarding it for involving the local community. Gunnebo House is one of the most innovative initiatives in the EU when it comes to making use of and developing a historic setting. The aim of the project was to convey older techniques to today's craftsmen, under the master-apprentice principle and by opening the project to public involvement.

95
http://www.europeanheritageawards.eu/winners/botanical-garden-national-palace-queluz/

5.2.4. CASE STUDIES:
Examples of good practices in awareness raising

1 | Monuments Are Amusing (Památky nás baví) project, Czech Republic.

2 | Adopt a Monument, Heritage Council, Ireland.

3 | I love Cultural Heritage (Io amo i beni culturali) Italy, secondary schools.

4 | Contractors Wanted project (Aannemers gezocht), Municipality of Zutphen in the Netherlands.

5 | Volunteer programme for future heritage professionals at the Museu Nacional do Azulejo, Lisbon, Portugal.

6 | National Programme 'Otherwise School,' Romania.

7 | Electronic Databases, Slovakia.

8 | Katarinka project: summer camps for young people, Slovakia.

9 | 'EnSeñas' programme for cultural heritage education in school curricula, Canary Islands and Cantabria Autonomous Communities of Spain.

10 | Cultural Association: craftsmanship of lime production, UNESCO Good Safeguarding Practices (2011), Andalusia, Spain.

11 | National Plan for the Safeguarding of Intangible Cultural Heritage: crafts and call for grants for projects to safeguard intangible cultural heritage in Spain, 2018.

12 | European Day of Conservation-Restoration 2018.

13 | Carillon Culture, Belgium: OMC study visit.

14 | Itinera Nova, Belgium: OMC study visit to the volunteer project.

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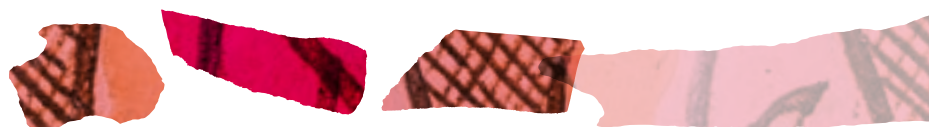
Monuments are Amusing (Památky nás baví): five special methodologies, one of them for pre-school children (3–6 years old)

CZECH REPUBLIC

The educational programmes for Czech cultural heritage help various target groups to discover cultural heritage, including pre-school and primary school pupils. The successful project, Monuments are Amusing, stems from the wider research project 'The educational role of the National Heritage Institute: education as a key tool for improving Czech heritage conservation', which also sets the principles of working with various target groups in the field of cultural education. The project is based on selected monuments across the Czech Republic.

The European Commission awarded it the prestigious European Union Prize for Cultural Heritage/Europa Nostra Awards in 2017.

⏻ https://www.pamatkynasbavi.cz/cs
http://www.europeanheritageawards.eu/winners/educational-programme-czech-cultural-heritage/

© Magdalena Fantová

2

Adopt a Monument, Heritage Council

IRELAND

The Adopt a Monument scheme, which started in 2015, helps communities to become actively involved in the conservation and interpretation of their local archaeological and cultural heritage sites.

The work not only increases community involvement in and understanding of local history, it also offers opportunities for collaboration and participation in local development, and helps to boost local tourism, business and employment opportunities. Communities from 10 counties around Ireland are presently involved with monuments as diverse as mediaeval forts, ruined churches, a mill race, an 18th-century walled garden, a 19th-century coalmine powder-house and a 1930s handball alley. The Heritage Council has published helpful advice for communities that wish to manage and care for sites: *Guidance for community archaeology projects* (prepared by Abarta Heritage, 2017).

⏻ https://www.heritagecouncil.ie/projects/adopt-a-monument
https://www.heritagecouncil.ie/content/files/Guidance_for_community_archaeology_projects.pdf

© The Heritage Council of Ireland (Áras na hOidhreachta)

3 I love Cultural Heritage (Io amo i beni culturali): call for proposals to increase the value associated with cultural heritage

ITALY (Emilia-Romagna region)

Since 2011, the Emilia-Romagna region's Institute for Cultural Heritage (Istituto per i beni artistici, culturali e naturali) has been promoting the competition, I love Cultural Heritage: a call for proposals to increase the value attributed to cultural heritage. It is aimed at secondary schools, museums, libraries and archives in Emilia-Romagna. The initiative is as an opportunity for students to be actively involved in discovering and enhancing the cultural heritage of their region. The different editions of the competition have involved thousands of students who have worked with hundreds of cultural institutions, organisations and associations from all over the region. Museums, archives and libraries are institutions where students can work as a group, learn, create, play and make use of their learned competencies and talents. Each one of them is given the opportunity to play an active role in the achievements of a cultural project; each one understands the role they can play in taking care of a cultural asset and how this can impact future generations. Students are able to actively experiment with the museum, the archive and the library as areas for active learning.

Over the years, students have come up with extremely original and innovative projects: board games, e-books, audio guides, videos, interactive and emotional maps, design objects, xylographs, didactical routes, websites, promotional tourism projects, virtual reconstructions, catalogues and exhibitions, monitoring every phase of the process closely.

⏻ https://ibc.regione.emilia-romagna.it/amm-trasparente/sovvenzioni-contributi-sussi-di-vantaggi-economici/bandi/concorso-io-amo-i-beni-culturali-viii-edizione

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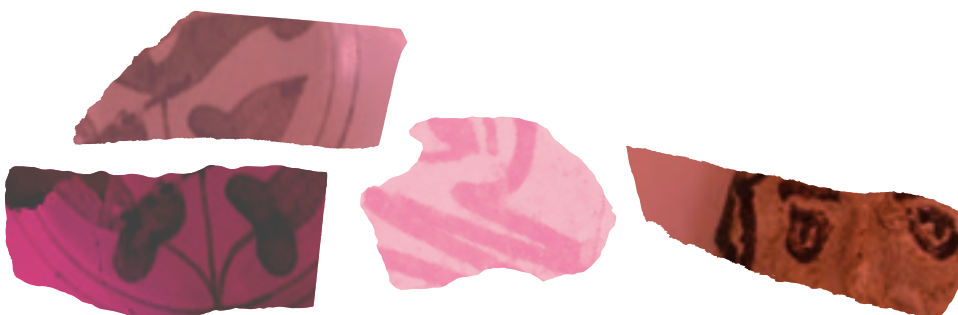
Contractors Wanted project (Aannemers gezocht)

THE NETHERLANDS (Municipality of Zutphen)

Project by the Municipality of Zutphen, winner of the BNG Heritage Prize 2017 for the municipality with the best heritage policy and activities.

Pupils in the last year of primary school and first two years of secondary school saw what it is like to be in the shoes of a contractor during an educational visit to a church in Zutphen. They were allowed to climb the scaffold, touch construction materials and build an arch. They learned about construction, restoration and safeguarding heritage in a practical way. One of the assignments was to develop a masterplan for how the church could be used in future. A jury chose the three best ideas (a laser-game centre, a restaurant with a view, or an old people's home and artists' residence combined).

⏻ https://www.erfgoedwerkplaats.nl/2018/04/17/aannemers-gezocht-1-500-scholieren-be-zoeken-restauratie-kerktoren-zutphen/

© Municipality of Zutphen

5

Volunteer programme for future heritage professionals at the Museu Nacional do Azulejo
PORTUGAL (Lisbon)

Portugal's state museums encourage volunteering by young people focused on developing future cultural heritage professionals.

Being a volunteer at museums, monuments and historic sites is an excellent opportunity to participate in the safekeeping of cultural heritage and gain professional skills. These opportunities give volunteers the chance to have contact with the cultural world from inside it. Being a volunteer is an opportunity to be part of a lively, creative and active community. At the Museu Nacional do Azulejo (National Tile Museum), the Bringing Back into View (Devolver ao Olhar) project is cataloguing historic tiles with the help of 12 volunteers so that they can be added to the museum's collections and exhibitions.

⏻ http://www.museudoazulejo.gov.pt/en-GB/default.aspx

© Museu Nacional do Azulejo

6 National Programme 'Otherwise School' (pupils 6-10 years old)
ROMANIA

Order No 5034/29.08.2016, issued by Romania's Ministry of Education and Research in 2016, set up the National Programme "Otherwise School". It aims to help develop competence in learning and socio-emotional skills among pre-school children (6-10 years old).

The programme consists of five consecutive days during the school year, and each educational institution decides on the schedule, according to the Order from the Ministry of Education and Research.

The museums are 'invaded' by teachers and school children for visits or activities related to heritage. Some of the institutions cannot manage all of the requests, but it is considered a successful programme because more than 100 000 children have had the opportunity to access culture.

© Mariana Iuliana Grumazescu

Electronic databases
SLOVAKIA

Ministry of Culture organisations are constantly developing electronic databases: electronic encyclopaedias, virtual galleries and databases including inventories, collections and documentation. These databases improve the accessibility of culture, disseminate the results of work by particular institutions, help share information among people involved in the heritage sector and enable members of the general public that are interested in cultural heritage to get more information, etc.

⏻ Database of the Monument Board of Slovakia:
https://www.pamiatky.sk/sk/page/databazy

Databases of the Slovak National Library:
http://www.snk.sk/sk/zbierky-a-zdroje/elektronicke-informacne-zdroje-a-databazy.html

Digitised Cultural Heritage of Slovakia: https://www.slovakiana.sk/

Traditional Folk Culture Fund: http://fondtlk.sk/en/search/

The Traditional Folk Culture of Slovakia, electronic encyclopaedia:
http://www.ludovakultura.sk/index.php?id=11

The Traditional Folk Costumes of Slovakia, electronic encyclopaedia:
http://www.uluv.sk/sk/encyklopedie/tradicny-odev-slovenska/
http://fondtlk.sk/en/search/

Masters of Traditional Crafts virtual gallery:
http://www.uluv.sk/sk/encyklopedie/vyrobcovia/

Products of the Centre for Folk Art Production virtual gallery:
http://www.uluv.sk/sk/encyklopedie/vyrobky/

Online catalogue of visual arts by the Slovak National Gallery:
http://www.webumenia.sk/

Manuals for owners of cultural monuments:
http://www.promonumenta.sk/index.php?id=3

8

Katarinka project:
summer camps for young people
SLOVAKIA

The St. Catherine's Monastery preservation project is designed for young volunteers aged 17 and from all over Slovakia. The four two-week summer camps in July and August take place every year. The project started in 1994, and is planned to last until conservation of the neglected sites is complete. KATARINKA n.g.o. (a civic association) works in cooperation with the Association of Christian Youth Communities (ZKSM) – an apolitical youth organisation based in smaller Christian communities all over Slovakia. The goals of the project are:

- the preservation and conservation of the ruins plus their complex archaeological, historical preservation and geophysical research;
- clearing and maintaining the surrounding Katarina nature reserve (keeping order education path elimination of fires);
- giving young people a chance to spend two weeks immersed in nature and the wilderness, away from civilization;
- proving that enthusiastic and determined young volunteers are able to preserve valuable cultural monuments.

Since the project began, hundreds of young people have gained experience with several traditional built crafts. Many of them would like to choose heritage professions in their future careers.

© Pavol Ižvolt

9 'EnSeñas' programme for cultural heritage education in school curricula

SPAIN (Autonomous Communities of the Canary Islands and Cantabria)

The Canary Islands and Cantabria, two of Spain's Autonomous Communities, include natural and cultural heritage in all levels of education. Their main aim is to help students understand the need to actively preserve natural and cultural heritage. The EnSeñas programme began in the 2016/2017 academic year under the auspices of the Directorate-General for Cultural Heritage of the Ministry of Tourism, Culture and Sport, and the Innovation Service of the General Office for Planning, Innovation and Educational Promotion of the Government of the Canary Islands' Department of Education. It responded to a demand from the population of the Canary Islands to incorporate historical, cultural and patrimonial values into formal, non-formal and informal education.

Article 5.2.m of the Law on Education in the Canary Islands establishes the importance of promoting knowledge, respect and appreciation for the Canary Islands' cultural and natural heritage, to create a more harmonious coexistence between citizens and the environment.

⏻ http://www.gobiernodecanarias.org/educacion/web/programas-redes-educativas/progra-mas-educativos/ensenas/

© Christian Perazzone

10 Cultural Association: craftsmanship of lime production, UNESCO Good Safeguarding Practices (2011)

SPAIN (Morón de la Frontera, Autonomous Community of Andalusia)

Enhancing associationism to protect and promote crafts at risk, such as the traditional craftsmanship of lime production in Morón de la Frontera (Seville, Andalusia). The project was added to UNESCO's register of Good Safeguarding Practices in 2011.

The traditional practice of lime production was a source of employment in Morón de la Frontera, and a key part of its identity. When production was eclipsed by industrial lime, kilns fell into disuse and the transmission of knowledge ended. The project's primary goals are to raise awareness of the practice and importance of lime production, and improve living conditions for craftspeople. The Cultural Association of the Lime Kilns of Morón was established for this purpose, and established an ethnographic centre and living museum that displays the craft process in situ. The project has involved stakeholders and residents of Morón de la Frontera in its decision-making.

⏻ http://www.unesco.org/culture/ich/en/BSP/revitalization-of-the-traditional-crafts-manship-of-lime-making-in-moron-de-la-frontera-seville-andalusia-00511

© Museo de la Cal de Morón, Manuel Gil-Ortiz.

11 National Plan for the Safeguarding of Intangible Cultural Heritage: crafts and call for grants for projects to safeguard intangible cultural heritage

SPAIN

The general objective of the National Plan is to safeguard intangible cultural heritage, including traditional crafts, to guarantee its viability. This includes identification, documentation, research, preservation, protection, promotion, valuing, transmission and revitalisation actions.

Given the complexity of this type of cultural heritage, as well as the high vulnerability of its values, and the scarce support for its safeguarding, this National Plan has several objectives. One is to increase social awareness and achieve institutional recognition within the framework of cultural policies for intangible cultural heritage, and the crafts considered to be an Asset of Cultural Interest.

⏻ http://www.mecd.gob.es/planes-nacionales/mediateca/plan-inmaterial.html

Grants schemes operate for projects to safeguard intangible cultural heritage: the beneficiaries can be public authorities (Autonomous Communities or local entities) or foundations, associations, etc. The purpose of this line of grants is to: safeguard intangible cultural heritage, especially any that is in danger; promote its transmission, dissemination and knowledge about it; and support projects that help to promote its social function

⏻ https://ipce.mecd.gob.es/noticias/2018/2018-09-24-ayudas-inmaterial.html

© Pascal Janim

Spinner Dyers with esparto (dried) grass

12 European Day of Conservation-Restoration
EUROPE

To celebrate the European Year of Cultural Heritage, the European Confederation of Conservator-Restorers launched a week to invite European citizens to their workplaces: museums, ateliers, private studios, university studios and conservation-restoration sites at monuments. They explained their conservation-restoration projects to the public using case studies over the course of the week.

The objectives are:
- to raise awareness of the key role of conservation-restoration in safeguarding cultural heritagewith policy makers and civil society (public);
- to share knowledge of the complex activity of this discrete profession as an applied science which includes humanities , natural science, and intervenes with a code of ethics in the many fields of cultural heritage;
- to highlight the respect and discovery of the values for society through the interventions beyond artists and crafts for ensuring the integrity of the material witness to guarantee the authenticity of cultural heritage for identification process of the individual;
- to make transparent the international quality standards of the profession on this high level of competences for safeguarding Cultural Heritage through member associations in 22 European states; and
- to clarify how this expertise is of value to sustainable tourism and a catalyst for innovation in science for heritage.

⏻ Trama project (Spain):
https://asociacion-acre.org/proyectos/trama-project
http://www.ecco-eu.org/eych-2018/european-day-of-conservation-restoration

© Jimena Calleja

Trama project at the European Day of Conservation-Restoration, Asociación de Conservadores Restauradores de España (ACRE), Spain

13 Carillon Culture: OMC study visit
BELGIUM

The art of making music with bells (carillon) is performed by 'carillonneurs', traditionally on market and festive days. The programme to safeguard carillon culture exists in 76 Belgian cities and villages and 30 countries worldwide. The primary objectives are:

- to preserve the components of historic carillon culture (practices, repertoire, instruments, music, oral and written history);
- to ensure the continuity and sustainable development of carillon music as a living heritage that fosters cultural identity and social cohesion; and
- preserving and restoring historic carillons with many formerly silent carillons now active once more.

Transmission is secured by a number of educational initiatives, of which the Mechelen carillon school is the most important. Efforts have also been made to revitalise the carillon, including promoting new arrangements, compositions and genres of music.

The programme combines respect for tradition with a willingness to innovate, constantly seeking new ways to safeguard carillon culture in contemporary society. It also promotes proven best practices, as well as a deep respect for local players in the field, building on cooperation among actors.

⏻ https://ich.unesco.org/en/BSP/safeguarding-the-carillon-culture-preservation-transmission-exchange-and-awareness-raising-01017

© Luc Rombouts

14

Itinera Nova:
OMC study visit to the volunteer project
BELGIUM (Leuven)

An example of working with volunteers was demonstrated by the group visit to the Itinera Nova project at the City Record Office in Leuven. Key lessons learnt were:

- allocate resources to recruiting and managing volunteers;
- clearly define the role of the volunteer;
- understand the motivations of volunteers, which can be social and educational;
- recognise volunteers' contributions;
- create flexible opportunities so people can be involved in a variety of ways: long- or short-term, regular or flexible times, or working remotely (e.g. Levan translators working online worldwide);
- ensure the quality of volunteers' work through training and monitoring by specialist professionals;
- motivate and retain volunteers by supporting networking (e.g. digitally on social media) and arranging social events for volunteers to meet up;
- communicate how volunteers, as individuals and as a group, contribute to the whole organisation.

The Itinera Nova project has a community of 35 volunteers digitising the 1 128 registers of the Bench of Aldermen, 1362-1795.

⏻ https://www.itineranova.be/in/home?_lang=eng
www.schepenbankregisters.be

In the UK, a large volunteer sector has led to the development of best practice in managing volunteers through National Occupational Standards, training programmes and qualifications. There were an estimated 615 500 historic environment volunteers in England in 2016-2017 (DCMS, Taking Part Survey).

⏻ https://www.volunteernow.co.uk/?s=national+occupational+standards
https://www.nationaltrust.org.uk/projects/volunteer-management-traineeship

© J. van Leeuwen

5.3 Education and training

5.3.1 Introduction

This section concerning formal education and training looks at the means available to acquire competences in Europe in order to start working as a cultural heritage professional. It is about how to become a professional in the field of cultural heritage. What are the cultural heritage professions? What is the status of formal education and training in the cultural heritage sector? How do people access the field and with what qualifications? How do we bridge the gap between education and the labour market? Are there other gaps? The method draws on the SWOT analysis, and a review of research and sectoral reports at EU level. It particularly looks at challenges and opportunities, which explains the recommendations on formal training and education.

5.3.2. Recommendations

To help professionals like Miriam and her friends to develop their careers in the cultural heritage sector, the group makes the following recommendations.

1. Develop a database at EU level on occupational profiles (knowledge and skills) in cultural heritage professions, in accordance with the European Qualifications framework. Encourage Member States to implement a national qualifications framework for cultural heritage professionals, using the database profiles.

2. Develop a portal that shows existing cultural heritage professions; the competences and skills needed for these professions; and the options for formal and vocational training, learning resources and formats, tools for formal education and training, skills acquisition and knowledge transfer. The portal should be managed and developed by a stable and qualified organisation with sufficient resources. This portal would act as a tool for mapping higher education and vocational education and training courses across Europe that are related to cultural heritage.

3. Explore activities at European and national level that aim to bridge the gap between education and the labour market. Connections with creative industries should be encouraged.

4. Promote cultural heritage apprenticeships, work-based learning and the dual education system, and bridge the gaps between academic and vocational training in higher education. Also encourage the establishment of more European centres of excellence based on existing centres, to connect research and practice in different fields of cultural heritage, and promote them on the recommended EU portal.

5. Support the mobility of cultural heritage apprentices, students, university teachers, craft instructors and other heritage professionals in Europe.

5.3.3. Discussion

CONTEXT

European Member States have developed common frameworks for Vocational Education and Training (VET) and Higher Education (HE) to equip people with the knowledge, skills and competences required in most occupations. It was not possible to map existing (or accredited but not currently offered) cultural heritage-focused VET and HE courses in the EU as part of this study, but it is a key recommendation.

The importance of fostering education, training and knowledge transfer in cultural heritage has long been acknowledged in Europe. Cultural heritage professional-development policies and sector standards are influenced by a number of European and international bodies. Important conventions, charters and guidelines for best practice in training and in professional life have been initiated by official and non-governmental organisations. These initiatives form the context for formal education and training content and delivery in the cultural heritage sector.

This section discusses education and training frameworks, sector organisations and networks that influence standards, and quasi-regulatory cultural heritage standards that inform the content of formal programmes. It also examines matters to do with content and delivery in formal training.

CHALLENGES

The review of standards, frameworks, organisations and networks for education and training in cultural heritage professions undertaken for this report shows strong commitment and innovative initiatives. Nevertheless, the SWOT analysis enabled the open method of coordination workgroup to identify some major challenges. These challenges are connected to seven salient weaknesses and threats evident in Europe today.

1. Skills at risk

There is insufficient awareness of the fact that cultural values can only be conserved through knowledge of craftsmanship. Several important skills in cultural heritage are at risk of disappearing unless action is taken to ensure their transfer to the next generation. Craft careers nowadays usually focus on contemporary production, materials and technologies. The practical knowledge of traditional crafts in tangible heritage, such as straw-roof thatching, or traditional plastering, is decreasing among active professionals. Also, several crafts relating to the restoration and maintenance of cultural heritage are in danger, including traditional boatbuilders, gilders and archaic musical instrument makers. Regional variations in the application of skills and materials used make craft preservation more difficult, as does the loss of material resources through modern agricultural practices or gentrification, for example.

The same issues arise with several intangible skills related to archaic traditions in agriculture and fisheries, or archaic singing.

On the other hand, business skills and new digital heritage skills are underdeveloped in the heritage professions. There is a growing gap in these competences between the few professionals who are familiar with new technologies and the majority that are lacking digital competences.

2. Educational gaps

Today, there are either minimal or sometimes no formal education programmes for most of the heritage professions. This is the case for academic education but also for pre-academic education (vocational schools). Heritage-related subjects are at best integrated into other programmes. The frequency, duration and level of quality of existing education varies widely, and this is often connected to the hourly remuneration of teaching and inadequate qualification of some teachers.

Education in general is becoming more theoretical instead of practical, both for crafts and in academic programmes (even those training conservators). Cultural heritage professional training often allocates less time to teaching practical skills. Other issues include a lack of focus in heritage courses on digital skills, interdisciplinary working and decision-making skills, and on the design, assessment and review of innovative solutions. Another important gap is the poor correlation and cooperation between academic training and the heritage competence requirements of the labour market.

3. Problems with quality assurance in professional training

Few European countries have drawn up occupational/professional profiles for the heritage sector, leaving educators without a benchmark or standard to ensure that curriculum content matches international best practice. The quality of cultural heritage practice is at risk without standards for professional competence, and assessment frameworks for education and training. Moreover, because the European standards developed in the field of conservation are not widely known among heritage professionals (or demanded by clients), they are often not specified or used.

4. Academisation of society

In the cultural heritage sector, academically qualified professionals and craftspeople sometimes have different understandings of traditional skills and competences. It is an unfortunate reality that some academically trained professionals can show little respect for practical knowledge of skills and materials. The fact that the education system throughout the EU favours academic training over vocational, and that academic programmes generally allocate less time to practical skills, makes the gap between the two groups bigger. This bias exacerbates social preferences for academic qualifications over vocational ones.

5. Reduction of public funding and commercial pressure on training availability

Almost all cultural heritage professions, including conservation, restoration and traditional crafts, largely depend on shrinking public funding. Professionals and educators in the cultural heritage sector therefore often have an uncertain and underpaid future, relying on freelance jobs and temporary contracts. In addition, there is a lack of structural investment in knowledge transfer in the sector. When economic circumstances are not favourable, courses organised by commercial providers can collapse.

The financial pressure on heritage organisations often requires them to prioritise economic results over training employees in conservation and ensuring knowledge is transferred within

the workforce and to the public. Even for state heritage organisations, results based on quantity (such as number of visitors or profit) are easier to calculate than outcomes based on quality (such as standards of excellence). As the sector is less economically attractive for young people to work in, given the lower social status of vocational careers, it has a low inflow of professionals and no continuity in skill transfer due to a lack of generational replacement. A reliance on internships and volunteers cannot substitute long-term posts, which build up valuable knowledge of best practices.

6. Impact of digitalisation and new technologies

Like all sectors, the cultural heritage sector must recognise that many manual skills are gradually being replaced with digital skills (e.g. drones, geo-spatial imaging, laser scanning, 3D printing) and increased standardisation. This can have a negative effect on the transfer of knowledge of traditional skills and the social standing associated with the roles that require these skills. The questions of authenticity, ambiguity, administrative costs, value for the public and use of digitalisation and digitisation are seldom raised or debated [96]. The potential impact of open access to digital film, and digital reproduction and distribution, may threaten the integrity of local crafts and immaterial property. This is because hand-made, unique artefacts that bear the marks of their creation and associated traditions may be replaced by numerous replica items that are divorced from their cultural context.

7. Legislative restrictions regulating cultural heritage actions and the procurement of goods and services

All areas of cultural heritage are subject to increasing regulation for reasons as varied as consumer protection, financial probity and product safety. They are also subject to increasingly onerous guidelines relating to the procurement of goods and services. However, the equal risk of workforce competence has not been addressed. The heritage sector has become a growing confusion of legal regulations and requirements, such as copyright restrictions and e-tendering, public procurement, volunteer insurance and legal deposit legislation. However, work and interventions to safeguard built and movable heritage are not required to use specialised and accredited professionals, and the existing standards (which should set quality benchmarks) are not mandatory criteria.

96
See: www.londoncharter.org.

OPPORTUNITIES

Despite these challenges, the current state of formal education and training in cultural heritage in Europe today also presents many opportunities. Seven key opportunities or strengths have been identified through the SWOT analysis and are detailed below.

1. Increasing accessibility and interconnectedness

There is increasing accessibility for those seeking training in the field of cultural heritage, which has made heritage-related professions more visible and appealing. This is very much linked to a move towards digitisation, which is described in the recent Davos Declaration as a common concern and global trend. The Declaration describes digitisation as the 'fourth industrial revolution'. This manifests itself in cultural heritage in many ways, including open access databases, web portals, online inventories, video instructions, e-learning, download-able technical advice, 3D technology and new surveying techniques. In 2014, the Council on Training in Architectural Conservation (a UK organisation), published a document entitled *Integrating digital technologies in support of historic building information modelling – BIM4 Conservation (HBIM)*[97]. It outlines the need for a 'different professional expertise and under-standing from that which has been more commonly developed for the 'mainstream' new-build construction industry.'

Databases are being used as methods to record, for example, traditional crafts and crafts-men with the purpose of safeguarding tangible and intangible methodologies. They can enhance the search and retrieval of historic cultural information. Projects to make herit-age-related information digitally accessible are being carried out in a wide range of EU countries, such as the UK, Austria, Poland, Sweden, Ireland and Croatia. Web-based, spatial data viewers, which contain information on built, cultural and natural heritage, are providing an accessible online resource for those entering the field from the VET or HE sector.

2. New learning approaches and training formats

Linked to the opportunities outlined above is the change in learning approaches and training formats that is being experienced across Europe, with a shift towards informal learning and social learning. New learning theories such as experience pedagogy and lifelong learning (which is dealt with in further detail in the next section) are being developed where there is a focus on talent and ethical values. New and improved training formats such as dual education (a combination of working and learning), apprenticeships, e-learning, blended learning and crossover training are also emerging, which could have benefits for the heritage sector[98].

Ireland has reintroduced government-led apprentice training in stonemasonry crafts. In the UK there is a major focus on apprenticeships. In England, new apprenticeship standards have been developed. Historic England is working with employers to develop apprenticeship standards for archaeologists and conservators and historic environment advisors (see case study).

Shared apprenticeships, such as the Traditional Building Skills Bursary Scheme, can help small and micro businesses share their knowledge and skills, without committing to a full-time apprentice. In turn, the apprentice benefits from enriched learning from a wider range of people[99].

97
Cotac report, 2014 at http://www.cotac.global/
See also
http://www.bim4heritage.org/paper-archive.html
98
The business-driven Global Apprentice Network, with offices in several European countries, is developing and supporting dual systems of education and work-based learning.
See: https://www.gan-global.org/
99
https://historicengland.org.uk/services-skills/training-skills/work-based-training/traditional-building-bursaries/

New networks for sharing knowledge face-to-face and digitally are evolving, which again is a result of the increasing accessibility and interconnectedness of heritage professions. Smaller institutions can reap the benefits of the knowledge, services and resources of larger organisations. The introduction of work-based placements and internships in the field of archaeology, for example, by the Chartered Institute for Archaeology in the UK, has aimed to develop sectoral capacity through the teaching of key practical and technical skills.

Some EU countries have successfully fostered unique strengths in education and research. For example, Sweden offers advanced craft education and careers up to doctoral level within craft science as an academic discipline.

3. European Qualifications Framework (EQF) and validation of prior and informal learning

The EQF for lifelong learning classifies levels of qualification on the basis of demonstrated knowledge, skills and competencies. An appreciation of tacit knowledge has led to formal processes for validating non-formal and informal learning, which are gaining traction in Europe (as noted in Section 5.4). This increases the range of people who can access formal education. The commonly agreed references developed by the European Qualification Assurance in Vocational Education and Training (EQAVET) has made it easier for skills and competences to be recognised between countries.

4. Accreditation and certification

The demand for formal training is stimulated by requirements for certification, accreditation or registration to practice as a cultural heritage professional. Certification of heritage professionals varies greatly across the EU. While some countries have very strong national systems for recognition, validation, certification and qualification, others do not. As a result, establishing a high-quality system is challenging, although there are opportunities to examine good examples from EU member countries. For instance, work has been done to develop occupational profiles for the heritage sector in Flanders since the year 2000. The profiles describe the responsibilities, activities, working conditions, skills and knowledge of each heritage professional in order to map the sector and competences needed for each. Also connected to these profiles are professional qualifications, which have been under development since 2012. Developing formal descriptions of heritage professions (occupational profiles) is a key step in this process.

A number of countries require cultural heritage professionals to demonstrate their skills and competences, for example it may be laid down by legislation or by requirements of state-operated grant schemes. This can stimulate the demand for accredited conservation professionals, which has been the case in the UK, Portugal, Croatia and Slovakia [100].

100
For the UK see https://historicengland.org.uk/
services-skills/training-skills/heritageskills-cpd/
conservation-accreditation-for-professionals/

5. Law, regulation and financial support from governments

The beneficial role of law, regulation and international policy in safeguarding heritage and stimulating the education and professionalism required in the sector should not be understated. Funding for vocational training is, for example, enshrined in law in Lithuania. Specialised subsidy programmes, policies and funds aimed at creative industries, informal learning and the protection of heritage exist throughout the EU. The Flemish government has funded expert organisations to become involved in crafts and heritage transmission. For example, in May 2018, the Flemish Ministry for Culture introduced a grant for the transmission of cultural heritage skills from master to pupil. This is connected to the 1993 UNESCO living human treasures programme [101].
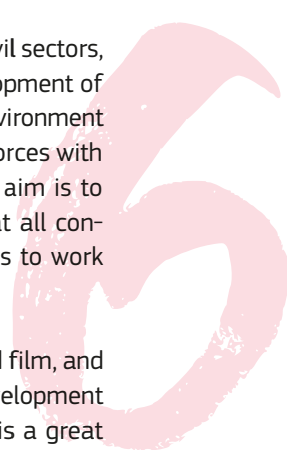
Administrative agreements such as those between national and regional governments in the Netherlands can also stimulate the involvement of students in restoration projects as part of their training. This cooperative approach can be very successful for the heritage community, because of the holistic training and skills the students bring to the projects. This can also play out at an international level but that depends on the availability of resources.

6. Cross-sectoral partnerships, cooperation between the heritage sector and formal education

Partnerships between heritage institutions, educational organisations and other civil sectors, such as tourism and construction, can help to strengthen and promote the development of heritage education. In the UK, the heritage bodies (Welsh Government's Historic Environment Service (Cadw), Historic England and Historic Environment Scotland) have joined forces with the Construction Industry Training Board (CITB) in a landmark partnership. The aim is to integrate heritage into mainstream construction education and training, so that all construction students will have the knowledge of traditional materials and methods to work on the 6.5 million traditional buildings across the three countries.

New connections with creative industries such as fashion, architecture, design and film, and the re-emergence of crafts as a creative industry, are all positive factors. The development of cultural and creative links between heritage education and the labour force is a great support to the future of heritage.

There is an interesting opportunity for cultural heritage organisations to join forces with higher education, with excellent potential for more joint projects and cooperation between the theoretical work of universities and the practical work of heritage institutions. The development of research strategies and PhD routes is an important tool for creating collaborative research partnerships to develop the next generation of heritage researchers (collaborative doctoral partnerships, doctoral training partnerships, doctoral training centres, etc.). On the other hand, national and international strategies for the revival of crafts need to be developed. An example of this is Ireland's Office of Public Works (OPW), which is responsible for looking after state-owned historic buildings and monuments [102]. The OPW provides the practical settings for research projects with higher level institutions (such as Trinity College Dublin) on topics such as the appropriate mortars to repair historic stones, or suitable insulation products for historic structures. The dissemination of this information can be problematic, as students graduate or move on, and it is an area that requires better follow-up from all parties involved.

101
http://www.kunstenenerfgoed.be/nl/beurzen-voor-het-doorgeven-van-vakmanschap-een-meester-leerling-traject
http://www.livinghumantreasures.be/;
https://ich.unesco.org/en/living-human-treasures
102
https://www.opw.ie/en/heritage/

Cultural heritage is not currently a high-profile research topic for other sciences. However, social sciences such as public management, business administration, economics and law do show an interest in it, both in education and research. Education and training providers should promote cultural heritage as a study module for management, brand design and tourism, for example. One idea would be to develop study programmes specially aimed at mediating and protecting the cultural heritage. This would align well with the emphasis in the Voices of Culture report on the importance of fostering the skills required by heritage mediators.

5.3.4 CASE STUDIES:
Examples of good practice in education and training

1. | **Raymond Lemaire Centre for Conservation, built-heritage conservation, Belgium.**

2. | **The Office of Public Works, stonecutting/stonemasonry apprenticeship, Ireland.**

3. | **Craft Laboratory at the University of Gothenburg**, **Sweden.** A bridge between university, crafts and heritage institutions, which offers a PhD programme in heritage conservation crafts and historical gardens, **Sweden.**

4. | **Higher vocational education in traditional crafts, Sweden.**

5. | **Formal Education in conservation-restoration, Germany, 50th anniversary.**

© Martina Ivanuš

1

Raymond Lemaire Centre for Conservation: built-heritage conservation

BELGIUM

The origin of the Raymond Lemaire International Centre for Conservation dates back to 1976. The centre offers a renowned Advanced Master's in the Conservation of Monuments and Sites at one of Europe's top universities. The master's is supported by high-level research focusing on a holistic approach to the preservation and management of built cultural heritage, including interdisciplinary cooperation.

Graduates of the Advanced Master's go on to spread these ideas and interdisciplinary approaches at national and international level. The centre's research aims to improve heritage protection, preservation, attribution of value and the (re)-integration of heritage into society, based on the needs identified by the international community. The centre and its more than 800 alumni from 70 countries collaborate in a vast international and local network.

⏻ https://set.kuleuven.be/rlicc

© Pavol Ižvolt

2 Office of Public Works, stonecutting/stonemasonry apprenticeship
IRELAND

An apprenticeship in the craft of stonecutting/stonemasonry has been introduced in the National Monuments Division of the Office of Public Works (OPW) in Ireland – the government body responsible for managing many of Ireland's built heritage sites.

The programme teaches enthusiastic and technically minded apprentices the skills required for the on-site conservation and restoration of historic stonework. This includes repairing and building stonework, stone cutting, carving and working with lime-based materials. It offers them the opportunity to learn an important conservation trade from craftsmen with many years of experience, and practice it in historic surroundings. It also enables them to develop a unique set of skills, through a standards-based system and following a modular pattern. It generally takes four years to complete, and the apprenticeship is divided between periods both on and off the job, concentrating on learning both practical skills and theory. The key factor in the delivery of an off-the-job training phase is that it is delivered in a single training environment to ensure practical training is integrated with the necessary theoretical and personal skills.

The Advanced Certificate in the Craft of Stonecutting and Stonemasonry (Level 6 on the Irish National Framework of Qualifications) is awarded to successful apprentices. This level is the internationally recognised requirement for craftsperson status.

⏻ https://www.opw.ie/en/media/Stonecutting%20Stonemasonry%20Apprenticeship.pdf

Conor O'Brien, apprentice stonecutter/stonemason working on conservation of the gate tower at Kells Priory, Co. Kilkenny

© Eamonn Rafter, OPW

3

Craft Laboratory at the University of Gothenburg, Sweden. A bridge between university, crafts and heritage institutions, which offers a PhD programme in heritage conservation crafts and historical gardens, Sweden

SWEDEN (GOTHENBURG)

The Craft Laboratory at the University of Gothenburg was established in 2010, in cooperation with heritage organisations, craft enterprises, and trade organisations, with the purpose of empowering craftspeople in the complex processes of making craftwork. The focus is on fields in which craftsmanship has lost influence in design and planning. The general agenda of the Craft Laboratory is to bring research into practice and involve craftspeople in the development processes. The Laboratory provides the following:

- Craft Scholarships for craftspeople in the trade to investigate an advanced problem or question, or develop ideas to improve methods or techniques. Craftspeople may apply for the scholarship and get funding for work and expenses, an internship with supervision and publication with the University of Gothenburg's Conservation Department.
- Craft Film Courses are provided for craftspeople to improve their own documentation and dissemination of craft processes and projects. The Craft Laboratory occasionally produces documentaries on traditional crafts or learning resources (on a YouTube channel), but the main goal is to provide the craft community with the skills to produce their own documentation.
- Craft documentation is a core development area for the Craft Laboratory. Thanks to research funding, a set of documentation methods has been investigated and adapted for procedural and intangible aspects of the craft.
- Master Classes are provided in particular skills for highly trained professional craftspeople. The courses may be devoted to a single advanced group or designed to involve transverse competences and share experiences on project management and other cross-functional issues.
- A Nordic Building Preservation Convention is arranged every second year for professionals in the built heritage sector. It attracts around 500 professionals, with many from the Nordic countries. They participate in around 150 seminars, lectures, workshops and courses over three days. The convention's main goal is to provide opportunities to make contacts, learn about the built heritage sector, exchange experiences, and update knowledge and insight into new methods, materials, techniques and legislation.
- Bachelor Programmes in Crafts are provided at the Department of Conservation, in close cooperation with the Craft Laboratory. The programme fields are traditional carpentry, masonry, heritage gardening and landscape preservation.
- Craft Sciences is established as a formal academic discipline, with doctoral programmes that include tailored courses, adapted academic formats and supervision by professors in the craft sciences.

⏻ https://craftlab.gu.se/english

4 Higher vocational education in traditional crafts
SWEDEN

In 1996, Sweden established a higher vocational education (HVE) system with financial support for both private and public providers, and for students. The education programmes run in regular, short cycles and are updated or replaced depending on contemporary labour markets demands.

The Swedish National Agency for HVE has adopted the system to respond to the need for traditional crafts and small-craft trades, taking into consideration long-term needs, smaller student groups and the valorisation of cultural heritage. The agency supports, for instance, an apprentice programme in traditional crafts, which provides financial support to craft businesses and a master's programme to teach even individual students. Individual careers have also been supported in traditional log timber crafts, and there is also a particular call for resources for education in small-craft trades, cultural production and arts.

The agency is also responsible for coordinating and supporting a national framework for recognition of prior learning, as well as serving as a national coordination point for the European Qualifications Framework. The HVE system currently has 23 200 students enrolled and 220 education providers, and 93 % of the students have a job one year after graduating. The average age of the students is 31.4 years, indicating the system's contribution to lifelong learning.

⏻ https://www.myh.se/In-English/Swedish-National-Agency-for-Higher-Vocational-Education-/

5 Formal education in conservation-restoration in Germany, 50th anniversary

GERMANY

Formal higher-education training in conservation-restoration began at the Kunsthochschule in Berlin-Weissensee in 1968. Since then, more universities and academies with a wide range of specialisations were established. As a result, Germany has educated students in conservation-restoration at well-established universities for many decades.

Eight educational institutions teach around 19 specialisations at a scientific and highly practical level. These include: archaeological objects, sculptures, easel paintings, wall paintings, stone, metal, glass, ceramics, paper, textiles, musical instruments, photography and film, ethnographical objects, industrial objects, modern and contemporary art, performing arts, digital art and preventive conservation.

⏻ https://blog.restauratoren.de/50-jahre-restaurierungsstudium/
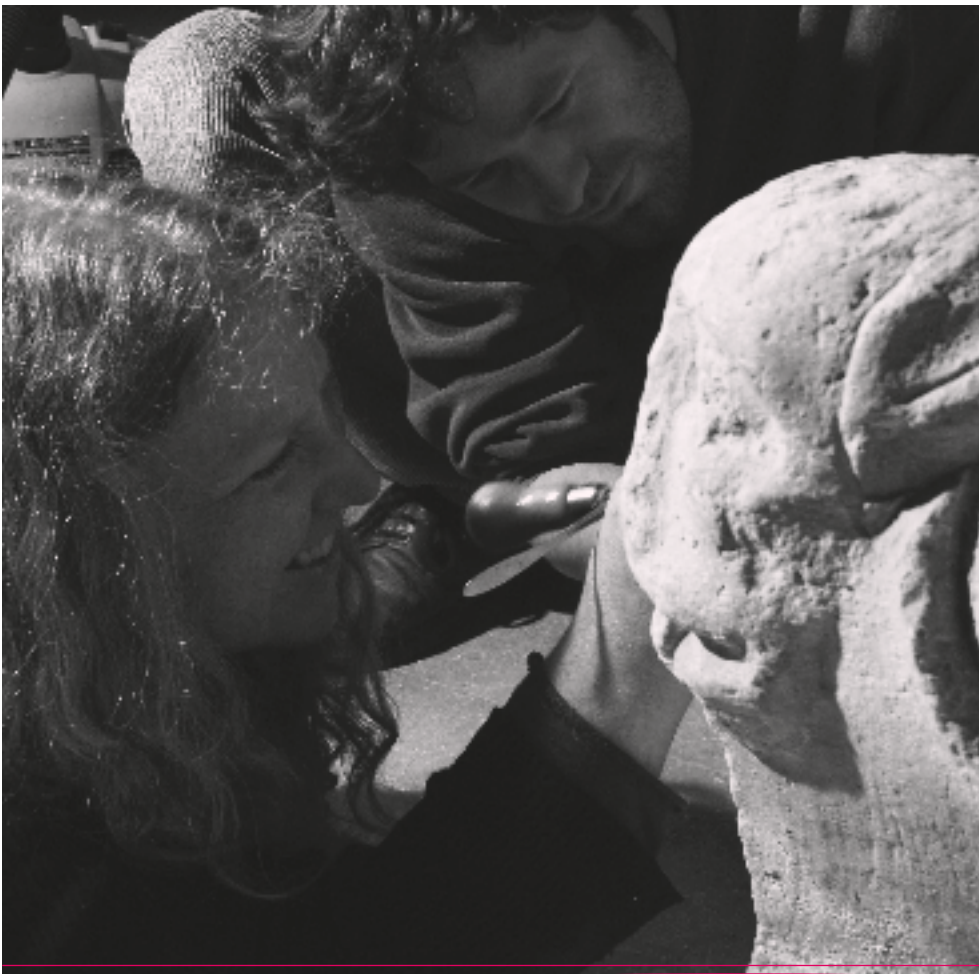
© Basen Johannes

5.4 Lifelong learning

5.4.1. Introduction

The lifelong learning group examined the issues, challenges and opportunities in lifelong learning for traditional and emerging cultural heritage professions. The group consulted EU and international studies on education and training, the Voices of Culture report (2017) and other papers referenced at the end of this publication, and the SWOT compiled by the open method of coordination (OMC) from participating Member States' submissions.

The group has concluded that a number of factors have combined to prevent Europe achieving steady progress in lifelong learning for cultural heritage. Difficulties at entry level, in progression and in the successful transferral of knowledge by experts are the major factors that are hindering it. Challenges external to the sector are the result of societal preferences that suppress demand for cultural heritage competences. This, in turn, threatens the ongoing ability of Europe to protect and present its irreplaceable cultural heritage. This section deals primarily with the direct challenges to entry and career development for cultural heritage professionals.

The nature of the subject, and particularly the influence of other professions on cultural heritage, led the group to broaden the scope and devise a structure that could accommodate lifelong learning in cultural heritage skills for professions that interact with the sector. This is particularly relevant to external decision-makers who manage heritage projects. The group proposed that an interlinked set of actions and initiatives would be necessary to provide a complete structure for lifelong learning. It also suggested that these initiatives should be held together by a set of principles to be agreed by European heritage stakeholders (government, educators, trainers and NGOs).

Goals of lifelong learning

The aim is to create a practical lifelong learning system for cultural heritage, to enable the successful transfer of knowledge, skills and attitudes to entrants and career-changers. It would also enable knowledge sharing between expert professionals, other decision-makers and society, generating a virtuous cycle of cultural heritage awareness, understanding and continuous improvement. This would improve the competence of decision-makers and enable there to be agreed standards of occupational profiles. The latter could provide the basis for the content of formal, non-formal and informal continuing professional development (CPD) and European Qualifications Framework (EQF) learning outcomes in cultural heritage. A lifelong learning system for cultural heritage would also provide a pan-European forum open to all stakeholders to discuss common interests, maintain standards and manage change.

5.4.2. Recommendations

To help cultural heritage professionals like David and his colleagues to upskill and develop new heritage competences, the group makes the following recommendations.

1. **Create a cultural heritage lifelong learning matrix**

   (a) Develop and disseminate a toolkit in the form of a structure and guidance to help cultural heritage professionals map a path for lifelong learning.
   - The toolkit should include a matrix structure setting out categories of core competences that individuals gain from formal training, and transversal competences gained from further training (formal, non-formal and informal). The matrix should be filled in by each cultural heritage profession, sector or national heritage body, as appropriate.

   (b) Develop guidance on using the matrix for:
   - individuals as a learning career path;
   - for sectors to create occupational role profiles;
   - training providers to assist in developing programme content and delivery.

2. **Publish guidance on the validation of prior cultural heritage learning**

   (a) Guidance for educational institutions and professional associations should illustrate the best practical methods of validating prior cultural heritage learning acquired through non-formal and informal routes. Validation methods should encompass practical skills as well as theoretical knowledge, and include work-based assessment.

3. **Publish guidance on the requirements for professional cultural heritage certification schemes**

   (a) Guidance for professional associations that operate cultural heritage personnel accreditation schemes (also known as certification, attestation or registration) to validate the expertise of their members. The guidance should cover scheme eligibility and assessment criteria necessary to satisfy the EU of members' specialist competence for public procurement purposes.

   (b) Set out CPD requirements to commit certified members to the ongoing development of their core and transversal competences in cultural heritage.

4. **Develop a digital skills card or passport to enable professionals (at all skill levels) to demonstrate their formally and non-formally obtained cultural heritage competences**

5.4.3 Discussion

The breadth of the issues outlined below (drawn from OMC meetings, the SWOTs and the Voices of Culture analysis) led the lifelong learning group to consider developing a structure and interlinked processes to accommodate lifelong learning needs and challenges for cultural heritage professionals (existing and emerging). The recommended tools would also increase the knowledge and skills of professionals that interact with cultural heritage, particularly decision-makers who manage heritage policies, programmes and projects.

These linked elements should ideally be unified under a set of principles, to become the 'attitudes' strand of the EQF's required 'knowledge, skills and attitudes'. These principles would be agreed by European cultural heritage stakeholders, including government, educators, trainers and NGOs. In due course, a structured Cultural Heritage Lifelong Learning Competence Framework should be considered as a mechanism for achieving best practice and optimum learning outcomes. This step would require some preparatory developments, which are outlined in this report. Such a framework would be a proportionate response to the challenges. It would also be in line with EU promotion of the competence framework concept as a tool for structuring lifelong learning, and the sectoral skills development blueprint as a tool for delivering training to match sector needs (see Chapter 6). This section will look at the following issues:

1. **challenges facing cultural heritage lifelong learning;**

2. **lifelong learning in the context of cultural heritage professionals;**

3. **cultural heritage role profiles and skills needs;**

4. **lifelong learning as a framework for continuing professional development.**

1. Challenges facing cultural heritage lifelong learning

The conclusion of the lifelong learning group is that challenges to the smooth functioning of knowledge and skills acquisition and transfer in the cultural heritage sector are generated in three main areas that are summarised below in eight points. The areas are entry into the cultural heritage sector; factors within the sector itself; and societal preferences that suppress demand for cultural heritage competences. Collectively these issues threaten Europe's ability to protect its cultural heritage effectively, now and into the future.

A. Getting clarity for cultural heritage professionals and others on their role profiles and competence needs

Many roles do not have specific, agreed occupational profiles setting out the types of competences required of practitioners. This is especially true of professions operating both within and outside of cultural heritage. Formal training does not always equip learners to acquire and maintain the competence requirements for cultural heritage professions, both in traditional and emerging areas. Where occupational roles develop or change, further theoretical and practical training is required. This means that lifelong skills training requirements and preferences (subjects, types, levels, best delivery methods) are not always clear to professionals who want to maintain their competences or get further qualifications that are relevant to their current or future role. In addition, a requirement to engage in knowledge transfer is not clearly specified as a core task of occupational profiles. One outcome of this situation is that variations arise in the standards of knowledge, skills and competence of cultural heritage professionals, which cannot be measured and addressed.

B. Getting clarity for clients and other stakeholders on what constitutes a cultural heritage profession, and the services that cultural heritage professionals are expected to provide

Some cultural heritage professions, or the specialist services that they or individuals working in an emerging area offer, are not clearly visible to commissioning clients (in the public and private sector) and other interested parties. A lack of clarity about the range of competences for the relevant roles, and the required level and quality of a cultural heritage service, is a risk both to cultural heritage professionals seeking to commercialise their competence and an organisation procuring cultural heritage services.

Public administrators and decision-makers are not required to have cultural heritage awareness competences. The cultural heritage impacts of most economic, environmental and social decisions are often not sufficiently identified in policy and programme formulation, or in public procurement. Cultural heritage professionals – working in their demonstrated sphere of competence – should be engaged from the outset. This would inform the planning, design and execution of cultural heritage policies, programmes and projects to improve the prospect of successful outcomes. In addition, cultural heritage standards and norms are not often cited by public bodies that procure and define projects, compounding a lack of awareness in society of cultural heritage best practice.
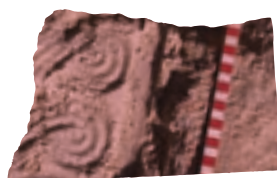
C. Career pathways and progression into, within and out of the cultural heritage sector are not clearly visible to entrants, professionals or career-changers

Cultural heritage occupations are largely invisible to school-leavers and career-changers due to the sector's low profile. The fulfilling nature of cultural heritage work is largely unrecognised as a motivating factor. Entry numbers are further limited by the lack of training programmes, difficulties in getting sponsored apprenticeships and poor prospects for paid employment or internships.

Many cultural heritage professionals do not have the benefit of a clear career structure in their current role or the profession as a whole. This absence of clarity compounds the lack of role-profile mapping that sets out progression pathways. Promotion may be limited to administrative or management roles in which the professional's cultural heritage specialism is of limited benefit. Furthermore, competences in administrative or management work may be informally gained and not validated.

Difficulties with fluid progression from vocational education to higher education are recognised at a European level. This is especially problematic for cultural heritage professionals who have entered the sector through further education. Take the example of a craft practitioner, where competence is expressed through psychomotor (physical) skills and knowledge about materials as much as – if not more than – cognitive (knowledge) and affective (attitudinal) skills learned in the classroom[103]. The overall trend of academisation within European society has led to a downgrading of craft and hand skills. A lesser value is therefore associated with craft-based occupations, including hands-on heritage professions, in many countries.

Motivation of expert individuals may be reduced by a lack of advancement opportunities (often from working within small units or alone), while opportunities for progression into related areas of work might not be clearly visible. The financial risks of competing against uneconomically low tenderers (being undercut by competitors without cultural heritage competences) is a further demotivator to investing in progression within the sector.

D. Due to the small size of the cultural heritage sector, formal training is not always available when needed due to a lack of commercial operability, while informal training is difficult for professionals to prioritise

The cultural heritage sector covers a broad spectrum of both 'core' and 'hybrid' professions. The term 'core' describes professions in which the focus is primarily on cultural heritage. 'Hybrid' describes occupations where a heritage focus has led an existing non-heritage profession to undertake work in, for example, repair, maintenance, promotion or interpretation of cultural heritage. In many cases, they have specialised in this work, but not to the extent that it has become an emerging new heritage profession. The latter includes many built environment professions such as architecture, engineering and building crafts. Many cultural heritage professions do not have the benefit of formal sector representation. Nor do they have a steady stream of potential trainees to influence education and training providers to design and deliver specialist programmes. Meanwhile, cross-discipline learning between related subsectors of cultural heritage is also underdeveloped.

It is not possible to quantify the sector and its overall training needs (both present needs and future needs dependant on a fully functional market for training programmes). This is because of a lack of statistical data resulting from the invisibility of cultural heritage occupations in both the European Skills/Competences qualifications and Occupations system and the International Standard Classification of Occupations system[104]. Sector-led training is now widespread in Europe. Employer groups, education and training providers, and client

103
Anderson, L.W. (Ed.), Krathwohl, D.R. (Ed.), Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., and Wittrock, M.C., *A Taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objective*s, New York, Longman, 2001

104
As recommended in *ESSnet-Culture European Statistical System Network on Culture Final report*, Luxembourg, 2012. See Section 4.1 above on ESCO and ISCO.

stakeholders in an industry or sector work together to identify workers' training needs. The aim is to devise the necessary education and training curricula and support the workforce to gain these qualifications.

The broad spectrum of cultural heritage actors inhibits the development of one voice representing the sector's research and training needs. Fragmented sectoral cooperation, small numbers of organised communities and under-resourced representative associations in many cultural heritage occupations mean that the private sector cannot effectively articulate medium- and long-term skills training needs. This results in an insufficient critical mass for training providers to operate formal or non-formal training on an ongoing, economic basis. It also hinders strategic career planning and improvement of identified gaps or weak areas.

In addition, many practitioners are sole traders or work in small businesses, making it difficult for them to prioritise time away from the business or afford the associated costs. Indeed, methods of informal upskilling such as mentoring are difficult to organise and maintain, as the time and costs involved must be planned and billed, while the benefits are not immediate or quantifiable.

E. There is no agreed mechanism for attaining and maintaining quality assurance in non-formal CPD and other lifelong learning vehicles

Some representative associations operate CPD programmes that aim to raise quality across the breadth of competences required of their profession. However, the content of non-formal CPD is not always based on researched learning outcomes, nor is delivery necessarily shaped to enhance the level of participant knowledge. CPD content should emphasise the ethical (affective) as well as cognitive dimensions of the training, based on internationally accepted cultural heritage principles, charters and norms. These documents are often underused as tools to guide training, and the intent or applicability of such guiding principles can be misunderstood by inexpert training providers or deliverers. As a result, quality varies and the time and expenditure involved may not benefit learners. The experiences gained in operating CPD programmes are not formalised in cross-sectoral exchanges to support quality assurance for the cultural heritage sector as a whole.

Many public sector professionals are obliged to undergo annual performance reviews. These could also be used to measure competence development, by qualitatively measuring an individuals' learning outcomes from their CPD. This could then be used to provide anonymised feedback to training providers. As noted in the Voices of Culture report, there is an uneven application of personal development plans among cultural heritage professionals.

F. Absence of formally supported, sector-wide methods of recognising and validating the cultural heritage competences that professionals, entrants and career-changers have gained through non-formal means

Many cultural heritage professionals, entrants or career-changers have gained competences that are not fully described by their formal qualifications. Indeed, some have no academic qualifications but can demonstrate competence. For those entering the sector to work or access advanced training opportunities, a suitable mechanism is needed to demonstrate cognitive, affective and psychomotor skills in cultural heritage.

As cultural heritage is a sector that combines the full range of skill types, a sector-specific solution is required to give education and training providers a mechanism for validating all existing skills and their interconnections[105]. Recognition of prior non-formal and informal learning is recognised as critical in many sectors. It must form one strand of any mechanism to accredit or attest the competence of individuals for association-operated certification or accreditation schemes.

G. *Inability of some cultural heritage professionals to demonstrate their competence clearly for procurement purposes in order to distinguish themselves from others claiming to offer similar services*

Cultural heritage professionals who are experts in their work may be unable to demonstrate their full range of competences to prospective employers, clients or procuring authorities. This may be because they have gained competence through non-formal pathways or because there is no accreditation system in their area of cultural heritage. This hinders their mobility and advancement, especially for craftspeople and those involved in certain areas of intangible heritage.

H. *The knowledge gained from the experience of experts or from the results of research projects does not feed back into education and training curricula in a structured way*

The outputs and outcomes of cultural heritage research programmes (except for many EU-funded programmes) are not disseminated widely enough as learning tools for the workforce, trainers and learners. As the cultural heritage sector is composed of fragmented subsectors, information on developing best practice from expert professionals does not always reach training providers, representative associations and individuals to generate discussion and expand capacity. Potential research organisations (at third and postgraduate level and in the private sector) should be alerted, through a cultural heritage feedback loop, to problems requiring resolution. These might include knowledge gaps in materials science, the availability of supplies, technological impacts or climate change adaptation. This flow of knowledge from carrying out 'ordinary' projects, as well as research, is necessary to establish a virtuous circle of competence in the sector and awareness among those who make decisions that affect cultural heritage.

2. Lifelong learning in the context of cultural heritage professions

Since the 1960s, emerging cultural heritage professions in completely new areas have had their qualifications formalised, in order to increase client confidence and control quality. Sector representative bodies at national and European level raise awareness, react to changing circumstances and set standards. This formalising of practice requirements has been done for some cultural heritage professions at European and national levels [106]. Two of the most visible components are requirements for CPD, and the introduction of professional accreditation schemes by professional institutes and associations. This has gained traction in the UK and Ireland in a range of built-environment professions [107]. CPD should strengthen existing core competences and raise professionals' capacity in emerging areas, such as digital technology, and in other transversal skills [108]. Such practice standards ensure that professionals adapt to changing requirements over time, as knowledge advances or cultures evolve.

Many cultural heritage professionals gain their initial training in allied fields, such as built or natural environment, education, social science or public administration. As cultural heritage specialisms have expanded in recent decades, professionals may now practise in a new or different role and have gained specialist knowledge and skills on the job. Retrospective validation of non-formally gained competences gives cultural heritage professionals formal recognition for all their professional achievements.

Many representative bodies provide non-formal CPD training and/or mentoring services for their members. Non-formal CPD is also provided by public or private sector organisations and third parties (e.g. education and training providers, sector forums or amenity societies). They host paying events such as field days, workshops or master-classes that contribute to interdisciplinary participation, with collaborative teaching and peer exchange of expertise.

3. Cultural heritage role profiles and skills needs

'Core' and 'hybrid' cultural heritage professions are represented in the four Voices of Culture groups [109]. Identifying the skills needs for each type of workforce role (as opposed to citizen role) requires the mapping of professions – a task best coordinated by each professional representative body, where one exists. A first task is to focus on the shared competences across all heritage professions, which are suggested in Table 1 of this report.

Voices of Culture notes that the educational response must cover transversal skills (administration, financial, communication etc.) to provide learning outcomes that fit with identified skills needs. It must also enable the workforce to respond to the competence demands in new forms of heritage. The Key Competences Recommendation (and accompanying staff working document) and the Cultural Heritage Strategy for the 21st Century illustrate these dynamics and challenges very well [110].

New and emerging professions should be defined and occupational profiles established at national or European level for the benefit of individuals working in these professions, and their employers and clients. This would help the relevant sectors to function commercially. Occupational profiles for heritage professions should allow for role flexibility, as competence requirements change over time. They should also incorporate ongoing dialogue and cooperation at European or international level.

106
See, for example, Corr et al, *Competences for access to the conservation-restoration profession*, European Confederation of Conservator-Restorers' Organisations, Brussels, 2011.
107
See, for example:
http://www.ihbc.org.uk/join/Categories/index.html
108
Voices of Culture report, 2017, p.2.
109
Voices of Culture divides society into four groups of stakeholders: public, policy, mediation and expertise (2017, p.4). The meaning of 'hybrid' in this document is given on page 83.
110
European Commission, *Commission staff working document accompanying the document 'Proposal for a Council Recommendation on key competences for lifelong learning'*, 2018.
European Cultural Heritage Strategy for the 21st Century, 2017.

Occupational profiles and principles would not in themselves set training content or standards, most of which should come from each profession and must meet all relevant regulatory requirements. However, profiles and principles would demonstrate the process involved and illustrate their fitness for purpose[111].

The starting point when developing occupational profiles is for sector representative bodies to agree on the range and categories of cultural heritage competences in each profession. The core and transversal skills required influence the description of occupational or role profiles, and clarify to clients, education and training providers, and potential career entrants the competence areas and dimensions needed to practice in each role. Besides the subject-matter expertise required in such development work, overarching expressions of values (described by codes of ethics and conduct) must be agreed. Individual roles commonly interact with a range of related occupations. Occupation boundaries and overlapping competences, and the desirable EQF levels for related roles, should be mapped by the professional representative bodies involved. This will avoid gaps and make the boundaries clear to professionals and to their clients, helping them identify which role is best suited to the service they require.

The purpose of role mapping is to help individuals to see their place in the system, rather than being a hurdle to entering or advancing in a cultural heritage career. By showing progression and diversification pathways, profiles should also help workers to plan their career strategically.

Profiles should specify the need to transfer, as well as gain, knowledge. This could be done by accepting the need for structured career planning by cultural heritage sector representative bodies, along the lines of a personal development plan[112]. Cultural heritage depends on the informal circulation of the expert knowledge and skills of educational, executive and managerial professionals to their peers, colleagues, students and other interested parties. Formalising knowledge transfer (or exchange) by making it a core role requirement ascribes a value to this fundamental task. Succession planning to identify long-term skills needs enables training and resource needs to be anticipated too. The exchange of experience and lessons learned should be done in a multidisciplinary environment and an atmosphere of trust and openness. This is critical to properly defining the knowledge and skills that professionals require, in order to resolve real-life situations and describe role profiles.

Critically, role mapping must be accompanied by a way of validating prior learning for professionals who have gained much or all of their expertise on the job, rather than through formal training. Many hand skills are transferable from one medium to another, as those who have learned to use hand tools (especially from a young age) are often adept at developing skill with different tools and fabrics. Specifying a requirement to validate such expertise in defining role profiles is crucial to encouraging career-changers to work in cultural heritage.

111
For example, The ICOMOS Columbo Guidelines (1993), referenced above, are complemented (not superseded) by the ICOMOS Principles for Capacity Building through Education and Training in Safeguarding and Integrated Conservation of Cultural Heritage (draft 2013). See also UNESCO, *World Heritage Capacity-Building Strategy*, 2011, WHC-11/35.COM/9B.
112
As suggested in the Voices of Culture report, 2017, p.28

4. Lifelong learning as a framework for CPD

The Commission's New European Agenda for Culture makes it clear that cultural heritage will assume greater prominence in EU-funded programmes in future. An accepted set of standards, principles or best practices for lifelong learning in cultural heritage would provide a benchmark for formal and non-formal training provision [113]. The progress and effectiveness of EU policy and EU-funded programmes, projects and actions to safeguard cultural heritage should be improved through the practical implementation of these principles.

The 2018 Key Competences Recommendation and accompanying Commission Staff Working Document support the development of competence frameworks [114]. Competence frameworks are most often used to structure education and training curricula, but go beyond cognitive skills to emphasise non-cognitive skills, attitudes and values. Transversal skills such as critical thinking, creativity and problem-solving also feature prominently [115].

A framework is a necessarily broad and adaptable instrument, as it must encompass a range of interests and needs, while being responsive to technological or cultural changes, in order to achieve the stated goals. The principles, goals and operating mechanisms of a competence framework would form an inter-connected, sustainable and resilient system for lifelong learning in cultural heritage.

Including CPD and other types of career development in a framework that is specifically established to coordinate a response to lifelong learning needs would considerably increase the standing of non-formal and informal skills development. This is especially true for non-cognitive (affective and psychomotor) cultural heritage skills.

A suggested framework and principles are outlined in Chapter 6.

113
European Commission , A New European Agenda for Culture, 2018, p. 10.
114
European Commission, *Key Competences for Lifelong Learning*, 2018 (2018/C 189/01).
European Commission, Commission staff working document (COM(2018) 24 final), 2018:
'Key competence descriptions could translate into frameworks of learning outcomes that could be complemented with suitable tools for diagnostic, formative and summative assessment and validation at appropriate levels (e.g. the digital competence framework)', section 5.2, pp. 64-65.
115
European Commission, Commission staff working document, 2018, sections 2.3 and 2.5.

5.4.4 Cultural heritage lifelong learning matrix

The challenges outlined above highlight the difficulty that training providers face in identifying the training needs of the many professions in the cultural heritage sector, in order to deliver successful (including economically successful) programmes. The recommendations in this report are designed to remove much of the doubt on this front, as they should bring greater certainty about the core and transversal competences expected of cultural heritage professionals.

The main lifelong learning recommendation is to develop a toolkit based on a matrix to help cultural heritage professions to map a pathway for structured career development. The matrix would also guide sectors on developing occupational profiles, and guide training providers on the programme content required by groups of related professions.

The toolkit must be flexible, practical, logical, helpful and clear. At its core is a model structure or matrix setting out categories of core, ancillary and transversal skills. The associated guidance should be applicable across professions, coherent and durable over time. But it must also allow for changes in how cultural heritage knowledge and skills are taught, and in the evolving, dynamic relationship between society and its heritage. It is envisaged that each profession will use the matrix as a tool for describing the competences associated with specific roles.

The matrix is primarily a practical tool to define the types of core and transversal knowledge, skills and attitudes that characterise the cultural heritage workforce. It is also a structure for managing the inevitable changes that occur with the advance of technology, the impact of regulation and changes in how decisions on cultural heritage are made.

Tables 1 and 2 suggest categories of core and transversal competences. The core competences in Table 1 are the focus of the learning outcomes, according to the programme's European Qualifications Framework (EQF) level. The transversal competences in Table 2 may be positioned at a lower EQF level, depending on the professional role for which the programme is providing training. Table 3 is a matrix or practical indicator overlaying the categories of core and transversal competences desired for each cultural heritage profession, in order to suggest combined or 'synthesised' skills.

Professional associations would populate the matrix with the specific associated skills under the 'core' and 'transversal' headings, taking the applicable skills from these lists and adding others as necessary. The synthesised skills lists aim to help cultural heritage professionals and trainers to focus directly on how transversal skills apply to the core competence requirements of the profession concerned. An example is the adaptation of building information modelling, originally developed as a framework for producing and exchanging multidisciplinary digital information for new construction, to become a tool for information management in the conservation of historic buildings [116].

The toolkit should help rather than hinder entry or progression and should not create unnecessary bureaucracy for representative organisations or trainers. The matrix should benefit potential entrants and career-changers by illustrating the varied types of career available and ways to plan progression strategically. It is important to note that this mapping process would not impose requirements on any profession or individual at any stage in their career.

The matrix is intended to be a way to illustrate the competences that different occupations need in order to offer a set of cultural heritage services. Individuals might have or wish to

gain some or all of these competences to progress in their career, whether they work in the cultural heritage sector or in a hybrid area connected to it, as well as other sectors. The recommendation is that each profession, at national, regional or European level would coordinate the structure, form, content and delivery of training depending on the needs of the profession and the sector in which it operates.

By setting out common competence categories, the matrix is intended as a useful tool to guide training providers in providing interdisciplinary training that can attract a critical mass: an essential requirement for most providers. Similarly, it will help each profession to ensure that the formal and non-formal training offered is right for the profession's needs, and should support the planning of CPD, including through cross-sectoral partnerships.

The demonstration of individual professional competence should be promoted by each profession, for example, by establishing accreditation, certification or other heritage validation schemes. A card scheme is recommended for the European heritage sector, which will include provision for the recognition and validation of prior learning.

The matrix can also be used to show non-cultural heritage professionals which categories of cultural heritage competence to be aware of, or to pursue training in, should they wish to enter the sector or become involved in a related project. Professions that have skills and/ or teaching methodologies they could share with the cultural heritage sector include: sociologists; social economists; anthropologists; diplomats; and commercial operators that use cultural heritage locations, artefacts or traditions, or draw on cultural heritage to develop products or services.

Table 1: **Suggested core cultural heritage competences**
(working document)

Note: some cultural heritage professions are fully involved (requiring expertise) and some are partially involved (requiring awareness) in the core competences set out here.

Core competences	Associated skills depending on profession, area and level of activity (requirements vary per profession and level of practice)
1. Cultural heritage purpose and context in which the profession operates	• Know the history of the cultural heritage sector and context of the specific profession. • Be conversant in international cultural heritage philosophy, theory and principles on which our understanding of values and significance is based. • Have a deep understanding of how local, national, European and global cultural expressions influence each other, and be mindful of the evolving purpose and role of cultural heritage for users and society. • Acknowledge the importance of cultural diversity and the need to identify and value the specificity of each heritage resource, which can influence the applicability of universal values or philosophical concepts. • Be aware of and respect intangible associations related to the specific profession: language, folklore/superstitions and geographical or topographical connections. • Be aware of the place of cultural heritage in sustainable development and practise ethical material-resource management.
2. General cultural heritage profession requirements	• Comply with international best practice requirements for the specific profession and uphold the ethical requirements of its representative bodies. • Understand the legal and regulatory standards of the sector (national and European). • Have a well-developed critical capacity to evaluate positive and negative changes that are generated externally and internally, as well as developments in sector norms. • Be able to handle value conflicts and ethical dilemmas. • Recognise the importance of interdisciplinary collaboration in cultural heritage by routinely engaging in knowledge exchange. • Conduct business in a legal manner.
3. Cultural heritage specialist subject competences	• Have a deep understanding of materials science, and the technical knowledge and skills required of the profession. • Be able to expertly use traditional and modern tools. • Understand materials hazards and comply with relevant health and safety requirements, without endangering the fabric/focus. • Be expert in assessing material condition and/or health of tradition, and the likely intrinsic and external influences on condition. • Produce accurate technical and material descriptions. • Stay up to date with, and participate in, sector research.
4. Cultural heritage specialist intervention competences	• Expertly carry out risk and impact assessments and make recommendations. • Expertly undertake diagnostic investigations to identify causes. • Identify and evaluate potential interventions and their tangible and intangible effects, including possible ethical implications of decisions. • Measure impact/quality control at all stages. • Upon completion of work, assess further actions/care. • Advise on preventive conservation measures, including mitigation of potential climate and other sustainability impacts. • Be skilled in disaster planning and management. • Advise on enhancement or other measures to promote meaning and value. • Identify need for and conduct applied research. • Proactively analyse own past work and apply lessons learned.

5. Core communication competences	• Have well-developed pedagogical skills including supervision and guidance of apprentices/ trainees/graduates and mentoring of others. • Clearly and respectfully negotiate courses of action with stakeholders. • Convey expert technical information effectively. • Provide easily understood advice to non-specialists (written and spoken), including when carrying out peer reviews of draft material. • Draft clear and thorough statements, reports, plans and treatment proposals. • Maintain a high standard of recording and technical reporting. • Present work to specialist and non-specialist audiences clearly and coherently and prepare to a high standard for publishing/promotion. • Represent the profession in a dignified manner, including through international networking, as appropriate, to further the aims of cultural heritage. • Have and maintain a highly developed capacity for critical thinking by continually seeking and expert and non-expert inputs from outside the sector. • Communicate clearly with the public and engage empathically in awareness raising.

Table 2: **Suggested transversal cultural heritage competences** (working document)

Note: some of these transversal competences could be core competences for emerging professions.

European Year of Cultural Heritage objectives	Voices of Culture categories	Associated skills for transversal competences (developed from Voices of Culture)
Engagement Shared heritage; heritage at school; youth for heritage	Communication and advocacy	• Active and empathic listening skills. • Participative dialogue skills. • Cultural awareness and understanding, including the social and emotional needs of society and ways to remove barriers to accessing cultural heritage. • Skills to communicate and promote cultural heritage through multiple media and channels to multiple non-expert audiences, e.g. social media, web publishing, drafting speeches and writing for news media. • Advocacy skills to promote cultural heritage within public administration. • Advocacy skills to support NGOs and community endeavours.
Protection Cherishing heritage; heritage at risk	Dialogic knowledge transfer	• Cultural exchange awareness and facilitation skills. • Skills to foster cross-sectoral partnerships and exchanges. • Interpretation skills. • Storytelling skills to communicate expert content to non-expert audiences. • Developing two-way communication with expert and non-expert audiences, including 'listening to learn' skills. • Developing cultural heritage skills in another language.
	Shared stewardship and citizen participation	• Awareness and activation of commonalities. • Citizen-engagement skills through outreach activities with related cultural, social, heritage and environmental sectors. • Teamwork skills, including influencing and persuading. • Awareness of inclusivity, including respect for diversity. • Networking within the profession and externally. • Mentoring and coaching outside the profession.

	Management competences (of business and staff)	• Stakeholder management, including analysis, engagement and workshop facilitation skills. • Human resources management. • Volunteer recruitment and management. • Change management. • Team management, leadership and participative decision-making skills, including use of decision tools. • Ethical cultural-heritage governance and diplomacy awareness. • Project management skills, including: requirements management; quality management; scope management; scheduling management; change management; and record management. • Risk management, including disaster and security/safety planning.
Sustainability Heritage in transition; tourism and heritage;	Financial competence	• Entrepreneurship. • Risk assessment. • Awareness of financial and social impacts. • Sustainable business model awareness. • Fundraising understanding and engagement. • Budgetary management. • Procurement and contracts management. • Awareness of financial compliance obligations. • Awareness of and ability to apply for diverse sources of financial support, e.g. research funding.
Innovation Heritage-related skills; all for heritage; science for heritage;	Strategic planning, strategic thinking	• Developing resilience through innovative, analytical and critical thinking, political awareness, and awareness of organisation maturity model concepts and systems thinking. • Understanding the benefits of, and investing in, multidisciplinary training. • Expertise in identifying and acting on research needs. • Advocacy, negotiation and conflict management. • Effective and innovative marketing. • Evaluation skills.
	Digital competence including information management	• Awareness of and engagement with new digital technologies relevant to cultural heritage identification, assessment, interventions, recording and presentation. • ICT, organisation and strategy alignment, including digital records management. • Development of digital literacy, including for content creation, management of born-digital heritage, and data collection and analysis.
	Prospective thinking	• Trendspotting and horizon scanning. • Self-reflection, continuing curiosity and creativity. • Emphasis on continuous improvement and efficiency; ability to set challenging goals. • Strategic development planning for own learning and career. • Long-term sector planning and forecasting.

Table 3: **Suggested lifelong learning matrix for cultural heritage professionals covering core and transversal skills** (working document)

TRANSVERSAL COMPETENCES

EUROPEAN YEAR OF CULTURAL HERITAGE OBJECTIVES	ENGAGEMENT		PROTECTION		SUSTAIN-ABILITY		INNOVATION	
	A. Communication and advocacy	B. Dialogic knowledge transfer	C. Shared stewardship	D. Management competence	E. Financial competence	F. Strategic planning, strategic thinking	G. Digital competence	H. Prospective thinking
1. Cultural heritage context	**A1**	**B1**	**C1***	D1	E1	F1	G1	H1
2. General profession requirements	**A2**	**B2**	C2	**D2****	E2	F2	G2	H2
3. Cultural heritage specialist knowledge	**A3**	B3	C3	**D3**	**E3**	F3	G3	H3
4. Cultural heritage specialist intervention competences	**A4**	B4	C4	D4	E4	**F4**	G4	H4
5. Core communication competences	**A5**	**B5**	**C5**	**D5**	**E5****	**F5**	**G5**	**H5**

CORE COMPETENCES: PROTECTION

Sample types of synthesised skills

* C1
CULTURAL HERITAGE CONTEXT SYNTHESISED WITH SHARED STEWARDSHIP AND CITIZEN PARTICIPATION SKILLS: e.g. training in the application of cultural heritage philosophical concepts to specific contexts; critical thinking on ethical principles in relation to community and cultural values.

** D2
SPECIALIST KNOWLEDGE SYNTHESISED WITH MANAGEMENT COMPETENCES:
e.g. training in the use of project management tools for recording ethical, practical and meaningful shared decision-making processes in cultural heritage projects.

*** E5
CORE COMMUNICATION COMPETENCES SYNTHESISED WITH FINANCIAL COMPETENCES:
e.g. training in the use of innovative fundraising methods, including digital ones, for small businesses and NGOs working in cultural heritage advocacy.

5.4.5 Recognition of prior learning

Many cultural heritage professionals, and career-changers entering the field, have gained competences that are not fully described by their formal qualifications. A retrospective validation mechanism is needed to assess the range and depth of non-formal and informal learning gained by individuals who wish to audit their cultural heritage skills.

The EU published recommendations on the validation of non-formal and informal learning in 2012. It noted that the validation of learning outcomes, namely knowledge, skills and competences acquired through non-formal and informal learning, can play an important role in enhancing employability and mobility. It can also increase motivation for lifelong learning, particularly in the case of people who are lower qualified or at a socio-economic disadvantage[117]. Guidance on validation was published in 2015 by the European Centre for the Development of Vocational Training[118].

The group considers a sector-specific mechanism to be necessary to demonstrate the cognitive (knowledge), affective (attitudinal) and psychomotor (physical) cultural heritage skills of those entering the sector, either to work or access advanced training opportunities. The Dreyfus levels or EQF learning outcomes associated with these skills, which provide references for competence standards at each stage of attainment, should inform the validation mechanism[119]. For professions originating in vocational training, the EQF's learning outcome summaries are particularly useful for the process of assessing individuals' demonstrated competence in order to validate the types of skills associated with higher education (for example, validation of master-craftsperson competences).

The evaluation of core and transversal skills for validation purposes should link to the categories of engagement, sustainability, protection and innovation. Assessment should take into account awareness of the wider relationships between social, territorial and economic development, and cultural heritage knowledge and education, to validate the learner's depth of appreciation of the geopolitical context[120]. Personal achievements gained through non-formal and informal learning should be measured in an appropriate way to aid retrospective validation.

117
European Commission, Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning, 2012.

118
European Centre for the Development of Vocational Training (Cedefop), *European guidelines for validating non-formal and informal learning*, Luxembourg, Publications Office of the European Union, 2015.

119
See Education, Audiovisual and Culture Executive Agency, L*earning Outcomes Based on EQF System: Development Guide*, Education and Culture DG Lifelong Learning Programme (no date).

120
Cultural Heritage Strategy for the 21st Century, Appendix A.

A useful mechanism for an individual to gain mobility through validation would be to combine validated skills using the European Credit Transfer and Accumulation System (ECTS). The ECTS makes it possible to merge different types of learning in the same study programme, or to participate in lifelong learning. The 2012 Council recommendation includes the principle that synergies exist between validation arrangements and credit systems such as the ECTS and the European Credit System for Vocational Education and Training[121].

Cultural heritage professional should demonstrate all of their validated competences, as well as records of personal input into projects, to clients to illustrate the breadth and depth of their competence. A potential solution is a digital skills card that can hold digital versions of textual, visual and video evidence of formal qualifications, and records of individual involvement in projects.

Individuals whose learning was not formally acquired will gain the most from a mechanism to verify personal competence, such as a skills card. This is especially the case for traditional craft skills, where psychomotor skills are handed from practitioner to apprentice without the benefit of on-site technical assessment.

The adoption of personal development plans[122] should be encouraged to document an individual's participation in CPD, and indicate the level of awareness of their own strategic career development. Such plans would help those responsible for assessing prior learning in their evaluations.

Figure 1: **Lifelong learning flowchart**

Suggested ways to a) capture the optimum benefit from participation in lifelong learning in order to design strategic career development; and b) clarify the nature and level of training demand to stimulate training providers to offer relevant formal and non-formal programmes.

Flow chart for strategic lifelong learning
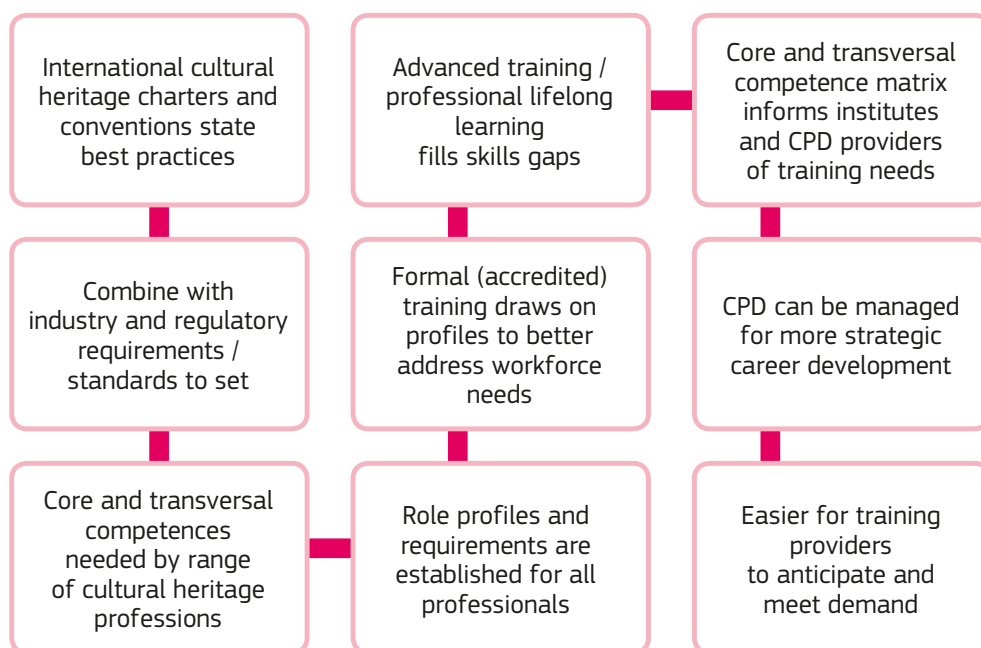
121
https://ec.europa.eu/education/resources/european-credit-transfer-accumulation-system_en

122
Voices of Culture, 2017, p.28.

5.4.6 CASE STUDIES:
Examples of good practice in lifelong learning

1. | **European Heritage Academy**, **Austria.**

2. | **AGORA: the learning centre for students and staff**, **Belgium.**

3. | **CEARTE: Professional School for Craftspeople and Heritage**, **Portugal.**

4. | **Heritage School of Nájera, Spanish Institute for Cultural Heritage**, **Spain.**

5. | **Heritage Skills Programme at Shrewsbury Flaxmill Maltings**, **UK.**

6. | **École de Chaillot, City of Architecture and Heritage (Cité de l'architecture et du patrimoine)**, **France.**

7. | **Safeguarding intangible cultural heritage**, **Croatia.**

8. | **National Occupational Framework**, **Slovakia.**

1

European Heritage Academy
AUSTRIA

The European Heritage Academy is an internationally certified initiative in the area of further education and training. It was launched by Burghauptmannschaft Österreich (BHÖ) in cooperation with the Federal Monuments Authority Austria and the Information and Training Centre for Architectural Conservation in the Charterhouse Mauerbach. BHÖ launched the EU project MODI-FY in 2014. An internationally certified programme for further education and training in heritage preservation has been developed as part of that initiative. The programme, which is based on practical experience, targets all types of occupational groups working with historic buildings. The seminar centre and practical training facilities are located at Charterhouse Mauerbach, which is Austria's education and training hub for the field of monument preservation. Officially, the European Heritage Academy opened its doors in December 2017, when the first modules were offered to the public.

⏻ www.european-heritage-academy.eu

© European Heritage Academy

2 AGORA: the learning centre for students and staff
BELGIUM

AGORA is the learning centre for students and staff at the KU Leuven university. It is the result of a large renovation project transforming the former pharmaceutical laboratory into a student-centred learning space. AGORA's mission is to provide a hub for social learning, technology and services, and to provide a platform for innovation and experimentation by students and staff. It is a state-of-the-art example of how higher education can invest in new forms of skills development. AGORA offers students and staff:

- a social hub where students and staff of the university can work together (social learning);
- a platform service for all learning activities, including digital and multi-location learning;
- state-of-the-art student support and accommodation, including laptop, tablet and audiovisual loan service; scientific software; presentation and editing rooms; and a PC repair shop;
- bridges with the labour market, such as developing entrepreneurial skills (hackathons, start-up weekends, business games, job-interview training, video CVs, digital skills, etc.).

© Ana Galán

3

CEARTE: Professional School for Craftspeople and Heritage
PORTUGAL

Public entities have a special responsibility to identify, safeguard and transmit traditional knowledge and skills.

Vocational education has a great role to play, as it offers young people well-structured courses on which masters and specialists play an important role in the transmission of knowledge and skills.

A good example in Portugal is the Professional School for Craftspeople and Heritage (CEARTE).

As a centre for specialised training in the areas of handicrafts and heritage, CEARTE (near the city of Coimbra in central Portugal) runs activities in partnership with more than 100 entities around the country. These include professional training, recognition and validation of skills, and promotion of entrepreneurship and innovation, and they are aimed at individuals, micro enterprises and other economic agents in the cultural, creative and heritage sectors, particularly the crafts sector. CEARTE supports technological training, and technical support and innovation, for creators of crafts, local products and endogenous resources, whatever their age.

⏻ https://www.youtube.com/watch?v=gqPY7_qj9Cg

© CEARTE

4 The Heritage School of Nájera, Spanish Institute for Cultural Heritage
SPAIN

The Spanish Institute of Cultural Heritage (IPCE), part of the Spanish Ministry of Education, Culture and Sports, runs the Heritage School of Nájera.

The main functions of the school are:
- the organisation and delivery of specific courses for professionals in the conservation and restoration of cultural property, to spread the principles, methods and criteria for intervention in cultural heritage;
- the programming of training on heritage aimed at different educational and professional levels;
- the exchange of knowledge with institutions of the EU and other countries;
- undertaking activities to deepen the study, development and dissemination of the European Landscape Convention of the Council of Europe, and to promote studies that train technicians, in accordance with the recommendations of the EU and UNESCO.

Courses include:
- Tangible Heritage: Technical Conference and Course on the Protection of Cultural Heritage in Emergency Situations. National Plan for Emergencies and Risk Management in Cultural Heritage.
- Intangible Heritage: Musical Instruments and Sound Records – Collections, Preservation and Exhibition.
- Tangible and Intangible Heritage: Course on Traditional Lime Production (Craftsmanship) and its Uses for Heritage Conservation. UNESCO Heritage (Moron de la Frontera, Seville (Spain).

⏻ https://ipce.mecd.gob.es/formacion/escuela-de-patrimonio-historico-de-najera.html

Workshop: Making a roof out of vegetation, by crafts professor Antonio Gandano

© Rocio Salas

5 Heritage Skills Programme at Shrewsbury Flaxmill Maltings
UNITED KINGDOM

Heritage projects offer great opportunities to build lifelong learning or CPD, knowledge transfer and practical training into live projects.

Historic England is using the project to repair the Grade I Listed Shrewsbury Flaxmill Maltings to deliver a programme of placements, training and CPD opportunities. Popular behind-the-scenes hard-hat tours give access to the works in progress. This is supported by the Heritage Lottery Fund, the Andrew Lloyd Webber Foundation, and a wide range of partners, including colleges and universities. Learn more about the range of learning activities here: https://historicengland.org.uk/get-involved/visit/shrewsbury-flax-mill/heritage-skills/

The benefits are:
- the team delivering the project share their knowledge, skills and experience;
- the site becomes a tool for learning that is practical, hands-on and provides real-life examples;
- it supports the attainment of qualifications and promotes careers in heritage;
- it provides opportunities to engage with wider audiences, particularly females and young people.

Find out more about how to plan and deliver training activities on live projects and explore case studies here:

⏻ https://historicengland.org.uk/services-skills/training-skills/heritageskills-cpd/building-skills-and-training-into-conservation-projects/

© Historic England Archive, Steven Baker

Trainees learning traditional carpentry skills on Prince's Foundation placements working on the roof at Shrewsbury Flaxmill Maltings

6 Safeguarding intangible cultural heritage, House of Batana, Rovinj
CROATIA

Following the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (ICH), 2003 [123], Croatia started inscribing ICH in its National Registry of Cultural Goods:

⏻ https://www.min-kulture.hr/default.aspx?id=6212

Although the inscription procedure follows tangible heritage documentation, it is significant that, besides textual and audiovisual materials, the inscription of every ICH element clearly names its practitioners. This helped not only to recognise their importance in local communities, but has enabled them to directly benefit from financial and logistical support available from various local and state-government resources and programmes. One of these is a special fund for ICH elements included in the National Registry, which was used by more than 300 practitioners from 2008 until 2018.

The Batana Ecomuseum is an illustrative example of how practical and theoretical knowledge has been transferred, not only to the local community, practitioners and future ICH bearers, but also on different levels and in different directions. This includes practitioners to experts, local to state government, and vice versa. Practitioners have thereby become managers of culture, while experts develop sensitivity towards the needs of local communities when working on the safeguarding and sustainability of cultural heritage.

⏻ http://batana.org/en/home/

Photo by: Kosjenka Brajdic Petek © Ecomusem Batana, 2015

Workshop at Rovinj on making wooden *batana* boat,
including the use of multimedia

[123] https://ich.unesco.org/en/convention

City of Architecture and Heritage (École de Chaillot, Cité de l'architecture et du patrimoine)

FRANCE

École de Chaillot, founded in 1887, became the educational arm of City of Architecture and Heritage (Cité de l'Architecture et du Patrimoine) in 2004. Rich in history, the school provides training for heritage architects who have been working for the contemporary reuse of existing buildings, ancient cities and territories for decades. The school offers advanced degrees and post-doctoral studies to state-licensed architects and urban planners, to specialise and deepen knowledge of architectural, urban and landscape heritage. Find out more about learning activities here:

⏻ https://www.citedelarchitecture.fr/fr/article/ecole-de-chaillot

The benefits are:

* acquirement of professional skills and conceptualisation capabilities for any form of intervention on 'existing' assets;
* it introduces architects to a 'diagnostic culture' that will enable them to intervene effectively;
* the site becomes a tool for learning that is practical, hands-on and provides real-life examples;
* it supports the attainment of qualifications and promotes careers in heritage;
* it provides opportunities to engage with wider audiences, particularly cultural heritage owners, mayors, etc.

STUDY DAYS

The school offers a forward-looking dimension to research activity. Management problems related to heritage dimensions in design of architectural, urban and landscape projects, or emerging issues (new norms, new laws) are addressed during these study days. Explore case studies here:

⏻ https://www.citedelarchitecture.fr/fr/article/journees-detudes-de-lecole-de-chaillot#

PUBLIC COURSES

The school organises an annual cycle of lectures intended for the public and devoted to a particular aspect of the built space. Explore case studies here:

⏻ https://www.citedelarchitecture.fr/fr/article/cours-publics-dhistoire-et-actualite-de-larchitecture

© Natacha Pakker

8 The National Occupational Framework
SLOVAKIA

Slovakia is building the National Occupational Framework and the National Framework of Qualifications, which will help to harmonise the needs of the labour market with the educational system by defining and describing the national standards for each profession. There are 35 professions related to cultural heritage, including emerging professions such as museum and gallery educators or data curators. Slovakia is developing these systems in order to establish effective dual education, in which theoretical and practical formal education in secondary schools will complement each other fully.

⏻ https://www.sustavapovolani.sk/sektorova_rada-34

5.5 Knowledge transfer

5.5.1 Introduction

Over the next 10 years, a large proportion of heritage workers in Europe, the 'baby boomer' generation, will be reaching retirement age. As the research of Jaap van Lakerveld and our SWOT have demonstrated, the heritage sector runs a big risk of losing expertise rapidly due to trends such as:

- the general withdrawal of public authorities from taking responsibility, especially financially, for protecting and promoting cultural heritage;
- skills gaps and shortages;
- fewer young people being attracted by cultural heritage professions, particularly the craft/manual skills side.

Here, our main focus is the experts themselves: what do they need to share their expertise and how can European, national and regional governing bodies support their knowledge transfer? In an online survey in spring 2018, we asked 91 experts for their views on knowledge transfer, in order to better understand:

- how knowledge and skills can be transferred between expert heritage workers, to other professionals and to a new generation;
- what experts need to share their expertise;
- how European, national and regional governing bodies can support expert knowledge transfer.

This section starts by defining what an expert is and then goes on to analyse the survey results in order to understand:

- what knowledge transfer activities are being undertaken;
- what barriers experts face when transferring knowledge;
- what the experts think is working well;
- the experts' main ideas for improvements.

The results of the survey were then analysed and combined with the findings of the Voices of Culture report, as well as relevant examples from the SWOTs, to provide a description of the current landscape, and draw conclusions and recommendations for governing bodies and the higher education sector. Practical examples are also included from Austria, Croatia, Flanders, Portugal and the UK to share good practice and lessons learned.

5.5.2 Recommendations
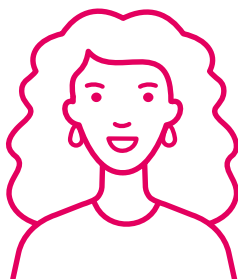
To help mature experts like Laura and her network to share their knowledge and skills with young professionals, the group recommends the following

- Build closer links between vocational and higher education and the workplace.
- Advocate for vocational and higher education institutions to allocate the appropriate time for practical work-based learning in the workplace. This should be designed, planned and supervised by experts in the field.
- Improve contacts, and knowledge and skills exchange, between academic experts and experts in their field in order to close the gap between academic and vocational education.
- Support work-based learning and develop equitable co-funding systems that are sustainable in the long term (with the involvement of all stakeholders: employers, heritage sector and education).

Develop closer links between national and regional authorities in culture and other relevant sectors

- These include professional training, work-based learning, higher education and scientific research, employment and tourism, among others. This will ensure that themes related to the heritage professions are given attention and coordination at the highest level.
- Improve cross-sectoral exchange, particularly with the creative and digital industries.

Identify the priorities in expert skills transfer

- Undertake research and surveys to identify skills gaps, shortages and future needs at all levels of heritage professions, from traditional professions that are at-risk, to emerging challenges and new skills that are required. This will provide the evidence base on which to build and shape educational and training offers going forward and direct funding to where it can have most impact.

Support experts to share their skills

- Provide funding at various levels, such as Erasmus+ and other European Commission funding, that enables experts to:
  - encourage the exchange of experts across Europe in order to address training needs;
  - support mentoring, apprenticeships and other forms of knowledge transfer and make these easily accessible to experts and learners;
  - develop funding streams specifically for heritage professionals outside of academic institutions to enable them to develop and share skills across sectors;
  - create a Living Human Treasures Programme (see below).

- Create databases, digital platforms and networks of communication between heritage professionals. Promote the dissemination of good practices and case studies, and the publication of reference manuals on materials and intervention techniques.

- Promote digital learning strategies such as massive open online courses (MOOCs) and webinars, etc. Terms and conditions for this include the following.
  - Provide blended learning: face-to-face transmission is very important, so digital platforms will not solve the problem. However, they can support the learning processes, e.g. record experts demonstrating and explain techniques and skills that are at risk, using video or augmented reality.

- Provide digital skills: close the gap in digital competence and develop a strategy for blended learning and blended media, using more diverse delivery methods (digital and analogue, e.g. augmented reality, documentation and delivery of heritage skills by video). The production of these should follow defined qualities and be developed with communication experts from creative industries.
- Expand the concept of telling (we know more than we can tell) and capture crafts-people's knowledge-in-action (tacit knowledge) using film and video to collect data on very fast and sensory judgments, which are not easily transferred verbally.

Support succession planning in heritage organisations

- Heritage organisations, institutions and government agencies must include the knowledge transfer into the job descriptions, so it becomes a core part of the business supporting succession planning and so the experts can allocate work time to do this.
- Heritage organisations, institutions and government agencies must develop a 'slow food concept of training' and a strategy for succession planning that gives people time to grow, bearing in mind that immediate results or outputs are not to be expected.
- Encourage employers to adopt a learning culture that supports development in traditional and emerging skills, lifelong learning and the sharing of knowledge and skills.

Support national and regional living human treasures

- Develop a Europe-wide Living Human Treasures Programme. Inspired by the Flanders project, described in Case Study 3 below, create a pilot project that could be implemented on a larger scale to identify and disseminate the experience and knowledge of Living Human Treasures, across a wide range of regions, nations and professions in cultural heritage. Protect the skill first, rather than the site. See the good practice recommendation above.
- Encourage innovation and creativity, and the creation of quality patents and trademarks for traditional products and techniques.

Assure the quality of heritage work and learning

- Promote systems for the accreditation of qualifications, and the certification, registration or accreditation of professionals at European, national and regional level. Encourage greater commonality between accreditation, education and training schemes that will aid the mobility of professionals across Europe.
- Create formal descriptions and competency profiles for heritage professionals.
- Actively encourage those who commission projects for the recovery, conservation and enhancement of cultural heritage (immovable, movable and intangible, classified or under classification) to use companies and professionals with knowledge, skills and experience that have been proven and verified by recognised qualifications, certifications and accreditations.
- Ensure there are appropriate quality assurance mechanisms, regular monitoring and evaluation of work-based learning in the cultural heritage field.

5.5.3 Discussion

What is an expert?

In this section, we define an expert as a person with the highest level of skills and knowledge possible [124]. Experts therefore represent the best in performance and the most up-to-date and state-of-the art knowledge. There are different theories about how to define experts and how the level of expert is reached. Dreyfus and Dreyfus define the expert level as an 'intuitive grasp of situations based on deep, tacit understanding'. Experts can tackle unseen challenges with a clear vision of what is possible [125]. K. Anders Ericsson et al state that an expert has the ability 'to select superior actions and to generate rapid reactions [126]. Germain and Ruiz define an expert as someone with the 'ability to assess importance in work-related situations, the capability to improve, intuition and self-assurance and confidence in their knowledge' [127]. The highest level in the Bloom taxonomy is 'the ability to produce new or original work [128].

In the online survey, we asked the participants what they think makes an expert. These are some of the answers we received.

'An expert knows the theory of processes and procedures but translates them into practice for him/herself and others. He/she does not lose sight of the more 'menial' tasks and aspects of collections management. He/she does not lose touch with the object.'

'Open mindedness is key and always questioning.'

'Mastery of their subject and confidence in communicating their knowledge.'

Online survey

The online survey was designed to ask heritage experts their views on knowledge transfer. We were seeking a 'bottom up' as opposed to a 'top down' view. An online survey was chosen as the best tool to achieve this.

The methodology was that the questions were devised by a subgroup working on the topic of knowledge transfer, including representatives from Austria, Croatia, Belgium, Portugal and the UK. The survey was circulated to contacts from the Voices of Culture Group and contacts compiled by the subgroup. The aim was to reach across a range of European countries and cover a range of professions across heritage, including in tangible and intangible heritage.

In Appendix I of this report, there is a summary of the profile of the respondents, a list of questions and detailed information on the results.

124
'Skills' are the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework (EQF), skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments), European Commission, The European Qualifications Framework for Lifelong Learning, Luxembourg: Office for Official Publications of the European Communities, 2008, Annex I.

125
Dreyfus, S. and Dreyfus, H., *Mind over machine*, New York, 1986; Dreyfus, S., 'The five-stage model of adult skill acquisition' in: *Bulletin of Science, Technology & Society*, 2004 Vol. 24, p. 177.

126
Ericsson, Anders K.; Prietula, Michael J.; Cokely, Edward T.; 'The making of an expert' in the *Harvard Business Review*, 85(7-8), July–August 2007, pp. 114-21.

127
Germain, M. L., and Ruiz, C. E., 'Expertise: Myth or reality of a cross-national definition?' in the *Journal of European Industrial Training*, Vol. 33 issue 7, 2009, pp. 614-634.
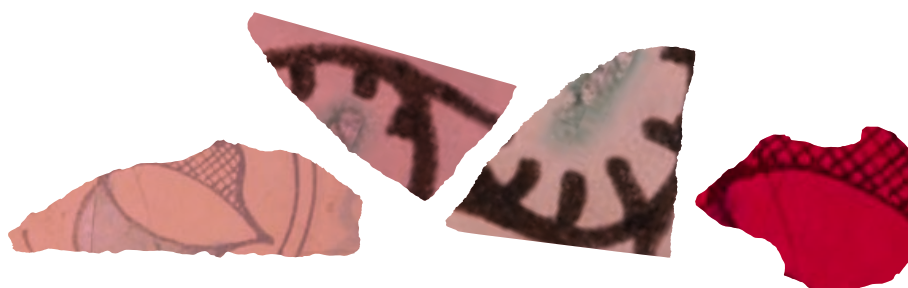
128
Anderson et al (eds.), *A Taxonomy for learning, teaching and assessing*, New York, 2001.

What knowledge transfer activities are being undertaken?

The survey asked respondents about what knowledge transfer activities they are involved with and found the following.

- On average, respondents spent 80 days a year on knowledge transfer activities (Q6).

- The wide range of knowledge transfer activities was striking (multiple responses were allowed to reflect this). The results included authoring at 51%, producing advice/guidance at 53%, government/statutory role at 21% and public engagement at 41%.

- Much of this work is focused on broadening the audiences for heritage. Working with volunteers was reported by 26% of respondents involved with this; working with young people by 22%; and working with diverse groups by 32%.

- There was an even balance between involvement in informal (75%) and formal training (66%) (Q7).

- There was more involvement in 'traditional' methods compared to newer, digital methods (Q7). The top answers given were:
  − producing written guidance, case studies or training materials (68%);
  − being a coach or mentor (62%);
  − hosting an apprenticeship, placements or work-based learning (54%).

- Many respondents are involved in producing online content, such as website content, webinars and podcasts (42%). But the level of involvement drops off for activities around digital skills (39%) and producing video (21%). This highlights the risk of getting left behind in the digital shift with a 'generational gap', and not reaching younger audiences, wider audiences and more diverse audiences.

- Activities that allow experts to communicate, network and share knowledge and experience are valued. These can include taking part in expert committees or more informally through attending lectures, conferences and presentations (Q8). One observation was:
  'My experience is that workshops and meetings with several experts in a special field (seminars) are a very good form of developing knowledge transfer, because the meetings make the experts interested in communication. One challenge is to find methods to capture the conversation and then be able to use it in other situations.'

- There is a strong preference for methods and techniques that are hands-on/practical (71.01%), multidisciplinary (60.87%) and trainer-centred (55.07%) (Q9).

- Site visits (81%) are the most popular locations for learning, reflecting this preference for the practical, followed by work-based (70%) and workshops (67%). It is interesting that online is much lower, at 22% (Q12).

- Demonstration/instruction (82.86%) was by far the most popular learning tool used, followed by coaching and mentoring (67.14%), and studying written materials such as manuals, checklists and work aids (55.71%). However, digital tools such as webinars, podcasts and video were lower (34.29%). Innovative practices such as place-based learning, reflection on practice, flipped classroom and facilitated learner-based groups such as action learning, were mentioned but not common (Q10).

- There was a strong commitment to contributing to the development of qualifications, with 50% of respondents being involved with this. The International Council on Monuments and Sites was the most commonly cited of the standards, codes of practice and guidelines used (Q15), followed by the International Council of Museums and UNESCO. It should be recognised that some activities will be cross professions and some will be profession-specific. It was also notable that many respondents did not reference any standards

What are the barriers the experts face in knowledge transfer?

The experts who participated in our survey are very keen to transmit their skills and knowledge. They would really like to contribute more to this, especially when there is the added benefit of networking with other professionals. This would also enable them to find new ideas and ways of working. However, they are not as active in their role as transmitters as they could be. Based on the results of the survey and the SWOT, there are five main reasons for this.

Time is running out

Our respondents agree: it takes time to develop an expert. Quality grows slowly and it is often said that it takes up to 10 000 hours of practice to become a true expert. Dedication, concentration and focus have to be invested in this learning process, both by the learner and the teacher. In today's society, this time is lacking in heritage organisations, craft ateliers and craft businesses.

- Many respondents refer to their busy jobs, with many tasks and a lot of time pressure. Often, **there is just no time left to do other things**. Reduction of staff across workforces has left little time to do the 'extras'. Transferring knowledge and skills is often seen as an 'extra' that will take them away from their jobs. Employers usually do not support this, according to our respondents, because is not directly focused on a business output (and time is money).

- **Professional profiles for heritage workers do not include knowledge transfer activities.** On the contrary, job descriptions often include other things that are not attached to their expertise. Respondents refer to time-consuming bureaucracy and management tasks or even routine jobs that could be done by others. In the survey, they ask to be relieved of these tasks so that they can concentrate on their core business and knowledge transfer. Both the SWOT and the Voices of Culture report argue for including such knowledge transfer tasks into the profiles of experts.

- The process of transferring knowledge and skills is a slow one, as it takes a lot of practice. Our respondents are worried that both management and learners are too impatient. They want the experts to develop quick and easy tools and job aids that they can apply immediately. The Voices of Culture report notably calls this **'the fast food concept of training'**, providing readymade, hands-on tools. Reality is often more complex than that, and one does not become an expert overnight.

- **Developing a good course or lecture is time consuming** if you want to do it well. One respondent said, *'It takes at least a day, often more, to prepare a single hour's lecture'.*
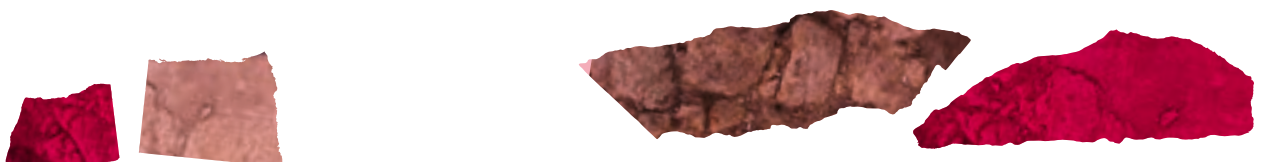
These views from respondents are set against the background of an ageing workforce, which means time is running out to transfer knowledge before the baby boomer generation reach retirement age. This is illustrated by the ages of the survey respondents. The majority were 46-60 years old, at 50%; the next largest group were 31-45 years old, at 26%; and a significant number were over 60 years old, at 21%. In the two younger age groups, there were no respondents age 16-24, and only 3% were 25-30 years old.

Financial barriers

Time is money, of course, and it is therefore no surprise that, after time, finances are the next barrier in our survey results. One of our respondents stated very forcefully that transferring knowledge and skills is currently *'forced voluntarism'*. The wider view was that not everyone can afford to do this, with 50% of respondents saying they cannot commit to unpaid work, and 41% pointing to the cost of equipment and travel as a barrier.

Additional funding is part of the solution, but it is also interesting to note some of the comments from the survey.

- Many respondents commented that **funding bodies often do not invest in knowledge transfer projects**. Funders are not focused on supporting long-term approaches such as mentoring, apprenticeships and workplace learning. One of the problems is that these kinds of programmes do not deliver quick outputs as their outcomes are meta level.

- **Designing and delivering quality courses can be expensive** for organisers as it requires a significant input of time. For attendees, time away from the day job must be agreed with managers in order to attend.

- Skills in applying for funding are often not the core competences of the experts working in the field. Experts report that they cannot afford the time to become formal partners and develop proposals, as the risk is that the vast majority will be unsuccessful. It is therefore often **too big a risk to invest time in writing a funding bid for a project**.

- Our respondents also point out that **learners should be financially supported as well**. Formal training programmes can be expensive and young professionals cannot afford them.

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Academisation and lack of connection to learners

If you want to transfer knowledge, there must be someone to transfer it to. Quite surprisingly, many of our respondents said that they do not have the means to find learners, and that this is holding them back. They cite several reasons for this.

- **Respondents consider further and higher education to be too knowledge-centred** and they regret the lack of practical skills in programmes. The former master-pupil or traditional apprentice-based education model is becoming less and less relevant, and is being replaced by specialised courses. Our expert respondents say that it is hard to communicate knowledge theoretically with no time for practice. As a result, they even question the quality of the lecturers, because they are considered to be too theoretical. The SWOT and the Voices of Culture report also refer to this 'academisation' of the curricula and the lack of hands-on training.

- **Experts from the field are often not involved in formal training programmes.** For example, they are not invited as guest speakers or mentors. One of our respondents therefore asked: *'Are non-academics like me seen as a threat to those who do make a living from teaching?'* According to our respondents, further and higher education programmes should engage more with the workplace to find out what skills are lacking in the field and how they could tailor their courses to meet the needs of the workplace. Training institutions must therefore broaden their network of experts in order to deepen their quality.

Other learning paths should be recognised, outside of academia

Although the recognition of training within academia is formal and quality-assured, Voices of Culture makes the point that this is less evident in fields outside academia. Our respondents describe the attitudes of educational institutions as being conservative, and not willing to change and keep up with the demands of the sector. They are criticised for the slow pace of engagement in new learning methodologies and opportunities, such as platforms for sharing knowledge and workshops and seminars contributing to the development of communities of practice.

Declining status and prestige of manual skills

As the SWOT demonstrates, manual skills do not hold a high status and prestige in society today. This often leads to personal frustration among professionals who seek other sources of income, with potential new learners choosing other professions.

- There are a number of traditional crafts that lack demand for their products or services, leading to insufficient financial sustainability for the workforce. This can force those who could be well suited to transferring their traditional knowledge and skills to leave their profession.

- Apprenticeships and vocational training are not entirely compatible with the economic and social aspirations of young people today, as academic achievement and university education are more highly valued.

- Small or micro companies find it difficult to offer a broad range of projects and tasks to attract and offer comprehensive training. In the survey, the experts do refer to a lack of access to students and learners. However, only 17 % think that learners have negative views of cultural heritage as 'stuffy' or 'outdated'. So, there must be other factors that make transmission of their expertise difficult.

A lack of knowledge of didactic tools: a digital gap

When training programmes are devised, the main challenge is to adapt knowledge to the needs of specific and diverse audiences, including professionals in the same field or other fields, members of the public with an interest in the subject or people with no awareness of the topic at all. It is therefore important to select the right content and tools for each target group. Our respondents clearly want to develop high-level training materials: 44% say that they are not clear on the options they have for doing so, and 20% say that they lack knowledge of didactic methods.

Our survey indicates that the experts are not adopting digital training formats, as these showed the lowest percentage of responses. For example:

- activities around digital skills – 1.61%;
- cross-sectioned methods and techniques – 18.84%;
- content curation and sharing online content as a method of documenting and sharing – 20%;
- the least preferred location for learning is online – 22.86%.

New technologies and digital methods are problematic, as only 48 respondents answered the question (Q18), and out of those, only 34 use new technology as part of knowledge transfer. In another question, out of 39 respondents, only 28 mentioned new technologies that they are interested in using.

What is working well?

It is concerning that only about 20% of the respondents addressed the question, 'What is going well?' Nevertheless, it is possible to identify themes in what is working well in knowledge transfer to reinforce skills and to help those interested in getting involved in cultural heritage (by giving them the skills to think for themselves, feel able to take decisions in new situations and even to test and share new working methods).

Creating 'fertile' terrain to stimulate and develop the transmission of knowledge

Cultural heritage is a priority in EU policies and is part of the life of citizens from an early age. There are ecosystems in which communities, professional associations and experts are an integral part of decisions on investment priorities and the allocation of funds to protect and promote heritage.

The most effective ways of ensuring knowledge transfer

The experts who answered the questions on 'What works well? And why?' emphasised the good results achieved through direct and dynamic contact with trainees, enhancing the exchange of knowledge and experience. The need for feedback was also strongly emphasised, both after and during training.

> *'Theory/practice mixed sessions are the most effective means of training as it allows the learner to understand and use techniques and materials and allows ethics/ principles to be taken out of the book and into real practice.'*

> *'Honest, evidence and experience-based communication; demonstration and hands-on practice.'*

This links directly to the survey results, which show a preference for hands-on/practical and multi-disciplinary approaches such as demonstrations, coaching and mentoring, and a strong preference for site visits, work-based learning and workshops. See above and Appendix I for more detail.

We conclude that success is based on the promotion of transversal knowledge and the use of different methods. This may be in personalised training or in small groups, but also using digital tools and networks. Experts should assess the content and adopt the most appropriate methods, using digital tools and networks. Hands- on or practical and multi-disciplinary approaches, using formal and non-formal methods, are preferred to ensure knowledge transfer.

What impacts can be gained from knowledge transfer?

- Survival and invigoration of knowledge and skills at risk.
- Further development of new innovative and creative methods.
- Engagement of all communities.
- Attracting young people to the heritage professions.
- Increasing volunteering, especially among the senior population and young people.
- Increasing knowledge, skills, and qualifications through the involvement of professionals from different levels and specialties in cultural heritage interventions, including 'Living Human Treasures' across regions, countries and professions.

What do the experts think can be improved?

Just under a third of the respondents gave ideas for improvements. This may be explained by some overlap with previous answers. Some statements on the subject of barriers are repeated as ideas for improvement. Based on the findings of the Voices of Culture report and the SWOTs, there is a need for the following improvements to be made.

More resources: time, people and finance

Lack of funds and resources is a serious threat to heritage professionals, learners and experts who can transfer their knowledge. Survey respondents repeatedly asked for funding streams specifically for heritage professionals, as unpaid work is commonplace, multi-skilling is required and people have to do other jobs to make a living:

> *'Mainly I suffer from lack of time, and this is because I have to do a job where I earn money (even though it is in the same field but with a lot of routine work). Most of my activities around knowledge transfer are unpaid.'*

The result is a lack of time for wider engagement in knowledge transfer and in European programmes. One idea could be to provide help through digital support at not-for-profit costs, and more sponsors could provide access to facilities, funding and IT.

Close the gap between academic and vocational education

Closing the gap between academic and vocational education is considered to be an important challenge for the future. The calls for improvement in the survey include:

- better cooperation between universities and organisations engaged in the practice (e.g. academic experts as guides and craftspeople as practical experts on courses, with a mutual respect for each other's work);
- better cooperation between academic institutions and the labour market;
- better correlation between academic training and workplace needs.

Respondents made a number of observations on the disconnect between academic and vocational training, and the need for better coordination with the workplace and employers, and to meet the digital shift. An on-site conservator of sculpture and architecture at a small, UK-based company stated that:

> *'Training institutions do not look outwards to broaden their network of experts. Institutions could engage more with the workplace to find out what skills are lacking in the field and how they could tailor their courses to meet the needs of the workplace.'*

The Voices of Culture report echoed this view: *'The two-way influence between principle and practice needs to be fostered in academia, in vocational education and in cooperation with professionals in the field'* [129].

Support more cross-sector exchange and collaborative spirit

To improve cross-sector exchange, the network of experts should be broadened, especially in the field of training institutions and the innovative creative and digital industries. The conservator's quotation above highlights this need to broaden networks for better collaboration.

More engagement with the workplace can give training providers better guidance on workforce skill requirements. The results of collectively developed workshops, meetings and seminars should be communicated to a broader community and open doors for new formal partnerships.

The ways in which knowledge is transferred depends on the objects in question. The people involved can be professionals in the same or other fields, members of the public with an interest in the subject or people with no awareness of the topic at all. Experts such as architects, restorers or craftsmen should be relieved of management tasks to focus on objects and best practice.

Knowledge transfer should always be two-way, and should always be an 'exchange'. One respondent observed:

> *'We should use the term knowledge exchange rather than knowledge transfer as it should always be a two-way transfer of knowledge.'*

129
Voices of Culture, 2017, p.2.

Develop digital skills in training, education and communication

Survey respondents highlighted a number of issues. Universities and cultural institutions should be engaged with the increasing need for digital skills, and educational experts need more digital support. Formal education for knowledge transfer is considered very outdated and ineffective, and training at further education colleges and universities has to be improved. The gap in digital competence also generates a communication gap. The suggestions include the following.

- Online learning such as FutureLearn in order to support a flipped classroom approach.
- Transfer of heritage skills through video (e.g. YouTube videos). An example would be thevideo of the traditional milling techiniques on view at Nucleo Do Moinho Mare De Corroios (Seixal, Portugal) [130]. The production of such media should be high quality and reference appropriate standards.

Developing communication skills is an important part of knowledge transfer and must be a focus for heritage professionals. Information and documentation call for the creation of new methods that are appropriate for cross-sectoral and digital use. The gaps include:

- didactic and specialist literature (either not accessible or not created yet);
- a reliable database for technical information;
- a toolkit with ratings to get better overview of the wide range of tools available.

Support greater diversification in training delivery methods

Heritage education should start early, in primary and secondary schools. The education of teachers in the fields of history and cultural heritage should be improved, and there need to be stronger links between teaching and practice in secondary schools and higher education.

More diverse training delivery methods include blended learning, lifelong learning, distance learning, modular training and on-site assessment. All of them are beneficial to upskilling employed conservators, craftspeople, contractors and professionals who cannot afford to take a block of time away from their business.

The Voices of Culture report commented on this subject, saying: *'Education and training should be broadened, go beyond traditional competences and skills in cultural professions. New proposed subjects include transversal skills, ethics, digital heritage, transversal approach and multidisciplinary work. Traditional skills need to be updated and made more relevant to a new integrated approach'* [131].

Map qualifications

Respondents suggested:
- establishing standards for professional competence and assessment frameworks for education and training;
- creating curriculum contents and describing and identifying heritage activities;
- taking measures to reach national occupational standards and to set international benchmarks.

130
http://www.cm-seixal.pt/equipamento/ecomuseu-municipal-do-seixal-nucleo-moinho-de-mare-de-corroios.
131
Voices of Culture, 2017, p. 2.
132
Voices of Culture, 2017, p. 2.

The Voices of Culture report underlines this issue, saying: *'It is necessary to identify/map professions; demonstrate their position in the European Qualification Framework realistically; locate needs to improve capacity building'*, and *'Those with professional expertise need their existing profiles to be defined in relation to necessary: education, competences, access, practical application of skills, and responsibilities towards cultural heritage'* [132].

An example of best practice is the recently founded European Heritage Academy in Austria, supported by the EU project MODI-FY. It opens up opportunities to identify traditional and emerging professions in the heritage sector, defines specific skills and jobs, applies them in accordance with the European Certification and Qualification Association (ECQA), and promotes exchange and accessibility.

Develop new visions in policymaking

Policymaking calls for new visions and the repositioning of laws and regulations. Stable and continuous funding ensures long-term development, instead of insecure project budgets. The allocation of budgets and projects illustrates economic priorities and the image a state wishes to portray.

Communities should be more involved in:
- strategy work
- raising awareness among young people
- communication with the public in general.

Cultural heritage policies should encourage more engagement with cultural institutions- such as newpartnerships between museums and national public agencies.

As one respondent summed it up:

> 'I think these kinds of projects are a way to learn more about the transfer of skills situation in Europe so I salute you for this initiative. We should also learn how to deliver training with less bureaucracy and engaging cultural institutions and universities with the increasing needs of the cultural sector for digital skills.'

5.5.4 CASE STUDIES:
Examples of good practice in knowledge transfer

1 | **Werkraum Bregenzerwald, working with craft businesses to attract young people to heritage careers, Austria.**

2 | **Accreditation and certification, Croatia.**

3 | **Living human treasures, Flanders.**

4 | **The Irish Film Institute, Ireland.**

5 | **The Lisbon City Hall School of Calceteiros, Portugal.**

6 | **Book of heritage professions: skills, training, and knowledge transfer in heritage professions, Spain.**

7 | **Heritage apprenticeships, UK.**

8 | **The documentation and protection of wire craft (Považie Museum), Žilina, Slovakia.**

1 Werkraum Bregenzerwald, working with craft businesses to attract young people to heritage careers
AUSTRIA

Werkraum Bregenzerwald is one of three regional centres for craftsmanship in Austria selected in 2016 for inclusion in the UNESCO Register of Good Safeguarding Practices under the Convention for the Safeguarding of the Intangible Cultural Heritage.

As a joint platform of 91 craftspeople, the Werkraum Bregenzerwald promotes exchange between local craft businesses. Side by side, they strive for the sustainable development of regional handicrafts by cooperating with international architects/designers and attracting young people to crafts professions.

In terms of vocational placements, the cooperation breaks new ground with the recent establishment of the Werkraum School. The school combines apprenticeship and a trade school in a five-year educational programme. Internships and taster afternoons take place in excellent regional crafts businesses to explore materials, working methods and procedures. Young people gain an accurate overview of craft professions in this first step, paving the way for later specialisation in historical craft techniques, which are dearly needed in the cultural heritage sector.

In special projects such as Werkraum School Building Days, elderly or retired professionals are actively involved in coaching and knowledge transfer. This offers solidarity between the generations and good experience for young people. Face-to-face transmission, handed down from one generation to the next, reinforces social cohesion and generates identity with the region and its culture.

⏻ www.werkraum.at

Sixty young people are building a 3D timber structure, coached by a crafts and design teacher, and retired professionals

© Werkraum Bregenzerwald and Johannes Fink

2 | Accreditation and certification
CROATIA

The Directorate for Cultural Heritage Protection of the Ministry of Culture of the Republic of Croatia is responsible for accreditation, and manages a register of skilled professionals. Expert legal and natural persons can conduct research, study, and carry out actions for protection, restoration, conservation, maintenance, reconstruction, reuse and trade in cultural goods. To acquire an accreditation, professionals have to submit evidence of their competence. In order to acquire the necessary competences, professionals need to work with expert legal or natural persons who already have a heritage conservation accreditation. There is an ordinance on the conditions under which natural persons and legal entities can obtain permits to work on the protection and preservation of cultural property.

http://www.min-kulture.hr/default.aspx?id=34

Living human treasures
BELGIUM (FLANDERS)

In 2018, Belgium (Flanders) launched a new fund for the transfer of intangible heritage skills, both for crafts and performing arts. The transfer of these kind of skills, often an intensive and time-consuming process, is a prerequisite for keeping this heritage alive. The new fund invites masters and pupils to apply for the scholarship together, for a maximum of two years. Each month, the partners can receive EUR 2 000 to support their learning process, with a maximum amount of EUR 48 000 per scholarship. Flanders aims to support the safeguarding of intangible cultural heritage, inspired by UNESCO's Living Human Treasures.

⏻ http://www.kunstenenerfgoed.be/nl/wat-doen-we/subsidies-cultureel-erfgoed/beurzen-voor-het-doorgeven-van-vakmanschap

© Het Mot, Grimbergen

The Irish Film Institute
IRELAND

The Irish Film Institute (IFI), is Ireland's cultural institution for film. It has a remit to exhibit, educate and preserve Ireland's moving image heritage. Over the last five years, moving image production and distribution has moved from a predominantly analogue environment to a completely digital landscape. The IFI has responded to this rapid change by proactively addressing the challenge of collecting, documenting, preserving and disseminating this new digital material. Key to negotiating this sectoral shift was the creation of the IFI Archive's Digital Preservation and Access Strategy [133].

The IFI Irish Film Archive has forged a reputation nationally and internationally as an example of best practice in the archival and digital preservation sector. A suite of open-source digital preservation tools that the IFI has created have been adopted by peer organisations internationally, and are now used across the globe.

⏻ http://ifiscripts.readthedocs.io/en/latest/index.html#purpose
https://github.com/kieranjol/IFIscripts

The IFI's contribution was recently recognised when it won the 2018 International Digital Preservation Award for IFI Scripts.

⏻ https://www.techcentral.ie/irish-film-archive-wins-international-digital-preservation-award/

The IFI has recently partnered with Maynooth University in Ireland to devise and teach an MA module in Media Archives, focusing specifically on digital preservation [134].
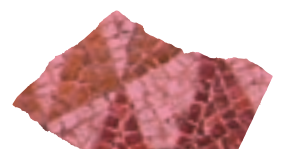
133
https://dpconline.org/blog/idpd/dear-ifi-irish-film-archive
https://ifi.ie/2015/06/digital-preservation-and-access-strategy/
134
https://scannain.com/irish/industry/irish-film-archive-maynooth-opens/
https://www.maynoothuniversity.ie/media-studies/news/ma-critical-and-creative-media

5
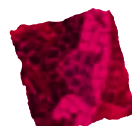
The Lisbon City Hall School of Calceteiros
PORTUGAL

At regional and local level, there are many examples of municipal councils that protect traditional arts and crafts, and create the conditions for them to survive and be passed on to new generations. One good example of this policy is the Lisbon City Hall School of Calceteiros.

Created by the City Council of Lisbon in November 1986, due to concerns about losing knowledge about paving ('calcetamento'), its objectives were to retrain current municipal workers in paving and spread the art of 'calcetamento'. Since then, male and female professionals have been trained in the knowledge of old masters, ensuring the survival of the characteristic Portuguese pavement. The art of 'squaring', 'unfolding the stone' and 'malhetar' (mortising) are expressions that the school is reclaiming in a profession that is uniquely Portuguese and closely linked to the country's cultural heritage.

The school delivers training through adult education and training courses, as well as workshops on the pavements.

In addition, it runs activities to raise awareness of the Portuguese 'calçada' (pavement), and the need to preserve it. These activities are intended for students in the first and second cycle of basic education, as well as the general population.

The school also has a collection of documents, available for consultation, and a play area for young people.

⏻ http://www.cm-lisboa.pt/viver/educacao/fora-da-escola/escola-de-calceteiros/

© Escola de Calceteiros/CML

6

Book of heritage professions: skills, training, and knowledge transfer in heritage professions. Challenges for the professions in 2018.

SPAIN

The aim of this book is to introduce heritage professions and identify their main challenges and needs, as well as their social, cultural and economic impact.

They include: archaeologists, conservation architects, conservator-restorers, digital photographers, drone pilots, documentalists, art historians, stonemasons and carvers and historical heritage gardeners.

It has been developed by the Association of Conservative Conservators of Spain (ACRE) and the Spanish Conservation Group of the International Conservation Institute (GE-IIC), with the support of the European Year of Cultural Heritage.

More than 80 professionals and craftsman in tangible and intangible heritage have described their situation, and the main challenges with regard to their skills and training, through an open call for participation in 2018. It has resulted in a very interesting overview.

⏻ https://shwca.se/Monografico-profesiones-del-patrimonio

© Manuel Valcárcel

Archaeological conservation-restoration works (Lalín, Pontevedra)

7

Heritage apprenticeships
UNITED KINGDOM

Apprenticeships offer a unique and valuable opportunity for individuals to learn a profession through formal training, gain experience in the workplace and earn money at the same time. Degree apprenticeships also offer the opportunity to study for a degree, making many roles in the sector more accessible to a wider audience.

Historic England is convening groups of employers to develop new heritage apprenticeships for archaeology, cultural heritage conservators and historic environment advice.

These heritage apprenticeships will:

- offer an important new route into a range of professions;
- improve social mobility and diversity in the heritage sector;
- address staff shortages, and specialist skills and knowledge-gaps in the sector;
- support career progression for existing staff through up- or side-skilling opportunities delivered through formal training;
- meet professional standards and ensure the apprentice is fully competent to work in the role at the end of the apprenticeship;
- create development opportunities for managers and mentors.

⏻ https://historicengland.org.uk/services-skills/training-skills/work-based-training/heritage-apprenticeships/

Learning archaeobotanist techniques at Fort Cumberland

© Historic England

The documentation and protection of wire craft at the Považie Museum in Žilina
SLOVAKIA

Wire craft is a unique and authentic local folk craft that nearly disappeared due to political and economic developments in the mid-20th century.

To revive the craft, the Považie Museum in Žilina established a project to document and protect it, setting up a specialised unit in 1994 with national competence and international contacts. It comprises a set of activities intended not only to revive, sustain and develop this craft and to facilitate its real acceptance by the national community as an element of its cultural heritage, but also to gradually establish a centre for information, methodology and coordination on wire craft.

Through its research, acquisition, presentation, exhibition, publication, education and promotional activities, and document searches, the unit permanently conserves and protects material and intangible heritage, documents and knowledge.

The unit is reviving the original skills of wire craft, promoting them and seeking out new potential applications. It helps wire craft to adapt to new conditions, monitors the situation and development trends, and supports and coordinates the individuals and communities that are the bearers of wire craft to encourage its further development.

Thanks to the broad and comprehensive scope of the project, it makes a highly effective contribution to the sustainability of a specific aspect of intangible cultural heritage. Since 2017, the documentation and protection of wire craft at the Považie Museum in Žilina has been included on the List of Best Safeguarding Practices of Intangible Cultural Heritage in Slovakia.

⏻ https://www.ludovakultura.sk/en/list-ich/documentation-and-protection-of-wire-craft-at-the-povazie-museum-in-zilina/
https://pmza.sk/

© Anna Kurcharfíková, Archives of Považie Museum in Žilina

© Martin Kleibl

6 SUGGESTED NEXT STEPS

6 SUGGESTED NEXT STEPS

6.1 A case for devising cultural heritage competence principles and a framework to organise lifelong learning

The EU General Block Exemption Regulation states '... the dual nature of culture [is] on the one hand an economic good that offers important opportunities for the creation of wealth and employment, and, on the other, a vehicle of identities, values and meanings that mirror and shape our societies'[135]. This and many EU policy statements make clear that cultural heritage has an inherent value for society: it is an essential public good.

Cultural heritage training and knowledge transfer is currently driven by a commercial paradigm, notwithstanding official recognition that culture cannot be evaluated solely by market forces. In addition, competing factors and constraints affect how the inherent value of cultural heritage is made manifest, and how or if quality is achieved in protection, conservation, mediation or awareness raising. Public and private interests – in policy and regulations (e.g. culture, education and procurement), clients, industry standards and sector representative associations – are constantly in tension as they have differing standpoints and purposes.

This report aims to recommend ways to stimulate the supply of, and demand for, cultural heritage awareness, high-quality education and expertise, so that professionals and society as a whole can safeguard cultural heritage throughout the EU in the long term. The logical development is to create a practical, flexible and successful lifelong learning system. In such a system, all participants (cultural heritage professionals, learners, those who interact with cultural heritage and the public) would possess and share knowledge, skills and attitudes in a sustainable, healthy and integrated way. The goal would be a virtuous circle of cultural heritage awareness, understanding and continuous improvement.

In order for the inherent value of cultural heritage to be fully reflected at all workforce levels and professions throughout the EU, a lifelong learning system and set of cultural-heritage competence principles should be devised to influence how the workforce gains and maintains the necessary competences required of them.

Competence principles would summarise stated EU values to promote measurable quality in cultural heritage education and training, knowledge transfer and public-sector decision-making. Principles represent collective priorities. It is necessary for European cultural heritage stakeholders (governments, education/training representative associations, interested non-governmental parties and the public) to work within a structure, such as the Action Plan for Cultural Heritage, to decide whether principles are an appropriate response. To be useful, the principles must support medium- to long-term solutions to the problems that this report has summarised.

Some queries should be considered by all stakeholders in order to decide whether competence principles should be pursued.

**Should baseline standards be set in cultural heritage education and training?**

- In what way or to what extent should cultural heritage standards, conventions, charters, legislation and policy influence learning content in training programmes?
- How best should educational institutions ensure that changing European and international understanding of cultural significance (tangible and intangible), as well as conservation philosophy and practice, are reflected in training programmes?
- How best should educational institutions ensure that programmes empower learners to develop the competences to fulfil one or more specific cultural heritage roles with the full range of skills required?
- How best should cultural heritage instructors, trainers, lecturers and demonstrators show their competence if not formally qualified in cultural heritage and/or conservation theory and practice?

How should educational institutions best match content and delivery to learner needs?

- Should a standard be developed (and possibly made applicable across disciplines) to ensure that programme content and delivery covers the occupational tasks essential to achieving cultural heritage best practice?
- Should formal training prioritise interdisciplinary decision-making, and theoretical and practical skills? Should training span vocational and academic levels, for example, by teaching skills to apprentices alongside students?
- How best should educational institutions apply digital technology to heritage training, including in areas such as design creativity and communications?
- How can academic programmes best include practical (psychomotor) skills development to ensure that theory is focused on the tangible materials, work methods and real-life issues of the workplace?

Are there principles that should apply to cultural heritage knowledge transfer?

- Are there principles that can be applied to help working professionals plan their continuing professional development strategically, to broaden and deepen their knowledge, skills and understanding of cultural heritage?
- Is it feasible to expect employers, as a matter of principle, to recognise the central importance of knowledge exchange and allow time and funding for it to take place?
- How best can the learning that occurs in publicly-funded cultural heritage projects be harnessed? What sort of principles would ensure this happens on-site and/or in the classroom and include both trainees/students and professionals?
- In principle, should there be a mandatory requirement to record heritage projects formally and disseminate the information online (where possible), to help develop further and higher education programme standards and content?
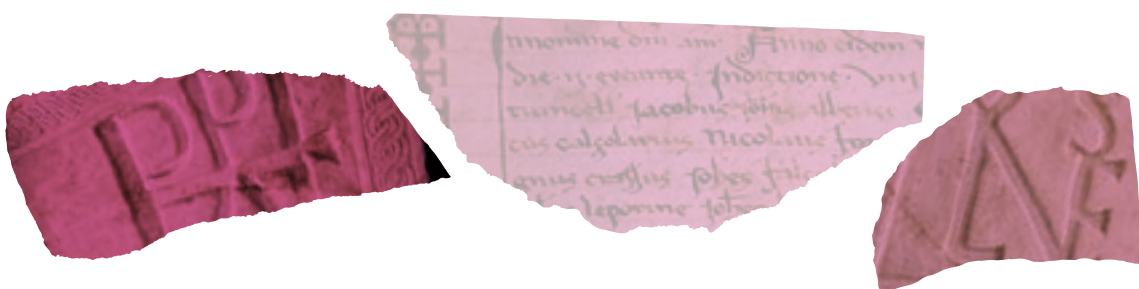
Would decision-making principles improve outcomes in cultural heritage programmes or projects?

The acceptance of cultural heritage as a public good suggests that Member States and bodies should employ decision-makers with cultural heritage competences when applying EU directives and implementing policies, plans, programmes and projects that could directly and/or indirectly affect cultural heritage.

The decision-making processes of best cultural heritage practice follow the principles of management science and systems thinking to manage change, analyse problems and generate high-quality solutions that are consistent with sustainable development. A high level of maturity in organisational management is therefore important to enable decision-makers to use cultural heritage knowledge, processes and professionals to best effect.

It is true that the focus and needs of heritage and heritage projects vary greatly, and that the responsibility for much of our patrimony lies in private hands. However, common decision-making competence principles could potentially help to manage risk and promote quality. There are some questions to ask when considering whether and how to formulate such principles.

- Should best practice require team leaders or decision-makers working on publicly-funded capital works, and on research projects affecting cultural heritage, to be competent in the subject matter (or take advice from expert cultural heritage professionals)?
- How should organisations promote collaborative and interdisciplinary cultural heritage decision-making that values the opinions of non-heritage stakeholders as well as experts? Are there useful principles to adopt from other sectors?

6.2 The concept of a cultural heritage lifelong learning framework

The European Commission Recommendation on Key Competences for Lifelong Learning (2018) promotes the concept of competence frameworks, based on the success of the digital competence framework and other sector frameworks [136].

The usual purpose of a sectoral competence framework is to set the skill levels necessary for the workforce in a particular sector. Frameworks are a methodological structure in which definitions, descriptions and implementation methods are agreed by, and for, the sector itself, with reference to underpinning sector requirements and practices. Frameworks use a common language and functional analysis to describe roles and competences, including the skills and knowledge requirements of a sector. In diagrammatic terms, they provide a functional map; a representation of a professional sector, describing the outcomes of activities from organisational to individual level, such as performance standards (descriptive or normative). This work helps to translate key competences into learning outcomes at national, regional or institutional level and bridge the gap between the worlds of education/training and professional practice.

Frameworks may include necessary associated elements, such as providing for recognition of prior learning. By focusing on activities rather than job roles, a competence framework

can provide a dynamic and flexible representation of evolving professional responsibilities. An advantage of this approach is that it is also possible to combine sector-specific with 'transversal' competences. Competence frameworks can serve as the basis for many functions, from recruitment to appraisals and staff certification, accreditation and registration programmes [137].

A potential framework outline

A 'Cultural Heritage Lifelong Learning Competence Framework' should be considered by the European Commission as a practical mechanism for achieving best practice and optimum learning outcomes. The rationale behind suggesting a framework is to combine the individual beneficial impact of each recommendation of this report, so that all become constituent elements of a coherent plan that enables the work to achieve more than the sum of its parts. A framework would define the interrelationships necessary for an integrated mechanism to achieve the goal set out in this report. A framework should be flexible, practical, logical, helpful and clear.

In order to be consistent, coherent and durable, a framework should be guided by cultural heritage competence principles to underpin its overarching purpose. The stakeholders that agree those principles would already be informed of skills needs and could set about addressing them under the umbrella of a set of desired outcomes (the benefits that the framework is designed to achieve).

The framework would primarily be a tool to outline the knowledge, skills and attitudes that characterise the cultural heritage workforce. It would also be a structure for managing the inevitable changes that occur with the advance of technology, the impact of regulation and in how cultural heritage-related decisions are made.

The benefits of a cultural heritage framework are likely to be seen in: maintained and/or improved and measurable quality of cultural heritage professionals; the setting of agreed standards and best practices for work; and the pooling of capacity to drive common cultural heritage interests.

In conclusion, a framework with a set of interlinked principles and process mechanisms would help the cultural heritage sector to structure the lifelong learning needs of professionals in a way that addresses the learning and development needs of policymakers, mediators and the public. It would assist with EU promotion of the competence framework concept as a structure for lifelong learning to raise the skill level of the workforce and broaden skills acquisition in society as a whole. The framework concept fits well with the newly developed Sectoral Skills Development Blueprint for delivering training to match the skills needs identified by each sector.

The idea of a competence framework for cultural heritage should be pursued as a central component of the Framework for Action on Cultural Heritage. It should be considered as part of the commitment to 'explore a European Institute of Innovation and Technology Knowledge and Innovation Community on cultural heritage and creative industries (2019)' [138].

137
TRACE, *Overview of European competency frameworks* (Transparent Competences in Europe, a Leonardo da Vinci pilot project 2005 (ref. 2005-2028/001 LE2-51OREF)), pp. 1-2, p. 8-9, p. 10.
138
European Commission, *Framework for Action on Cultural Heritage,* 2018, pp. 6 and 8.

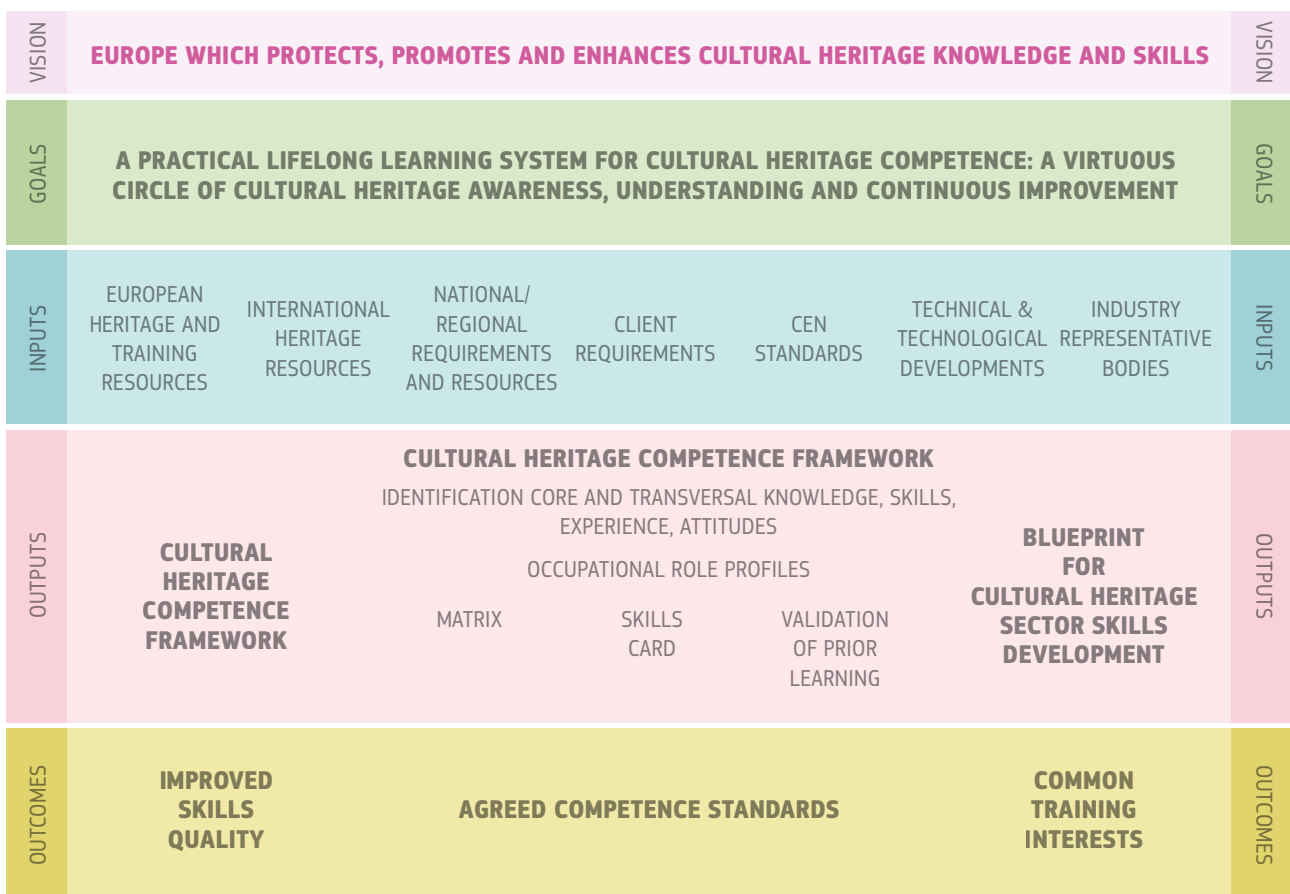## A potential strategy for framework implementation

The *Blueprint for Sectoral Cooperation on Skills* outlines a new process that offers the potential to obtain European funding to address lifelong learning requirements in cultural heritage [139].

The blueprint requires a sector to identify its skills requirements, which must be supported by statistics and must clearly support EU priorities. Sector partnerships must research, agree and implement sector-specific skills action plans. In the case of cultural heritage, such work will firstly require statistics to be gathered and analysed to illustrate the market for education and training. It will also require public and private sector stakeholders within the cultural heritage sector, or connected to it, to agree to adopt a European-wide competency framework and a strategy to implement it.

Erasmus+ funding is available for sector training under the blueprint. However, this requires all significant stakeholders in a sector to describe their training needs coherently and commit to participating in training programmes.

Diagram 1: **suggested main elements of a competence framework**

VISION	EUROPE WHICH PROTECTS, PROMOTES AND ENHANCES CULTURAL HERITAGE KNOWLEDGE AND SKILLS	VISION
GOALS	A PRACTICAL LIFELONG LEARNING SYSTEM FOR CULTURAL HERITAGE COMPETENCE: A VIRTUOUS CIRCLE OF CULTURAL HERITAGE AWARENESS, UNDERSTANDING AND CONTINUOUS IMPROVEMENT	GOALS
INPUTS	EUROPEAN HERITAGE AND TRAINING RESOURCES · INTERNATIONAL HERITAGE RESOURCES · NATIONAL/ REGIONAL REQUIREMENTS AND RESOURCES · CLIENT REQUIREMENTS · CEN STANDARDS · TECHNICAL & TECHNOLOGICAL DEVELOPMENTS · INDUSTRY REPRESENTATIVE BODIES	INPUTS
OUTPUTS	CULTURAL HERITAGE COMPETENCE FRAMEWORK — CULTURAL HERITAGE COMPETENCE FRAMEWORK: IDENTIFICATION CORE AND TRANSVERSAL KNOWLEDGE, SKILLS, EXPERIENCE, ATTITUDES / OCCUPATIONAL ROLE PROFILES / MATRIX · SKILLS CARD · VALIDATION OF PRIOR LEARNING — BLUEPRINT FOR CULTURAL HERITAGE SECTOR SKILLS DEVELOPMENT	OUTPUTS
OUTCOMES	IMPROVED SKILLS QUALITY — AGREED COMPETENCE STANDARDS — COMMON TRAINING INTERESTS	OUTCOMES

BIBLIOGRAPHY

All internet publications were accessed on 01.03.2019

Almevik, G., 'From archive to living heritage: participatory documentation methods in crafts', Palmsköld, A., Rosenqvist, J. and Almevik, G. (eds.), *Crafting Cultural Heritage*, University of Gothenburg, Gothenburg, 2016, pp. 77–99

Almevik, G., 'Reflections on knowledge transfer within traditional crafts', *Studia vernacula, Kaekirjad. The Scripts of Crafts*, Vol. 7, 2016, University of Gothenburg, Gothenburg, 2016, pp. 27–51. Internet resource: https://gu.se/english/research/publication/?publicationId =259702

Anderson, L.W. (Ed.), Krathwohl, D.R. (Ed.), Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., and Wittrock, M.C., *A Taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives*, New York, Longman, 2001

Ateca Amestoy, V., Aguilella Cueco, D., Baatz, W., Karatza, M., Konstantinidis, K., Marçal, Elis, Macfarlane, A, McKeon, S., Stanojev, J. (). *Brainstorming report. Towards an integrated approach to cultural heritage for Europe – Prospectus on 'Skills training and knowledge transfer for traditional and emerging heritage professions'*, Voices of Culture, October 2017. Internet resource: http://www.voicesofculture.eu/wp-content/uploads/2017/12/VoC-Skills-and-training-Final-report-with-Appendix1.pdf

Berlin Manifesto *Craft conservation and restoration in Europe*, Berlin, 13 September 2018. Internet resource: https://www.zdh.de/fileadmin/user_upload/themen/Gewerbefoerderung/kultur/Bundespreis_Denkmalpflege_2008/Berlin_Manifesto.pdf

Castaldi, M. M., Cueco, D. A., Hutchings, J., and ECCO (European Confederation of Conservator-Restorers' Organisations), 'A European recommendation for the conservation-restoration of cultural heritage. One step towards greater recognition of the role of conservation-restoration at European level', *Conservation, Exposition, Restauration d'Objets d'Art (CeROArt)*, No 9, Online since 20 January 2014. Internet resource: http://journals.openedition.org/ceroart/3751

CEN, European Committee for Standardization. *Conservation of cultural heritage*. https://standards.cen.eu/dyn/www/f?p=204:7:0::::FSP_ORG_ID:411453&cs=11079A55D7 0F8377E3942E1C6704C7664

Chaplin, E., *Succession Planning Framework*, CyMAL: Museums, Archives and Libraries Wales, 2014.

Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty Text with EAA relevance, 2014 [known as the General Block Exemption Regulation]. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AO-J.L_.2014.187.01.0001.01.ENG

Committee of the Regions, Opinion: *Towards an integrated approach to cultural heritage for Europe* (2015/C 195/04), 12 June 2015. Internet resource: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=OJ:C:2015:195:TOC

Corr, S., Hutchings, J. D., van der Burg, J., Aguilella Cueco, D., Noll Minor, M., Gall Ortlik, A., and Dobrusskin, S., *Competences for access to the conservation-restoration profession*, European Confederation of Conservator-Restorers' Organisations, Brussels, 2011. Internet resource: http://www.ecco-eu.org/fileadmin/assets/documents/publications/ECCO_Competences_EN.pdf

Council of Europe, *Framework Convention on the Value of Cultural Heritage for Society*, Faro, Portugal, 2005 ('Faro Convention'). Internet resource: https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/199

Council of Europe, *Recommendation of the Committee of Ministers to Member States on the European cultural heritage strategy for the 21st century*, CM/Rec(2017), 2017 https://www.coe.int/en/web/culture-and-heritage/strategy-21

Council of Europe, Strategy 21, *Preventive conservation of cultural heritage in less than 1,000 words*,. 2018. Internet resource: https://rm.coe.int/strategy-21-preventive-conservation-of-cultural-heritage-in-less-than-/16807bfbb9

Council of Europe, Strategy 21, *Conservation-restoration of cultural heritage in less than 1,000 words*,. 2018. Internet resource: https://rm.coe.int/strategy-21-conservation-restoration-of-cultural-heritage-in-less-than/16807bfbba

Council of the European Union, *Conclusions of the Council and of the Representatives of the governments of the Member States, meeting within the Council, on a Work Plan for Culture* (2015-2018) (2014/C 463/02), 2014. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2014.463.01.0004.01.ENG

Council of the European Union, *Council conclusions of 21 May 2014 on cultural heritage as a strategic resource for a sustainable Europe*, (2014/C 183/08), 2014. Internet resource: https://eur-lex.europa.eu/legal-content/GA/TXT/?uri=CELEX:52014XG0614(08)

Council of the European Union, *Council conclusions on participatory governance of cultural heritage* (2014/C 463/01), 2014. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52014XG1223%2801%29

Council of the European Union, *Council conclusions on the need to bring cultural heritage to the fore across policies in the EU* (2018/C 196/05), 2018. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XG0608(02)&rid=3

Council of the European Union, *Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning* (2012/C 398/1), 2012. Internet resource: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:398:0001:0005:EN:PDF

Council of the European Union, *Council Recommendation of 22 May 2018 on key competences for lifelong learning* (2018/C 189/01), 2018. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&rid=7

Council of the European Union, *Resolution of the Council of 16 November 2007 on a European Agenda for Culture* (2007/C 287/01), 2007. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32007G1129%2801%29

Council on Training in Architectural Conservation, I*ntegrating digital technologies in support of historic building information modelling – BIM4 Conservation (HBIM)*, COTAC, 2014. Internet resource: https://cotac.global/resources/COTAC-HBIM-Report-Final-A-21-April-2014-2-small.pdf

Cultural Heritage Counts for Europe Consortium (Europa Nostra, the European Network on Cultural Management and Cultural Policy Education, Heritage Europe, International Cultural Centre, Raymond Lemaire International Centre for Conservation, the Heritage Alliance), *Cultural heritage counts for Europe*, International Cultural Centre, Krakow, 2015. Internet resource: http://blogs.encatc.org/culturalheritagecountsforeurope//wp-content/uploads/2015/06/CHCfE_FULL-REPORT_v2.pdf

Davis, J., *Best practices module succession planning*, British Columbia Museum Association, Victoria, British Columbia, 2015. Internet resource: http://museumsassn.bc.ca/wp-content/uploads/2013/07/BP-9-Succession-Planning.pdf

Decision (EU) 2017/864 of the European Parliament and of the Council of 17 May 2017 on a European Year of Cultural Heritage (2018). Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0864&from=EN

Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0055&from=EN

Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0024

Dreyfus, S. and Dreyfus, H., *Mind over machine*, The Free Press, New York, 1986

Dreyfus, S., 'The five-stage model of adult skill acquisition', *Bulletin of Science, Technology & Society*, 2004 Vol. 24, no.3, University of North Florida, USA, 2004, pp.177-181

Education, Audiovisual and Culture Executive Agency, *Learning outcomes based on EQF system: Development guide*. Education and Culture DG, Lifelong Learning Programme (no date). Internet resource: http://ec.europa.eu/programmes/proxy/alfresco-webscripts/api/node/content/workspace/SpacesStore/9e081e1e-fc41-4758-a072-861951158bf2/Guide%20to%20Develop%20LEARNING%20OUTCOMES_v.02.pdf

EHEA, Bologna Process and European Commission, *ECTS users guide*, Publications Office of the European Union, Luxembourg, 2015. Internet resource: https://ec.europa.eu/education/ects/users-guide/docs/ects-users-guide_en.pdf

ENCoRE, *On practice in conservation-restoration education*, 2014. Internet resource : http://www.encore-edu.org/PracticePaper2014.html

Ericsson, A.K., Prietula, M.J. and Cokely, E.T., 'The Making of an Expert', *Harvard Business Review*, 85(7-8), July–August 2007, pp. 114-121

European Centre for the Development of Vocational Training (Cedefop), *European guidelines for validating non-formal and informal learning*, Publications Office of the European Union, Luxembourg, 2015. Internet resource: https://publications.europa.eu/en/publication-detail/-/publication/7a46cc6f-e10e-11e5-8a50-01aa75ed71a1/language-en

European Commission, *Blueprint for Sectoral Cooperation on Skills – responding to skills mismatches at sectoral level*, Publications Office of the European Union, Luxembourg, 2017. Internet resource: http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7969

European Commission, *Commission staff working document accompanying the document 'Proposal for a Council Recommendation on key competences for lifelong learning'* (COM(2018) 24 final), 2018. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018SC0014&from=EN

European Commission, *Commission staff working document: European Framework for Action on Cultural Heritage* (SWD(2018) 491 final), Brussels, 5.12.2018. Internet resource: https://ec.europa.eu/culture/sites/culture/files/library/documents/staff-working-document-european-agenda-culture-2018.pdf

European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *A New European Agenda for Culture* (COM(2018) 267 final), 2018. Internet resource: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52018DC0267

European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *A New Skills Agenda for Europe* (COM(2016) 381 final), 2016. Internet resource: https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-381-EN-F1-1.PDF

European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *Strengthening European identity through education and culture* (COM(2017) 673 final), 2017. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2017%3A673%3AFIN

European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *Towards an integrated approach to cultural heritage for Europe* (COM/2014/0477), 22 July 2014. Internet resource: http://ec.europa.eu/assets/eac/culture/library/publications/2014-heritage-communication_en.pdf

European Commission, *ESCO handbook: European Skills, Competences, Qualifications and Occupations*, Directorate-General for Employment, Social Affairs and Inclusion, Directorate E, 2017. Internet resource: https://ec.europa.eu/esco/portal/document/en/0a89839c-098d-4e34-846c-54cbd5684d24

European Commission, *European Skills, Competences, Qualifications and Occupations – ESCO Strategic Framework*, 2017. Internet resource: https://ec.europa.eu/esco/resources//escopedia/20170614_192128/1da9022e-6072-4ac6-bf34-863b87d37dd309_ESC0_Strategic_Framework.pdf

European Commission, Joint Communication to the European Parliament and the Council: *Towards an EU strategy for international cultural relations* (JOIN(2016) 29 final), 2014. Internet resource: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=JOIN%3A2016%3A29%3AFIN

European Commission, *Mapping of cultural heritage actions in European Union policies, programmes and activities*, Brussels, August 2017. Internet resource: http://ec.europa.eu/assets/eac/culture/library/reports/2014-heritage-mapping_en.pdf

European Commission, *Promoting adult learning in the workplace, ET 2020 Working Group 2016-2018 on Adult Learning, Executive Summary*, Publications Office of the European Union, Luxembourg, 2018. Internet resource: https://publications.europa.eu/en/publication-detail/-/publication/71427d31-7b46-11e8-ac6a-01aa75ed71a1/language-en/format-PDF

European Commission, *The European Qualifications Framework for Lifelong Learning* (EQF), Luxeumbourg: Office for Official Publications of the European Communities (2008/C 111/01), 2008. Internet resource: http://www.ecompetences.eu/site/objects/download/4550_EQFbroch2008en.pdf

European manifesto for the conservation-restoration profession: (ARP) Portugal; (ACRE) Spain; and (ARI) Italy, Professional Associations of Conservator-Restorers, 2018. Internet resource: http://www.ecco-eu.org/news/news-detail/?tx_news_pi1%5Bnews%5D=76&tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=6575cc78e88f4e68eca4b862064f2f74

European Parliament, Resolution: *Towards an integrated approach to cultural heritage for Europe* (2014/2149 INI), 8 September 2015. Internet resource: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2015-0293+0+DOC+XML+V0//EN

European Statistical System Network on Culture. *Final report*, Office for Official Publications of the European Communities, Luxembourg, 2012. Internet resource: http://ec.europa.eu/assets/eac/culture/library/reports/ess-net-report_en.pdf

Eurostat, *Statistics explained*, 2018. Internet resource: https://ec.europa.eu/eurostat/statistics-explained/index.php/Culture_statistics_-_cultural_employment

Eurostat, *Guide to Eurostat culture statistics*, 2018. Internet resource: https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-GQ-18-011

Galán Pérez, Ana, 'La Conservación-Restauración en el marco profesional Europeo: La Reunión de Nájera para el desarrollo Español del Plan Estratégico de E.C.C.O.-Confederación Europea de Organizaciones de Conservadores-Restauradores' ['Conservation-restoration in the European professional framework: The Nájera meeting for the Spanish development of the ECCO strategic plan'], *Ge-conservación*, No 12, Vol. 1, 16 and 17 July 2015, Escuela de Patrimonio Histórico de Nájera, 2015. Internet resource: http://ge-iic.com/ojs/index.php/revista/article/view/450/827

Galán Pérez, A. (Coord), *Monograph of heritage professions: Skills training and knowledge transfer: reflections and challenges in the European Year of Cultural Heritage 2018*, Spanish Group of the International Institute for Conservation (GE-IIC) and the Spanish Association of Conservator-Restorers (ACRE), supported by the Spanish Ministry of Culture and Education, 2018. Internet resource: https://showcase.dropbox.com/s/390jXXDrpoNwc8kE2mXaa

Galán Pérez, Ana, 'Competencias, formación y transferencia de conocimiento en materia de Patrimoni'' ['Skills, training and knowledge transfer of heritage professions'], *Hispania Nostra* No 28, September 2017, pp. 52-57. Internet resource: https://issuu.com/hispanianostra/docs/revista_20hispania_20nostra_20n_c2_

Germain, M. L., and Ruiz, C. E., 'Expertise: Myth or reality of a cross-national definition?', *Journal of European Industrial Training*, Vol. 33, issue 7, 2009, Bingley, United Kingdom, 2009, pp. 614-634.

Gustafsson, Christer, Conservation 3.0. *Integrated cultural heritage management in times of smart specialisation strategies*, delivered at Uppsala University, Gotland Campus, 19 November 2015. Internet resource:
https://campusnackrosen.gu.se/digitalAssets/1556/1556489_gustafsson-h--gre-seminarium-19-november-2015.pdf

Historic England, *BIM for heritage: Developing a historic building information model*, Swindon, 2017: https://content.historicengland.org.uk/images-books/publications/bim-for-heritage/heag-154-bim-for-heritage.pdf

Hutchings, Jeremy, *Educating the conservator-restorer: Evaluating education delivery in terms of the new ECCO Competence Framework for Access to the Profession – The Oslo University case study*, ICOM-CC, 2011. Internet resource: https://www.icom-cc-publications-online.org/PublicationDetail.aspx?cid=9c9161b4-91d4-438a-985a-0e0961c234e7

ICCROM, *Survey of preventive conservation tool and resource users*. Internet resource: https://www.iccrom.org/sites/default/files/2018-07/iccrom_precon_tools-resources_eng.pdf

ICOMOS, *Guidelines on education and training in the conservation of monuments, ensembles and sites*, Columbo, 1993. Internet resource: https://www.icomos.org/charters/education-e.pdf

ICOMOS International Training Committee, *Principles for Capacity Building through Education and Training in Safeguarding and Integrated Conservation of Cultural Heritage*, 2013. [Draft submitted to International Training Committee members] Internet resource: http://cif.icomos.org/pdf_docs/CIF%20Meetings/Guidelines/ICOMOS_CIF_PrinciplesCapacity_EN_20130930.pdf

International Labour Office, *International Standard Classification of Occupations ISCO-08, Volume 1*, ILO, Geneva, 2012. Internet resource:
http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_172572.pdf

Joint declaration of the European Ministers of Education, *The Bologna Declaration*, 19 June 1999. Internet resource: https://www.eurashe.eu/library/modernising-phe/Bologna_1999_Bologna-Declaration.pdf

Januarius, J., e.a., *Virtuoos Vlaanderen!: Naar een Living-Human-Treasures-programma in Vlaanderen en Brussel*, Bruges, 2014

KEA European Affairs, *Feasibility study on data collection and analysis in the cultural and creative sectors in the EU*, 2015. Internet resource: http://www.keanet.eu/wp-content/uploads/CCS-Stats-Study_final-30092015.pdf

Mercy, J.L. and Beck-Domżalska, M. (eds.), *Culture statistics*, 2016 Edition, Eurostat, Luxembourg, 2016. Internet resource: http://ec.europa.eu/eurostat/documents/3217494/7551543/KS-04-15-737-EN-N.pdf

Michalski, Stefan, 'Sharing conservation decisions: Tools, tactics and ideas', in Heritage, A., and Copithorne J. (eds.), *Sharing conservation decisions – current issues and future strategies*, ICCROM, Rome, 2018, pp. 183-204.

Sandgruber, R., Bichler-Ripfel, H. Walcher, M., *Traditional craftsmanship as intangible cultural heritage and an economic factor in Austria*, Federal Chancellery Vienna, 2016. Internet resource of English summary: https://www.unesco.at/fileadmin/Redaktion/Publikationen/Publikations-Dokumente/Handwerksstudie_EN_Summary.pdf

Spanish Ministry of Culture and Education, *Los profesionales de los museos. Un estudio sobre el sector en España*, 2016. Internet resource: https://sede.educacion.gob.es/publiventa/descarga.action?f_codigo_agc=14316C

TRACE, *Overview of European competency frameworks*. Transparent competences in Europe, a Leonardo da Vinci pilot project, 2005. Internet resource: http://www.menon.org/wp-content/uploads/2012/11/9.-TRACE-Overview-of-EU-competency-frameworks1.pdf

UNESCO, Convention for the Safeguarding of the Intangible Cultural Heritage, Paris 17 October 2003. Internet resource: https://ich.unesco.org/en/convention

UNESCO, *'Guidelines for the establishment of national 'Living Human Treasure Systems'* (no date). Internet resource: https://ich.unesco.org/doc/src/00031-EN.pdf

UNESCO World Heritage Committee, *World Heritage Capacity-Building Strategy*, UNESCO, Paris, 2011 [WHC-11/35. COM 9B]

Van Lakerveld, J.A., Vroonhof, P., Broek, S., Stoutjesdijk, F.D., van Loo, S.B., *Skills, training and knowledge transfer: Traditional and emerging heritage professions. An exploration. Leiden: Plato, Ockham, Panteia*, 2017. Internet resource: https://www.panteia.com/uploads/2017/07/final-report-on-emerging-heritage-professions-23062017.pdf

Van Leeuwen, J., *Tijd voor vakmensen: hoe geven we vakwerk in de cultureel-erfgoedsector alle kansen?*, Brussels, 2016

APPENDICES

APPENDIX I:
WORKING GROUP METHODOLOGIES

1. INPUTS

The open method of coordination (OMC) group worked collaboratively, in face-to-face meetings and via remote working. In addition to the working meetings, the group benefited from various inputs from experts, European Commission programmes and publications, as well as first-hand experience of examples of good practice. The SWOT was a key tool and this is described in more detail in Section 4.1.1 below.

1.1 Voices of Culture, European Commission

Parallel to the OMC process, the European Commission operated a structured dialogue with 35 selected stakeholders, operating under the name of Voices of Culture, on the topic 'Skills, training and knowledge transfer: traditional and emerging heritage' (Ateca Amestoy et al. 2017)[140]. Two experts from Voices of Culture were invited to participate in the OMC group, to exchange ideas and cross-reference information. They were:

- Elis Marcal (Conservator-Restorer, European Confederation of Conservator-Restorers' Organisations);
- Jermina Stanojev, PhD (Researcher and Independent Expert, Uppsala University).

1.2 Erminia Sciacchitano, The European Year of Cultural Heritage 2018 and its legacy, European Commission

Erminia Sciacchitano, Policy Officer and Chief Scientific Advisor of the European Year of Cultural Heritage (EYCH) 2018, ensured the link with the European Year of Cultural Heritage, which includes among its objectives to '*support the development of specialised skills and improve knowledge management and knowledge transfer in the cultural heritage sector, taking into account the implications of the digital shift.*' She managed two of the 10 European initiatives run by the European Commission to implement the EYCH, liaising with the OMC group. These were European Initiative No 8, 'Heritage-related skills, focusing on specialised skills, knowledge management and knowledge transfer in the cultural heritage sector, including the implications of the digital shift'[141], and European Initiative No 6, 'Cherishing heritage[142]. They were run by the European Commission and International Council on Monuments and Sites (ICOMOS), with the aim of producing an updated document on quality principles and guidelines for cultural heritage interventions in Europe[143].

The European Framework for Action on Cultural Heritage[144] launched by the European Commission to ensure the legacy of the EYCH beyond 2018, includes a cluster of actions for 'boosting skills in cultural heritage professions' in the framework of Pillar 4, 'Mobilising knowledge and research', which builds on the present report.

1.3 Jacqueline Pacaud, Erasmus + European Commission

Jacqueline Pacaud, Head of Sector, Directorate General for Education and Culture of the European Commission, presented to the group on the Erasmus+ Programme. This is an integrated programme covering education, training, youth and sport. It aims to create more synergies and interaction between formal, informal and non-formal learning. It has a budget of around EUR 14 billion for the 2014-2020 period.

Three strands or key actions of the Erasmus+ programme support cultural heritage.
- Learning mobility of individuals, including opportunities for students, teachers, staff professionals, etc. This is the most important action in terms of funding.
- Cooperation for innovation and exchange of good practices, including support for cooperation projects between educational organisations and other sectors.
- Support for policy reform, including for policy dialogue with stakeholders, third countries, international organisations and Member States.

The Erasmus+ programme operates a yearly call for proposals. One of the objectives of the 2018 call was linked to the EYCH. A list of education and training projects related to cultural heritage was circulated to the OMC group.

1.4 Ana Schoebel, Council of Europe, Strategy 21

The European Cultural Heritage Strategy for the 21st Century[145] is a recommendation from the Council of Europe to Member States to introduce participatory governance and interdisciplinary work in heritage management, thereby improving the living environment and the quality of life. The strategy recommends various courses of action that allow the sector to face current challenges, using heritage as a resource in the social, development and knowledge spheres of European society. Public administrations, professionals and communities can share their projects in order to exchange experiences and advance towards being a more participatory and responsible society.

The strategy has three components:
- a social component based on the principle of participatory governance, which aims to create a relationship between heritage and societies;
- an economic and territorial component focusing on the relationship between cultural heritage and spatial development, which is guided by the principle of sustainable development;
- a knowledge and education component, focusing on the relationship between cultural heritage and shared knowledge.

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European Commission, *Commission staff working document: European Framework for Action on Cultural Heritage* (SWD(2018) 491 final), Brussels, 5.12.2018.
145
Council of Europe, *Recommendation of the Committee of Ministers to Member States on the European cultural heritage strategy for the 21st century*, CM/Rec(2017), 2017.

Traditional heritage professions are evolving with the introduction of new technologies, among other factors. It is important to learn from the common sense of past generations, rooted in traditional skills and ancient knowledge.

1.5   Jaap van Lakerveld, Leiden University

The European Commission commissioned an expert report on the same theme (*Skills, training and knowledge transfer: traditional and emerging heritage professions*) [146]. The expert report focuses on societal trends affecting the heritage sector and the professions within it. Based on a literature study and analyses of job vacancies, the study gives an overview of emerging professions, examples of relevant practices and suggestions on how to professionalise the sector in view of the new challenges. The results point at common strands, with geographical and sectoral variants, and indicate how the situation relates to general trends in the cultural heritage sector in Europe. In particular, it highlights the impact of the digital shift.

1.6   Institutions in Bucharest

The situation of professional training and training in culture in Romania was explained to the OMC group in two presentations:

1.   Carmen Croitoru, Director, Institutul Național pentru Cercetare și Formare Culturală (National Institute for Research and Cultural Training), which is subordinate to the Ministry of Culture and National Identity. This is the national institute that aims to study, research and provide statistical data on culture, as well as on training professionals who choose a career in this field. Presentation of the paper: *Skills, training and knowledge transfer: traditional heritage professions and emerging professions (digital context).*

2.   Professor Nicolae Postăvaru, Vice President, Autoritatea Națională pentru Calificări (National Qualification Authority), which is subordinate to the Ministry of National Education. Presentation of the paper: *Methodological guidelines for writing learning outcomes*.

1.7 Christer Gustafsson, Uppsala University, Sweden

Professor in heritage conservation, Christer Gustafsson, gave a presentation to the group in Mariestad, Sweden: *Integrated cultural heritage management in times of smart specialisation strategies*. He said:

> 'In the context of conservation, preservation and restoration, where are the decisions made? Who makes the decisions? Why are they made?'

> 'The overall objective is to develop new models for cultural heritage policies with a view to integrating them in smart specialisation strategies, in order for cultural heritage to better express its potential as a driver and enabler for sustainable and cohesive growth at local/regional levels.'

2. OMC ATTENDANCE AT CONFERENCES AND PRESENTATION OF PAPERS

2.1. Conference on Professionalism in the Built Heritage Sector, Leuven (Brussels), at the 2018 Thematic Week of the Raymond Lemaire International Centre for Conservation

The aim of this international conference was to define the professional profiles, capacities and drivers involved in a successful project. Based on identified gaps in the sector's organisational fabric, theoretical reflections and best practices were discussed in three main sessions: 'Profiles and capacities', 'Education, training and quality labels' and 'Obstacles and changes'.

The OMC group attended two presentations:

Gunnar Almevik, Associate Professor at the University of Gothenburg and Swedish Representative at the OMC, presented the paper: *Mastering building conservation*.

Susan Corr, President of the European Confederation of Conservator-Restorer Organisations, presented the paper: *On skills, training and knowledge transfer in conservation-restoration with cultural heritage professions*. In it, she said:

> *'The younger generation of professionals also have to respond to new and emerging challenges given the threat of climate change, the effects of an ageing society in Europe, the global nature of the illicit trafficking of cultural goods further exacerbated by ongoing armed conflicts, and, not least amongst these issues, is the role of digital access in making redundant the apparent need to conserve tangible cultural material. The ability to identify and address the changing issues around the preservation of cultural heritage can only be guaranteed by the exchange of knowledge and skills by experienced conservator-restorers with upcoming generations, and through the concept of inter- and trans-disciplinary cooperation with other players in the field of cultural heritage.'*

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2.2. The OMC group presented at two conferences during the work process

- 'Fostering cooperation in the EU on skills, training and knowledge transfer in cultural heritage professions', on 5 February 2018 at the Conference on Professionalism in the Built Heritage Sector, Leuven (Brussels) [147].

- 'The promotion of heritage professions at the European Commission: analysis and challenges in the European Year of Cultural Heritage', on 26 October 2018 at the conference Cultural Heritage – Challenges for the 21st Century, (Lisbon, Portugal), by A. Galán-Pérez (PhD Fine Arts-Conservation, ACRE Vice President, OMC Chair, Spain).

3. LIST OF VISITS

As part of the cooperation, the OMC group organised meetings in five of the participating countries (Romania, Belgium, Sweden, Portugal, Austria) to see first-hand examples of good practice, and to learn directly from those delivering on the ground. Case studies from these visits are included in the report.

Bucharest (Romania):
- 'Dimitrie Gusti', National Village Museum, open-air museum and crafts;
- Peleș Castle (Romania: Castelul Pele), a Neo-Renaissance castle in the Carpathian Mountains.

Leuven (Flanders, Belgium):
- Itinera Nova project on the university bell tower (carillon culture in Belgium is recognised by UNESCO as a good safeguarding practice);
- AGORA study centre.

Mariestad and Gothenburg (Sweden):
- Tour of craft workshops and gardens, and meetings with students and teachers, led by Professor in Craft Sciences, Harald Høgseth, and the Director of Craft Laboratory, Linda Lindblad;
- Gunnebo castle and gardens, research on historic gardening management regimes by doctoral student, Joakim Seiler, head gardener;
- REKO fair, Nääs (sloid and handicraft), cultural heritage development projects (i Västra Götaland).

Lisbon (Portugal):
- National Tile Museum and its volunteering activities;
- conservation workshop at the National Carriage Museum;
- National Ethnology Museum (exhibition and storage rooms);
- Laboratório de Conservação e Restauro José de Figueiredo (National Conservation Institute), with workshops on easel and wood painting, wood and stone sculpture, textiles, furniture, metal, works of art on paper, photography, the X-Ray laboratory and conservation laboratory.

Vienna (Austria):
- Information and Training Centre for Architectural Conservation, Charterhouse Mauerbach, presentation by Director Astrid Huber and site tour including the new European Heritage Academy;
- tour of Imperial Palace, Vienna;
- walking conference in Vienna showcasing traditional crafts through live performances and demonstrations of historic and sustainable craft techniques by experts, restorers, craftspeople and apprentices.

4. METHODOLOGY USED BY EACH WORKING GROUP

4.1 Awareness raising

The sources used to write the section on awareness raising are:
- SWOT
- Voices of Culture report
- European Cultural Heritage Strategy for the 21st Century
- good examples from the countries in this working group (Romania, Czech Republic, Spain, the Netherlands, Slovakia and Italy).

4.1.1 SWOT

We compiled all of the information about raising awareness that the participating countries have put together in the SWOT. It is an interesting instrument, because it shows that different opinions exist about whether something is a strength, a weakness, an opportunity or a threat. This is also caused by the fact that the information gathered for the SWOT comes from different organisations and individuals working in the heritage field, all with their own opinions and interests.

What is going well? What are good practices?
The SWOT revealed two themes to be important strengths in many of the participating countries: engaging society and engaging young people.

Engaging society is about all activities to attract the general public to participate in cultural heritage. These include folklore trades, festivals and workshops, but also national events like museum weekends and projects to stimulate interaction between professionals, heritage and the general public. It also includes projects specifically focused on involving unemployed people in cultural heritage. The effects in engaging society can also be seen in an increase in the numbers of visitors to heritages sites and fairs. The countries that mention engaging society as a strength are: Lithuania, the UK, Croatia, Ireland, Flanders, Austria, Portugal, Sweden, the Czech Republic, the Netherlands and Slovakia.

Engaging young people is about all activities to attract young people to cultural heritage. Educational activities that take place in a historical setting have an irreplaceable place in the system of caring for state monuments and cultural heritage in general. Examples are youth competitions, festivals, workshops, interactive activities involving students, prizes such as the Young Talent Monument Prize and Young Talent Museum Prize, and projects to help young professionals get a job in the heritage field. In the Netherlands, we asked a group of school children in the Kidsmindz project [148] for their ideas on Dutch heritage policy, and especially on how to attract young people to heritage. They responded that what attracts them to cultural heritage is when it is shown from a different, innovative angle. A suggestion they came up with was to build a glass bridge in a church, which would give them the opportunity to see the historical building from a new, spectacular angle. Key words are 'active participation' and 'support to get jobs'. The countries that mention engaging society as a strength are: the UK, Lithuania, Austria, Flanders, the Netherlands, Ireland, Slovakia and the Czech Republic.

[148] http://www.kidsmindz.nl/

What needs improvement and attention?

What is a strength in one country, can be a weakness in another. And even in the same country, different organisations or individuals can value the same subject in an opposite way. In Austria, the UK, Portugal, the Netherlands and Romania, despite several good practices, the engagement of the community and volunteers in particular is considered insufficient. So is the engagement of young people. In the UK and Romania, the lack of a national plan or activities to promote heritage professions is considered to be a problem. In the Netherlands, Croatia, Lithuania and Sweden, the heritage sector is not rated highly for its digital competences, while digitalisation/digitisation is an aspect that attracts young people, as they are very active users of digital tools and channels. The lack of competences and structured funding in the heritage sector may also influence the interest that children and young people have in the heritage field. If quality is not prioritised enough and there is not sustainable funding, young people might prefer to work in a field with higher quality and more 'job security'.

What opportunities are there to raise awareness of cultural heritage?

As we have seen, strengths in some countries are weaknesses in others, while the same weaknesses can also be seen as opportunities, if they are embraced.

Countries such as Italy, the Netherlands, Ireland, Belgium (Flanders), Austria, Croatia and Sweden are embracing digital technologies as new ways to reach a new public. The younger generation is growing up using digital technologies such as apps on their smartphones, so these are an important opportunity to reach a bigger and younger public. Digitisation policies, including open-access databases and the use of algorithms, are particularly considered to be opportunities, as are new tools (3D models, 3D printing, GPS, photo scanning, games, virtual reality and mixed or augmented reality). E-learning is another important opportunity.

Cultural heritage organisations work a lot with volunteers to reduce staff expenses, but volunteers are also a connection to the general public and grandparents that do volunteer work can also introduce their grandchildren to cultural heritage. So countries as the UK, Belgium (Flanders), the Netherlands, the Czech Republic, Slovakia and Spain consider volunteers to be an important key factor in raising awareness. Activities include the development of new types of volunteering, such as micro-volunteering, online, virtual, crowdsourcing volunteering and the development of new skills in volunteering management. However, as we will see in the next section, the use of volunteers is a topic open to discussion about whether they are an added value for the heritage sector or not.

COUNCIL WORK PLAN FOR CULTURE 2015-2018

Priority Area 6 'Cultural heritage'
Topic 02: skills, training and knowledge transfer:
traditional and emerging heritage professions
Open Method of Coordination (OMC)
working group of Member States' experts

Deadline for SWOT
17th November 2017

What are the threats to awareness raising?

Besides changes, there are also several threats that Europe should be aware of. For example, the academisation of society is a threat in many countries: Austria, the Netherlands, Lithuania, Portugal, the Czech Republic, Slovakia, Spain, Belgium (Flanders), Croatia and Sweden. There has been a general change in society in that manual work is now considered 'lesser' or 'lower' than working in management functions, for example. Why would an adolescent choose a profession that is considered to be below the profession his friend chooses? Parents also do not encourage their children to choose a profession that is considered 'lesser'. The educational system is not helping either: it favours academic over vocational training, and academic programmes have less time allocated to practice.

Apart from this, there is a demographic impact on the workforce, leading to recruitment problems. While the cultural heritage professionals are ageing, there is a lack of generational replacement. Emigration can also lead to brain drain and a loss of skills. Meanwhile, the diversity of society is not well represented in heritage organisations.

As we saw above, volunteers are considered to be a strength, an opportunity and a weakness in raising awareness. In Lithuania, the Czech Republic, Ireland and Spain, professionals even see a harmful side to the use of volunteers. This was an interesting topic in the working group: what to do about topics that are considered a strength in one country, while other countries are very negative about the interaction between volunteers and heritage? We decided to make a strong recommendation on it (see recommendations in Chapter 5.2). Volunteers do not have the knowledge that professionals have. For example, volunteers might damage museum objects as a result of not learning how to handle them. It is therefore important to look carefully at the type of activities volunteers can do in order not to damage cultural heritage.

There is also a threat on an abstract level: heritage is not always used properly. For example, it can be associated with nationalism. Others see no social or economic added value in heritage and skills. Heritage is even seen as an obstacle to development, growth and prosperity. Apart from this, there is also a general perception of heritage as being dull, old and boring.

4.1.2 According to the Voices of Culture report

The Voices of Culture report sets out four levels that play a role in raising awareness.

- **Public: communities/participation, both public and private**

At the public level, we could say that is has to be two-way in order to receive and to transmit. One way to increase participation is to stimulate economic, social and community citizenship, personal identity and sense of place. Awareness and the social role of cultural heritage can also be identified through volunteering and education.

- **Policymakers/policymaking**

Policymakers have an important voice in pointing out the value of heritage. They have the option to: support heritage with extra funding (within existing financial frames, of course); create possibilities for cultural organisations to develop new ideas to involve a wider and younger public; and ensure that heritage is an important aspect in school education. Policymakers also have the legal instruments to project heritage, stimulate the transmission of knowledge and to specify the qualifications of heritage professionals. Policymakers have the position to address cultural organisations, schools and national, regional and local governments. Policymakers also are in the position to use and develop cultural diplomacy and cultural relations to address international political issues.

- **Heritage mediation**

Contributes to raising awareness through communication between professionals, policymakers and communities, by bringing resources together. It also helps determine and understand cross-sectoral needs, enables and drives engagement with cultural heritage, and facilitates intellectual and physical access to cultural heritage.

- **Heritage expertise**

Professionals with expertise in cultural heritage represent the active part of managing change, identifying and preserving significant values, and mitigating the risks encountered by excessive tourism or other traditional usage (e.g. religious or technical). Their mission is to raise awareness, especially among stakeholder groups.

4.1.3 Abstract of the Recommendation of the Committee of Ministers to Member States on the European Cultural Heritage Strategy for the 21st century

The European Cultural Heritage Strategy for the 21st Century makes useful recommendations on raising awareness, including:

- encouraging the involvement of citizens and local authorities in capitalising on their everyday heritage;
- making heritage more accessible;
- using heritage to assert and transmit the fundamental values of Europe and European society;
- promoting heritage as a meeting place and vehicle for intercultural dialogue, peace and tolerance;
- encouraging and assessing citizen participation practices and procedures;
- developing and promoting participatory heritage identification programmes;
- facilitating and encouraging public and private partnerships in cultural heritage promotion and conservation projects;
- incorporating heritage education more effectively in school curricula;
- implementing measures to encourage young people to practise heritage;
- providing optimum training for non-professionals and professionals from other sectors with a connection to heritage;
- diversifying training systems for heritage professionals;
- ensuring that the knowledge and skills involved in heritage trades are passed on.

4.2 Formal education and training

This working group's method draws on the SWOT analysis and a review of research and sectoral reports at EU level. The aim is to create an overview of European frameworks, standards and organisations involved in formal education and training in the heritage sector.

4.3 Lifelong learning

The group examined the strengths, weaknesses, opportunities and threats relating to lifelong learning for traditional and emerging cultural heritage professions. It consulted EU and international studies on education and training, the Voices of Culture report and other papers, and the SWOT compiled by the OMC using participating Member States' submissions.

The group considered the questions of: participation in lifelong learning, including motivation (whether voluntary or mandatory is better); strategic career planning; how to gain types of skills not taught in formal training; role profiles; the relevance, content, quality and delivery of CPD; interdisciplinary training and knowledge sharing; the need to improve practical skills as well as theoretical knowledge in CPD training; the benefits of international participation for career development; the need to recognise non-formal learning through gaining credits; and issues of how to evaluate on-the-job skills development.

These discussions led to examination of the ways in which the cultural heritage sector and professionals practise, to consider how such a multidisciplinary workforce is trained, how competences are assessed and how individuals are accredited in formal, non-formal and informal learning. Relevant factors are how the sector is valued, funded, quality-assured and future-proofed, as well as how regulatory controls operate (in terms of education/training, procurement, consumer protection and heritage protection). The nature of the subject led to broadening out the scope to suggest a structure that could accommodate lifelong learning in cultural heritage skills for professions that interact with cultural heritage, particularly for decision-makers managing and administering heritage projects.

The group was influenced by the Voices of Culture *Competencies and Skills diagram*[149] and used it as a critical analytical tool. The diagram maps EU lifelong learning competences against transversal competences for cultural heritage and European Year of Cultural Heritage objectives (along with challenges to be met). The group placed categories of activity from the combined SWOTs against the headline skills needs, to see how these transversal competences are taught and learned, and to see the identified weaknesses, potential positive moves and threats (Table 4). This work enabled themes to be extracted and examples of current best practice to be identified.

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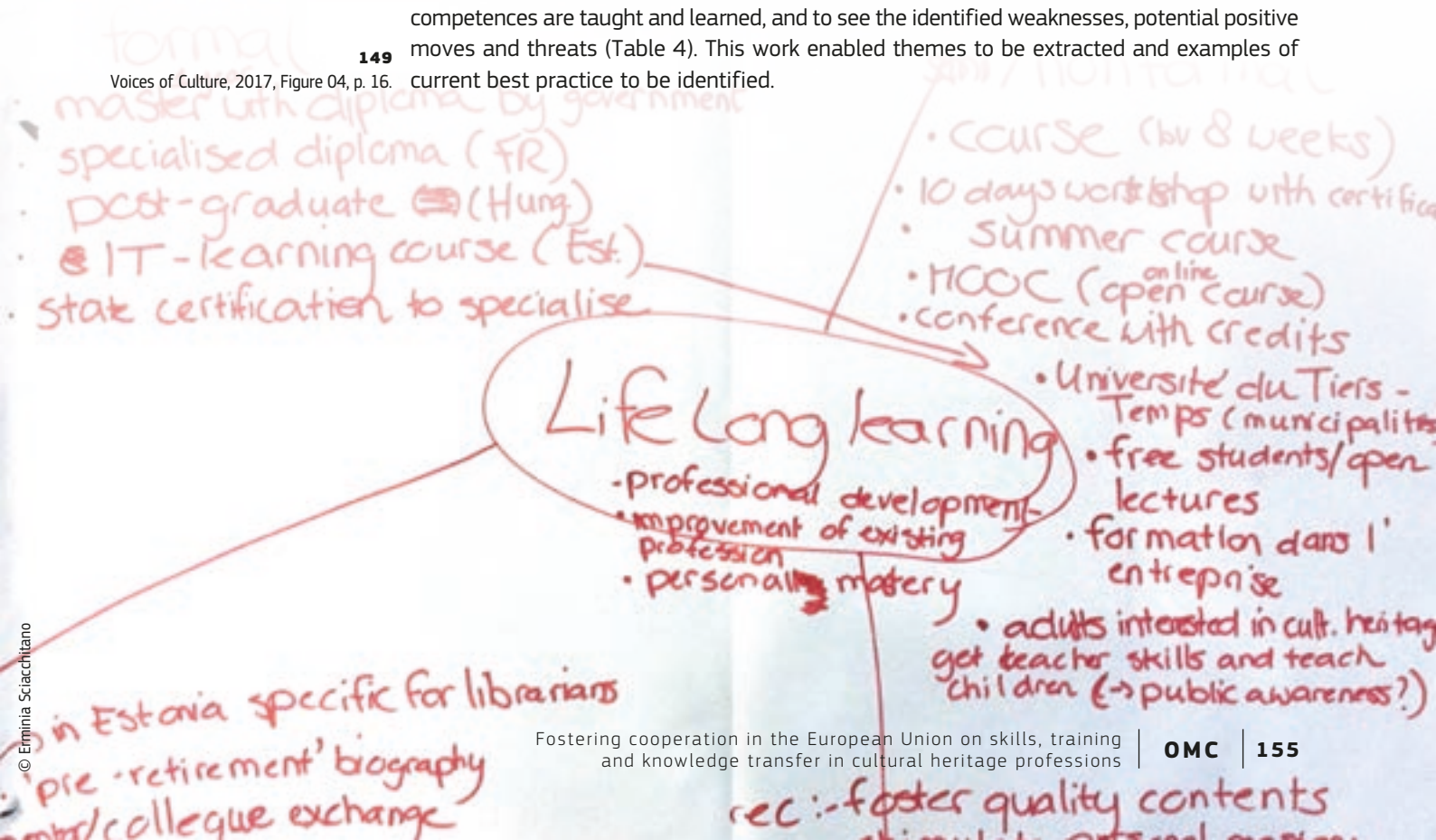Voices of Culture, 2017, Figure 04, p. 16.

**Application of SWOT headline categories to Voices of Culture (VoC)/
European Year of Cultural Heritage (EYCH) competences matrix**

EYCH objectives	Skills needed for cultural heritage transversal competences listed in VoC	VoC profession categories	Examples in the OMC combined SWOTs (detail of examples omitted here for clarity)	Key themes and examples to recommend as good practice
ENGAGEMENT Shared heritage: cultural heritage belongs to us all Heritage at school: children discovering Europe's most precious treasures Youth for heritage: young people bringing new life to heritage	**Communication and advocacy:** Active listening Participative dialogue Cultural awareness Communicating through multiple media and methods	*Public* *policy* *mediation* *expertise*	STRENGTHS Increasing accessibility Engaging society Engaging young people International cooperation WEAKNESSES No training for stakeholders Lack of community engagement and/or volunteering OPPORTUNITIES Working with volunteers Increasing interest in participation in heritage THREATS Harmful volunteer developments Negative views of heritage	***ACCESSIBLE INFORMATION:*** Guidance on good volunteer practices for managers of cultural and community institutions Digital tools for non-heritage users ***PARTNERSHIPS:*** Virtual networks for knowledge exchange Collaboration with NGOs Use international connections, including Erasmus+ ***HANDS-ON OPPORTUNITIES:*** Workshops Camps Mentoring Competitions ***LEADERSHIP:*** Heritage ambassadors Seek young voices in policymaking ***'SELL' Intangible Cultural Heritage:*** Use the 'men's sheds' concept [150] – a community self-help approach to saving traditional skills Tap into disenchantment with modern production – employ heritage and craft as a counterforce and spur to creativity
	Dialogic knowledge transfer: Cultural exchange Interpretation Storytelling Developing communication with expert and non-expert audiences Developing skills in another language	*Public* *policy* *mediation* *expertise*		

[150]
https://en.wikipedia.org/wiki/Men%27s_shed

EYCH objectives	Skills needed for cultural heritage transversal competences listed in VoC	VoC profession categories	Examples in the OMC combined SWOTs (detail of examples omitted here for clarity)	Key themes and examples to recommend as good practice
SUSTAINABILITY Heritage in transition: re-imagining industrial, religious, military sites and landscapes Tourism and heritage: responsible and committed tourism around cultural heritage	**Financial competence** Entrepreneurship Risk assessment Awareness of financial/ social impacts Budget management Fundraising – understanding and engagement	*Policy* *mediation* *expertise*	STRENGTHS Flourishing craft skills WEAKNESSES Skills at risk Problems with quality assurance in profession Lack of occupational profiles, no formal organisational of sector Low inflow of professionals to sector No policy to promote crafts and heritage professionals	***PROMOTE INTERDISCIPLINARY WORKING:*** Stress co-operation, managerial and improvisation skills of cultural heritage workforce ***COLLATE INFORMATION ON SKILLS AT RISK:*** States seek submissions on endangered intangible cultural heritage skills from practitioners ***FORMAL EXCHANGE TO SHAPE TRAINING:*** Seek employer inputs to training content and delivery methods Set standards for workforce quality assurance ***INCREASE SUSTAINABLE AND NON-STATE FUNDING STREAMS:*** Seek private sector resources in line with heritage ethics for institutions, training and knowledge exchange ***IMPROVE SECTOR VISIBILITY:*** Promote careers by classifying occupations Emphasise innate work value and personal satisfaction Celebrate hand skills of craft and conservator Promote care for heritage as part of climate adaptation
	Management competence Stakeholder management Volunteer management Resources management Change management	*Policy* *Expertise*	OPPORTUNITIES Heritage as key factor in sustainable development, including environment, social, economic Co-operation between heritage sector and formal education THREATS Demographic impact on workforce – recruitment problems Reduction of public funding and institutional instability Market conditions and commercial pressure Conflicting interests puts pressure on heritage assets	

EYCH objectives	Skills needed for cultural heritage transversal competences listed in VoC	VoC profession categories	Examples in the OMC combined SWOTs (detail of examples omitted here for clarity)	Key themes and examples to recommend as good practice
INNOVATION Heritage-related skills: better education and training for traditional and new professions All for heritage: fostering social innovation, and participation by people and communities Science for heritage: research, innovation, science and technology for the benefit of heritage	**Strategic planning, strategic thinking:** Developing resilience through innovation, analytical and critical thinking Investment in multi-disciplinary training Research Advocacy and negotiation Mediation and facilitation Marketing Evaluation Stakeholder analysis	*Policy* *mediation* *expertise*	STRENGTHS Innovative scientific research Heritage boosts the economy Fundraising WEAKNESSES Digital skills gap OPPORTUNITIES EQF and validation of prior and informal learning New learning approaches and training formats, including e-learning Cross-sectoral partnerships THREATS Impact of digitisation, robotics, Automation and new technologies	***INCREASED EU INTEREST:*** Importance of heritage and culture in social democracy – needs to be backed by resources Urge creation of national/regional centres of excellence Establish pilot living treasures programme ***LEGAL AND REGULATORY REQUIREMENTS:*** States: validate competence and prioritise experts in publicly funded projects with skills passport E-tendering processes overly complex and problematic for heritage projects: special contract types required Improve requirements for vocational training to include traditional hand skills Develop and validate train-the-heritage-trainer modules, including for intangible cultural heritage Require cultural institutions to employ sufficient verifiably expert professionals
	Digital competence Awareness of digital technologies ICT, organisation and strategy alignment Development of digital literacy	*Policy* *expertise*		
	Prospective thinking Trendspotting Horizon scanning Curiosity Creativity Self-development agement	*Public* *policy* *mediation* *expertise*		***GROWTH OF LIFELONG LEARNING:*** Personal development plans: motivator for CPD Non-formal learning: use to deal with emerging skills needs quicker than formal ***AWARENESS OF NEEDS:*** Build on increased recognition that skills are central to sustainable heritage protection and management
	Shared stewardship Realising commonalities Citizen engagement Team working Inclusivity Networking	*Public* *policy* *mediation* *expertise*		***QUALITY ASSURANCE:*** Formal training content and delivery quality-assured through a combination of state/EU and industry oversight (needs both) Improve work-based training and digital skills in formal programmes Properly designed and managed volunteers and internships to add value rather than substituting permanent qualified employees

| EYCH objectives	Skills needed for cultural heritage transversal competences listed in VoC	VoC profession categories	Examples in the OMC combined SWOTs (detail of examples omitted here for clarity)	Key themes and examples to recommend as good practice
PROTECTION Cherishing heritage: developing quality standards for interventions in the historic environment and at heritage sites Heritage at risk: fighting against illicit trade in cultural goods and managing risks at heritage sites	*Skills listed under 'sustainability' and 'innovation'*	*Public* *policy* *mediation* *expertise*	STRENGTHS Formal education CPD/lifelong learning Law, regulation and financial support WEAKNESSES Skills at risk Educational gaps Quality of education/ training/teachers OPPORTUNITIES Legislation to support transmission of knowledge and skills THREATS Academisation of society Legislative restrictions/ lack of legislative protection	

4.4 Knowledge transfer methodology

Online survey methodology

The survey was conducted in February and March 2018. The respondents were experts identified by the OMC members, including from the Voices of Culture group. The results of the survey were then analysed and combined with the findings of the Voices of Culture report, along with relevant examples from the SWOTs, to provide a description of the current landscape, and draw conclusions and recommendations (see Chapter 5.5).
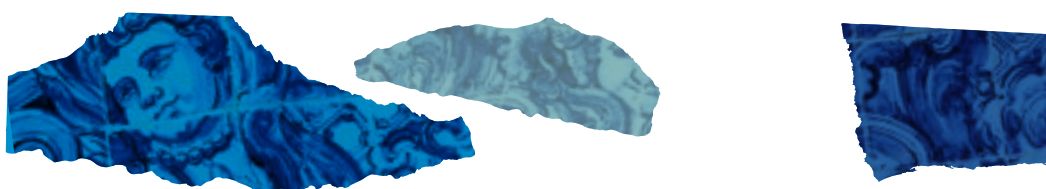
Below is a summary of the profile of the respondents.

- The survey did reach the target audience, with a total of 91 respondents, with 64 % of these being practitioners. A clear majority of respondents (86 %) have been involved in knowledge transfer (Q5). On average, respondents spent 80 days a year on knowledge transfer activities (Q6). In addition, it was striking that they also engaged in a wide range of knowledge transfer activities in their roles (multiple responses were allowed to reflect this).
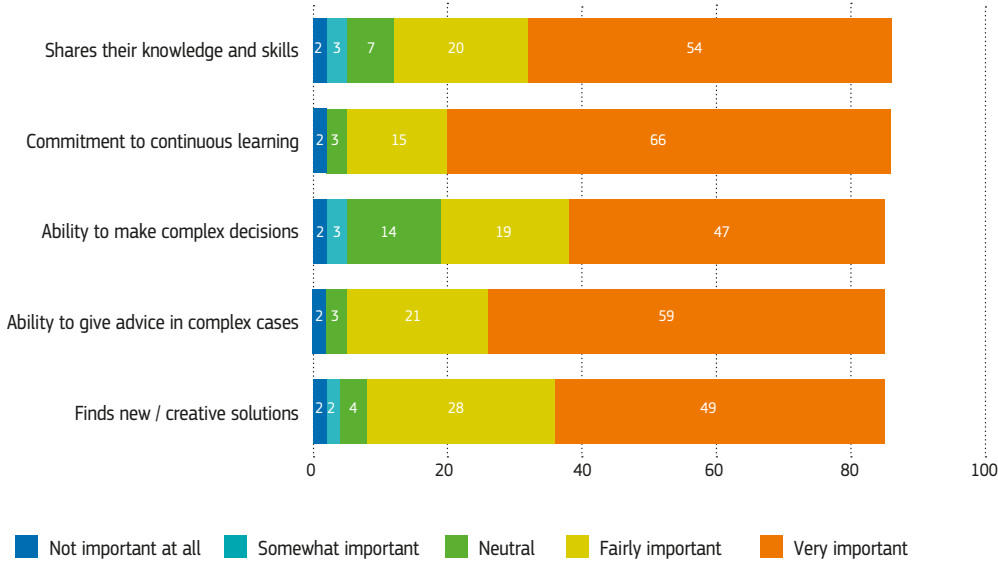
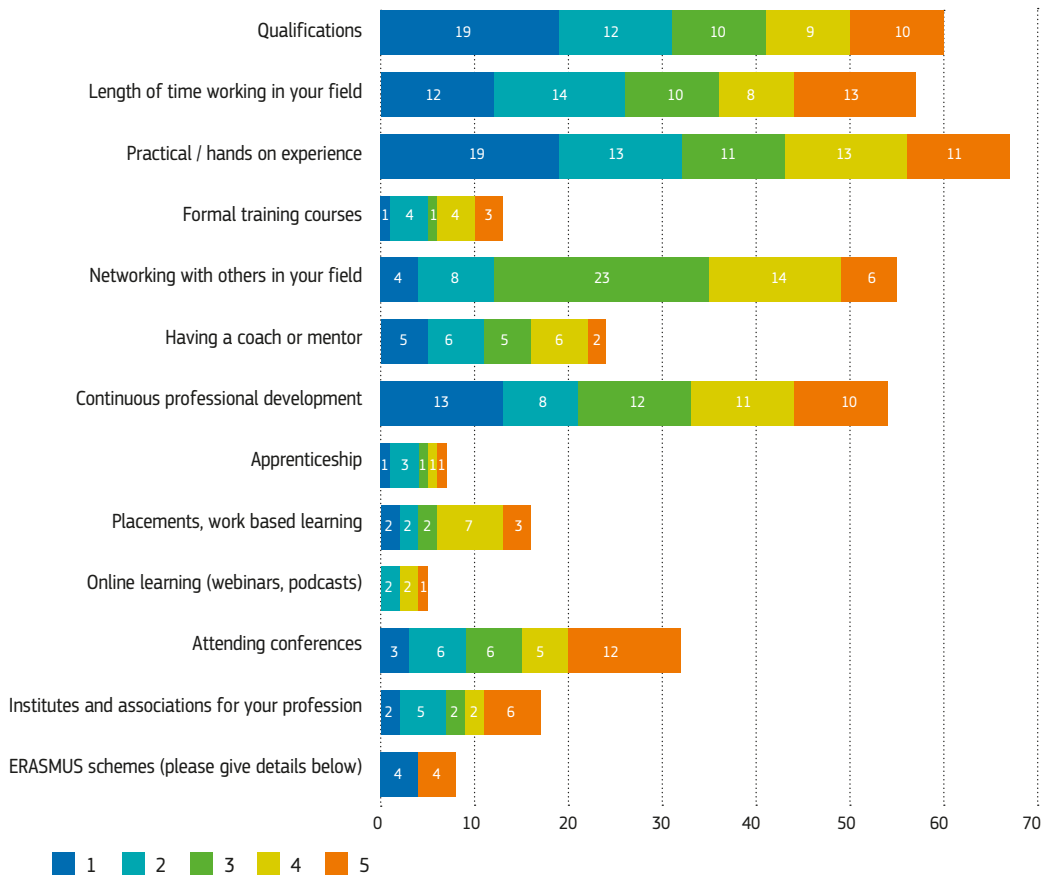### Q7. What type of activities are you involved with?
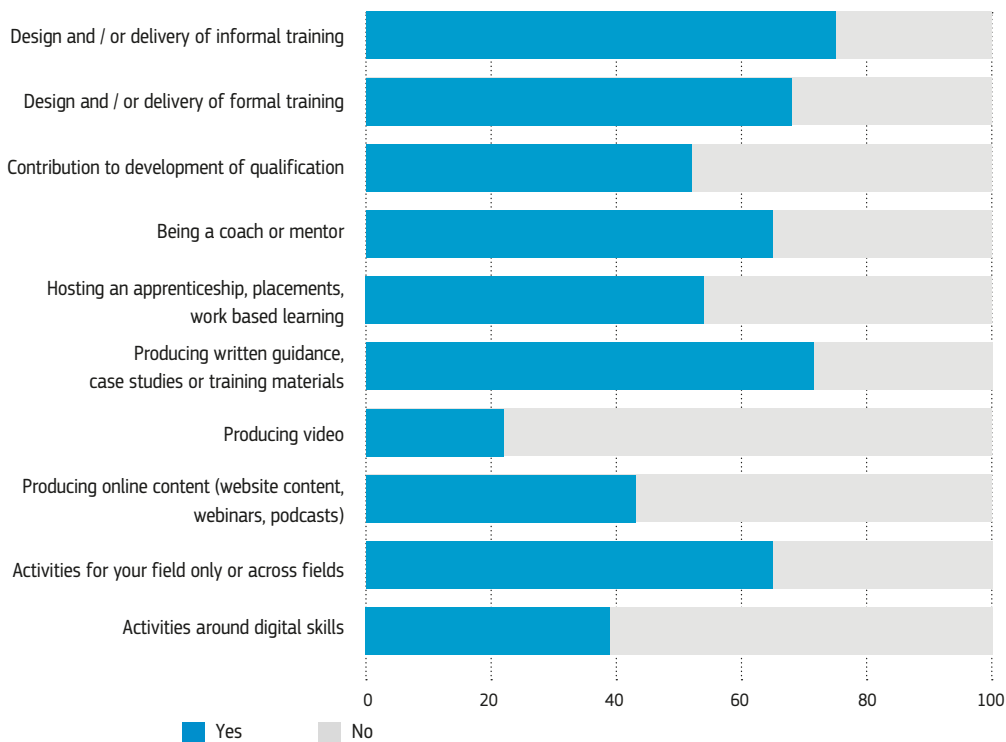
Legend: ■ Yes   ☐ No

- The results included: authoring at 51%; producing advice/guidance at 53%, government/statutory role at 21%; and public engagement at 41%. The percentage acting as a trainer for informal learning, at 55%, was close to that of those in a trainer role for formal learning, at 47% (Q24). Much of this work is focused on broadening the audiences for heritage. Working with volunteers was reported by 26% of respondents involved with this; working with young people by 22%; and working with diverse groups by 32%.

- Responses were received across a range of professions (Q23). The largest groups responding were in architecture/structures/immovable heritage (13%), conservation-restoration (12%) and archaeology (9%). There were no responses from people in exhibition design. Responses were also received from specialists in industrial archaeology, geology and entomology. It was useful to receive some responses from craftspeople in ceramics, glassblowing, carpentry and masonry as their work can span both tangible and intangible heritage.

- The largest group of respondents were from commercial companies (25%), followed by public institutions (20%), charities (16%), higher education/university (15%), national government (10%) and local government (4%). There were also respondents from NGOs, and three respondents working across a range of organisation types. An exception is there were no respondents from further education (Q25).

- It was positive that the survey reached small and medium-sized enterprises (SMEs), which tend to predominate in the cultural heritage sector. Out of the respondents, 42% were from organisations with 13 or fewer employees, and sole traders made up 14% of respondents.

- The balance of male to female was 58% male to 42% female.

- The majority of respondents were 46-60 years old, at 50%; the next largest group were 31-45 years old, at 26%; and a significant number were over 60 years old, at 21%. In the two younger age groups, there were no respondents age 16-24, and only 3% were 25-30 years old.

- Respondents work across a wide range of European countries, including Austria, Belgium, Croatia, France, Germany, Greece, Hungary, Italy, Lithuania, the Netherlands, Poland, Portugal, Republic of Ireland, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland and the UK.

- It is notable that 30% of respondents work in more than one country, and 20% work outside of Europe.
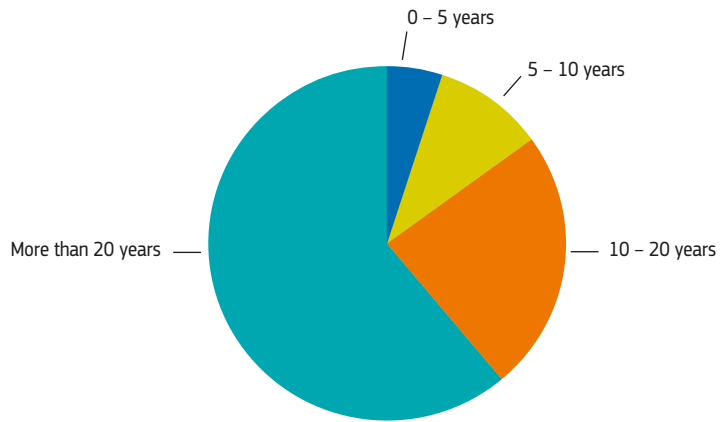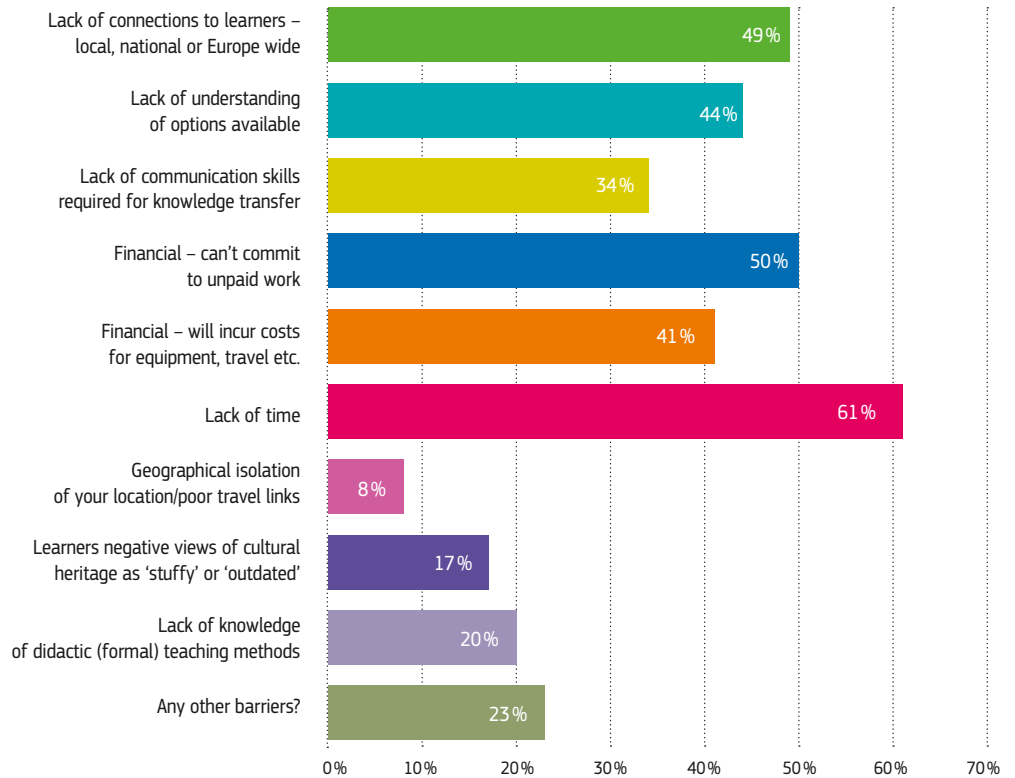
Q1. What do you think makes an expert?

Category	Not important at all	Somewhat important	Neutral	Fairly important	Very important
Shares their knowledge and skills	2	3	7	20	54
Commitment to continuous learning	2	3		15	66
Ability to make complex decisions	2	3	14	19	47
Ability to give advice in complex cases	2	3		21	59
Finds new / creative solutions	2	2	4	28	49

Legend: ■ Not important at all ■ Somewhat important ■ Neutral ■ Fairly important ■ Very important

Q2. How did you develop your expertise in your field? Select the top 5 factors (and mark 1 to 5 with 1 as the most important factor)
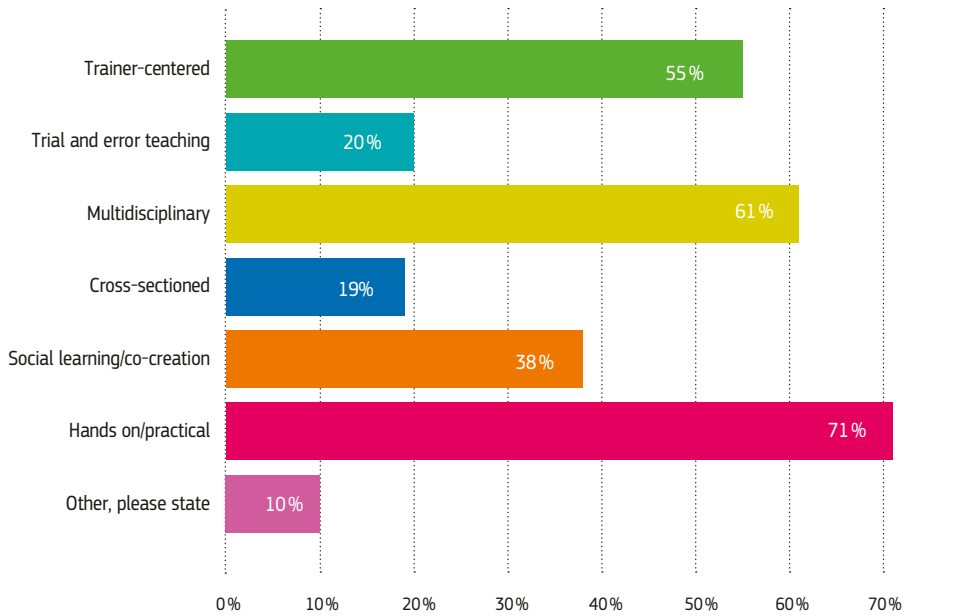
Category	1	2	3	4	5
Qualifications	19	12	10	9	10
Length of time working in your field	12	14	10	8	13
Practical / hands on experience	19	13	11	13	11
Formal training courses	1	4	1	4	3
Networking with others in your field	4	8	23	14	6
Having a coach or mentor	5	6	5	6	2
Continuous professional development	13	8	12	11	10
Apprenticeship	1	3	1	1	1
Placements, work based learning	2	2	2	7	3
Online learning (webinars, podcasts)	2	2	1		
Attending conferences	3	6	6	5	12
Institutes and associations for your profession	2	5	2	2	6
ERASMUS schemes (please give details below)	4	4			

Legend: ■ 1 ■ 2 ■ 3 ■ 4 ■ 5

Q3.   How long have you been working in your field in total?

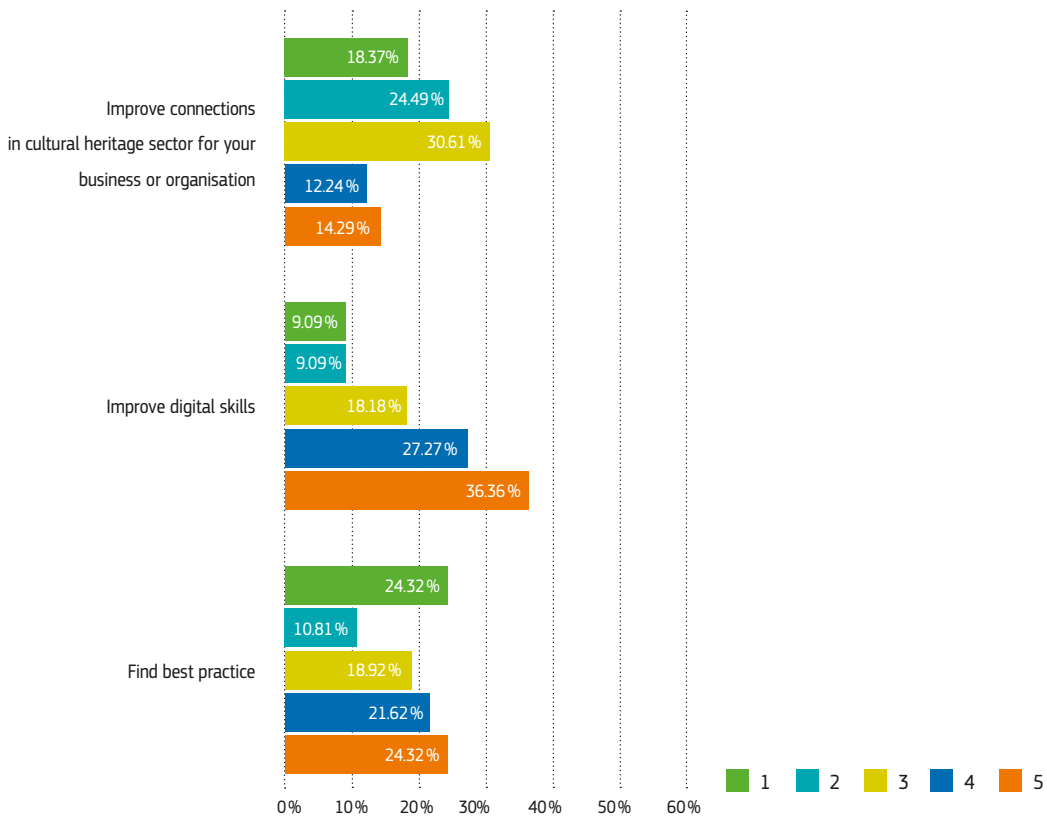

- 0 – 5 years
- 5 – 10 years
- 10 – 20 years
- More than 20 years

Q4.   What do you think are the barriers for experts in the cultural heritage seeking to transfer their knowledge?
Tick any that apply

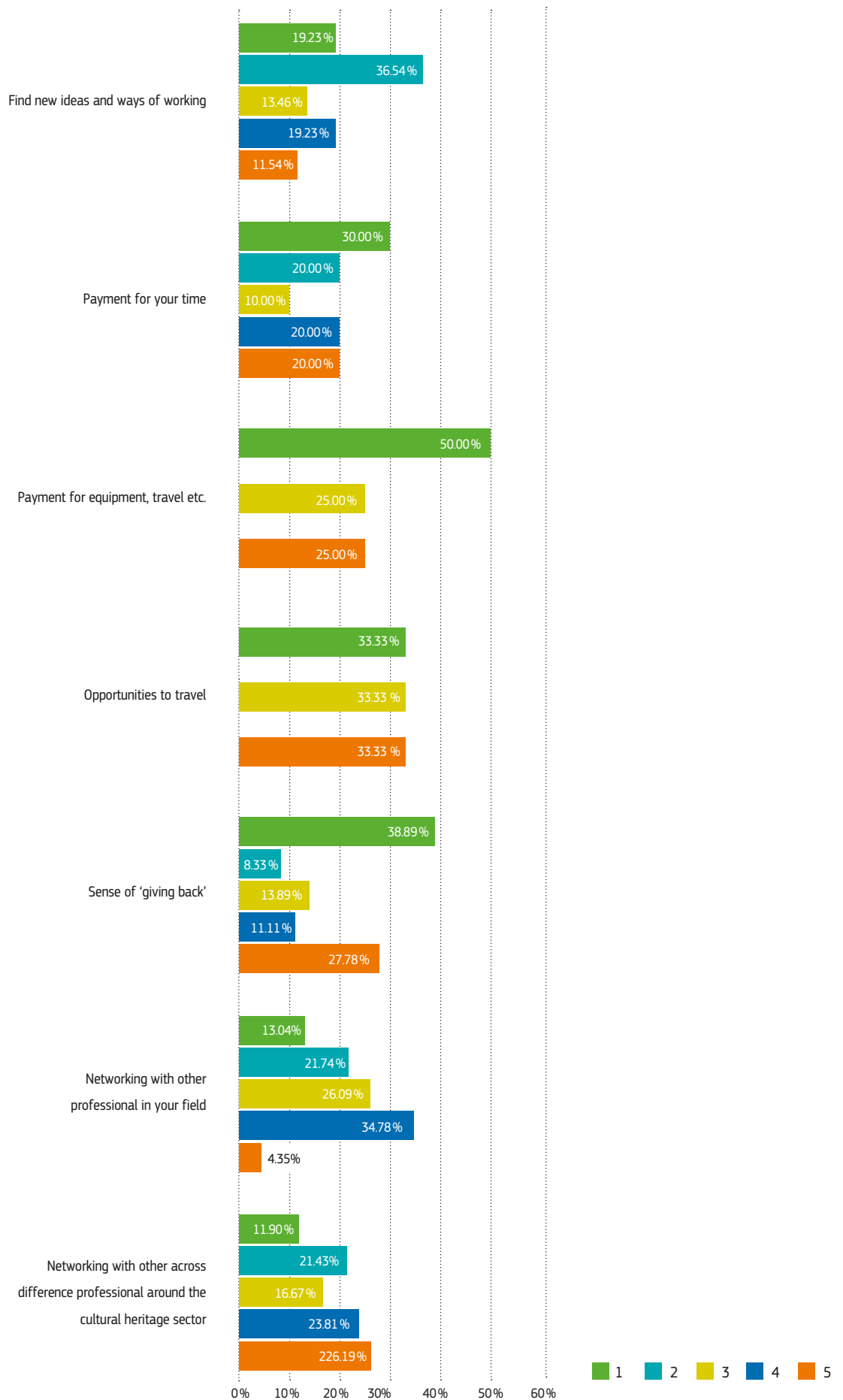| Barrier	Percentage
Lack of connections to learners – local, national or Europe wide	49%
Lack of understanding of options available	44%
Lack of communication skills required for knowledge transfer	34%
Financial – can't commit to unpaid work	50%
Financial – will incur costs for equipment, travel etc.	41%
Lack of time	61%
Geographical isolation of your location/poor travel links	8%
Learners negative views of cultural heritage as 'stuffy' or 'outdated'	17%
Lack of knowledge of didactic (formal) teaching methods	20%
Any other barriers?	23%

Q9. What methods and techniques do you use? Tick all that apply

Method	Percentage
Trainer-centered	55%
Trial and error teaching	20%
Multidisciplinary	61%
Cross-sectioned	19%
Social learning/co-creation	38%
Hands on/practical	71%
Other, please state	10%

Q16. What do you think are the benefits of your knowledge transfer activities for your learners? Select the top 5 factors (and mark 1 to 5 with 1 as the most important factor)

Improve connections in cultural heritage sector for your business or organisation
- 1: 18.37%
- 2: 24.49%
- 3: 30.61%
- 4: 12.24%
- 5: 14.29%

Improve digital skills
- 1: 9.09%
- 2: 9.09%
- 3: 18.18%
- 4: 27.27%
- 5: 36.36%

Find best practice
- 1: 24.32%
- 2: 10.81%
- 3: 18.92%
- 4: 21.62%
- 5: 24.32%

Legend: 1, 2, 3, 4, 5

Find new ideas and ways of working
- 1: 19.23%
- 2: 36.54%
- 3: 13.46%
- 4: 19.23%
- 5: 11.54%

Payment for your time
- 1: 30.00%
- 2: 20.00%
- 3: 10.00%
- 4: 20.00%
- 5: 20.00%

Payment for equipment, travel etc.
- 1: 50.00%
- 3: 25.00%
- 5: 25.00%

Opportunities to travel
- 1: 33.33%
- 3: 33.33%
- 5: 33.33%

Sense of 'giving back'
- 1: 38.89%
- 2: 8.33%
- 3: 13.89%
- 4: 11.11%
- 5: 27.78%

Networking with other professional in your field
- 1: 13.04%
- 2: 21.74%
- 3: 26.09%
- 4: 34.78%
- 5: 4.35%

Networking with other across difference professional around the cultural heritage sector
- 1: 11.90%
- 2: 21.43%
- 3: 16.67%
- 4: 23.81%
- 5: 226.19%

Legend: 1, 2, 3, 4, 5

Online Survey Form

Are you working in the heritage sector and sharing your expertise?

This survey is to find out more about knowledge transfer activities Europe wide and across all fields.

- What activities are you doing?
- What is working well?
- What isn't working well?
- What are barriers?
- Do you have ideas for improvements?

This survey will feed into a working group producing a report on skills, training and knowledge transfer in heritage professions for the European Year of Cultural Heritage.

1. What do you think makes an expert?

	Not important at all	Somewhat important	Neutral	Fairly important	Very important
Shares their knowledge and skills	○	○	○	○	○
Commitment to continuous learning	○	○	○	○	○
Ability to make complex decisions	○	○	○	○	○
Ability to give advice in complex cases	○	○	○	○	○
Finds new / creative solutions	○	○	○	○	○

Any other features?

2. How did you develop your expertise in your field?
   Select the top 5 factors (and mark 1 to 5 with 1 as the most important factor)

	Not important at all	Somewhat important	Neutral	Fairly important	Very important
Qualifications	○	○	○	○	○
Length of time working in your field	○	○	○	○	○
Practical / hands on experience	○	○	○	○	○
Formal training courses	○	○	○	○	○
Networking with others in your field	○	○	○	○	○
Having a coach or mentor	○	○	○	○	○
Continuous professional development	○	○	○	○	○
Apprenticeship	○	○	○	○	○

	Not important at all	Somewhat important	Neutral	Fairly important	Very important
Placements, work based learning	○	○	○	○	○
Online learning (webinars, podcasts)	○	○	○	○	○
Attending conferences	○	○	○	○	○
Institutes and associations for your profession	○	○	○	○	○
ERASMUS schemes (please give details below)	○	○	○	○	○

Any other ways?

3. **How long have you been working in your field in total?**

○ 0 – 5 years   ○ 5 – 10 years   ○ 10 – 20 years   ○ More than 20 years

4. **What do you think are the barriers for experts in the cultural heritage seeking to transfer their knowledge? Tick any that apply**

☐ Lack of connections to learners – local, national or Europe wide

☐ Lack of understanding of options available

☐ Lack of communication skills required for knowledge transfer

☐ Financial – can't commit to unpaid work

☐ Financial – will incur costs for equipment, travel etc.

☐ Any other barriers?

☐ Lack of time

☐ Geographical isolation of your location/ poor travel links

☐ Learners negative views of cultural heritage as 'stuffy' or 'outdated'

☐ Lack of knowledge of didactic (formal) teaching methods

5. **Have you been involved in knowledge transfer?**

○ Yes   ○ No

6. **Approximately how many days a year do you spend on knowledge transfer activities in total**

7. What type of activities are you involved with?

	Yes	No	If yes, approximately how many days per year?
Design and / or delivery of informal training	○	○	
Design and / or delivery of formal training	○	○	
Contribution to development of qualification	○	○	
Being a coach or mentor	○	○	
Hosting an apprenticeship, placements, work based learning	○	○	
Producing written guidance, case studies or training materials	○	○	
Producing video	○	○	
Producing online content (website content, webinars, podcasts)	○	○	
Activities for your field only or across fields	○	○	
Activities around digital skills	○	○	

8. Any other types of activities?

9. What methods and techniques do you use? Tick all that apply

☐ Trainer-centered   ☐ Cross-sectioned

☐ Trial and error teaching   ☐ Social learning/co-creation

☐ Multidisciplinary   ☐ Hands on/practical

☐ Other, please state

10. What learning tools do you use? Tick all that apply

☐ Demonstration/Instruction   ☐ Drawing/mixed media

☐ Coaching and mentoring   ☐ Digital – webinars, podcasts, video

☐ Studying written materials – manuals, checklists, work aids

☐ Other, please state

[ ]

11. Method of documenting and sharing your experience: do you document your experience, how and why? Tick all that apply

☐ Case studies   ☐ Writing papers, articles or webpages

☐ Online forum/blog/social media   ☐ Conferences

☐ Professional institutes or associations   ☐ Content curation, sharing online content

☐ Other, please state

[ ]

12. What are your preferred locations for learning? Tick all that apply

☐ Work based   ☐ Site visits

☐ Class room   ☐ Online

☐ Workshop

☐ Other, please state

[ ]

13. What measures of success or feedback from the learner do you use? Tick all that apply

☐ Qualifications gained   ☐ Feedback by interviews

☐ Badges and certificates of achievement   ☐ Gaining employment

☐ Letter of recommendation or references   ☐ Gaining higher wages

☐ Written feedback/survey

☐ Other, please state

[ ]

14. What works well? And why?

15. What National and European standards, codes of practice, guidelines do you regularly use in your activities? For example, Europass, SPECTRUM, ICOMOS

16. What do you think are the benefits of your participation in knowledge transfer activities for you? Select the top 5 factors (and mark 1 to 5 with 1 as the most important factor)

	1	2	3	4	5
Improve connections in cultural heritage sector for your business or organization	○	○	○	○	○
Improve digital skills	○	○	○	○	○
Find best practice	○	○	○	○	○
Find new ideas and ways of working	○	○	○	○	○
Payment for your time	○	○	○	○	○
Payment for equipment, travel etc	○	○	○	○	○
Opportunities to travel	○	○	○	○	○
Sense of 'giving back'	○	○	○	○	○
Networking with other professional in your field	○	○	○	○	○
Networking with other across difference professional around the cultural heritage sector	○	○	○	○	○
Any other benefits?	○	○	○	○	○

17. What do you think are the benefits of your knowledge transfer activities for your learners? Select the top 5 factors (and mark 1 to 5 with 1 as the most important factor)

	1	2	3	4	5
Improve connections in cultural heritage sector for your business or organisation	○	○	○	○	○
Increased technical knowledge in their field	○	○	○	○	○
Increased awareness of conservation principles, codes of practice	○	○	○	○	○
Improve digital skills	○	○	○	○	○

	1	2	3	4	5
Find best practice	○	○	○	○	○
Find new ideas and ways of working	○	○	○	○	○
Gain theoretical knowledge	○	○	○	○	○
Gain practical/hands on skills	○	○	○	○	○
Opportunities to travel	○	○	○	○	○
Networking with other professional in your field	○	○	○	○	○
Networking with other across difference professional around the cultural heritage sector	○	○	○	○	○

Any other benefits?

18. Do you use new technologies and digital methods as part of your knowledge transfer activities?

19. Are there any new technologies and digital methods you are interested in using?

20. What are the main burdens and challenges you are faced with transferring knowledge?

21. What factors would motivate you become more involved in knowledge transfer activities? Tick any that apply

☐ Improve connections in cultural heritage sector for your business or organisation

☐ Improve digital skills

☐ Find best practice

☐ Find new ideas and ways of working

☐ Gain theoretical knowledge

☐ Gain practical/hands on skills

☐ Gain teaching, coaching mentoring skills

☐ Opportunities to travel

☐ Networking with other professional in your field

☐ Networking with professional from the wider cultural heritage sector

☐ Payment for your time

☐ Payment for equipment, travel etc

☐ Gaining CPD for yourself

☐ Any other factors?

[text box]

**22. Please use the space below to add any further thought or comments.
For example: Any recommendations in order to improve the current situation around knowledge transfer? Where do you need more help and support?**

[text box]

About you and your work

23. What is your field of expertise?

○ Archaeology

○ Crafts – moveable heritage e.g. boat building, upholstery, cabinet making

○ Architecture/structures/immovable heritage – professional

○ Architecture/structures/immovable heritage – craft

○ Conservator/restorers

○ Landscape/gardening

○ Museum

○ Library

○ Archive

○ Visitor attraction/management

○ Management

○ Exhibition Design

○ Education

Other, please state

[text box]

24. Which of the following roles are part of your work? Tick any that apply

☐ Practitioner

☐ Trainer (informal)

☐ Trainer (formal)

☐ Author

☐ Producing advice/guidance

☐ Government/statutory role

☐ Public engagement

☐ Working with volunteers

☐ Working with young people

☐ Working with diverse groups

☐ Other, please state

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25. What type of organisation do you work for?

○ Charity   ○ Further education

○ Public institutions   ○ Higher education/university

○ Commercial companies   ○ Local Government

○ Schools   ○ National Government

○ Other, please state

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26. How many employees does your organization have?

○ Sole trader

○ 1 – 3 employees

○ 3 – 13 employees

○ 13 – 30 employees

○ 30 – 99 employees

○ 99 – 500 employees

○ 500 plus employees

27. What is your gender?

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28. What is your age?

○ 16 – 24 years

○ 25 – 30 years

○ 31 – 45 years

○ 46 – 60 years

○ over 60 years

29. Which country or countries do you work in?

┌───┐
│   │
│   │
│   │
└───┘

30. Do you consider yourself disabled?

◯   Disabled

◯   Not disabled

◯   Prefer Not To Say

◯   Disability description (optional)

┌───┐
│   │
│   │
│   │
└───┘

Many thanks for completing this survey

You can find out more about events around Europe in the European Year of Cultural Heritage 2018 at

https://europa.eu/cultural-heritage/

APPENDIX II:

KEY CONCEPTS AND TERMINOLOGY

Formal education terms

Apprenticeship

A form of education and training that formally combines and alternates workplace-based training (periods of practical work experience at a workplace) with school-based education (periods of theoretical/practical education in an educational institution or training centre) [151].

Competence

The proven ability to use knowledge, skills and personal, social and/or methodological abilities in work or study situations and in professional and personal development [152].

Dual system of education

The vocational education and training system used in Austria, Germany and Switzerland, also known as the dual training system, operates a combination of theory and training embedded in a real-life work environment. The main characteristic of the dual system is cooperation between mainly small and medium-sized companies, on the one hand, and publicly funded vocational schools, on the other. This cooperation is regulated by law. Trainees in the dual system typically spend part of each week at a vocational school and the other part at a company, or they may spend longer periods in each place before alternating. Dual training usually lasts between 2 and 3.5 years [153].

European Qualifications Framework (EQF)

A common European reference tool that serves as a translation device between different education and training systems and their levels. It aims to improve the transparency, comparability and portability of qualifications across Europe, promoting workers' and learners' mobility and facilitating lifelong learning [154].

Formal learning

Within structured and regulated education and training, formal programmes have prescriptive curricula and must set learning outcomes (knowledge, understanding and ability to do). Students/trainees are assessed and gain a qualification.

Knowledge

The body of facts, principles, theories and practices related to a field of work or study. Knowledge is described as theoretical and/or factual and is the outcome of the assimilation of information through learning [155].

Lifelong learning

Lifelong learning can be described as a concept covering the acquisition, development and updating of the key competences that each individual needs for personal fulfilment and development, employment, social inclusion and active citizenship throughout their life. Lifelong learning is divided into formal, non-formal and informal types of competence acquisition [156].

151
https://ec.europa.eu/ploteus/en/search/site/glossary?autocomplete_keywords=glossary

152
European Commission, *The European Qualifications Framework for Lifelong Learning* (EQF), Luxembourg: Office for Official Publications of the European Communities (2008/C 111/01), 2008. Annex I, definition (i).

153
Adapted from https://www.bmbf.de/en/the-german-vocational-training-system-2129.html

154
European Commission, *The European Qualifications Framework*, p.3.

155
European Commission, *The European Qualifications Framework*, Annex I, definition (g).

156
Commission Staff Working Document on key competence for lifelong learning, 2018.

Skills

The ability to apply knowledge and use know-how to complete tasks and solve problems. Skills are described as: cognitive, involving the use of logical, intuitive and creative thinking; or practical, involving manual dexterity and the use of methods, materials, tools and instruments [157].

Traineeship

Limited period of time spent at an enterprise or organisation in order to gain work experience, and specific skills and competences required by the labour market through on-the-job training. Trainees are typically people who have recently completed their education, participating in a traineeship ahead of taking up regular employment.

Non-formal education terms

Informal learning

Learning resulting from daily activities related to work, family or leisure that is not organised or structured in terms of objectives, time or learning support. Informal learning is intentional or deliberate but not organised. It can occur on-the-job, or through internships, shadowing, being mentored or carrying out individually motivated research.

Non-formal learning

Learning that takes place through planned activities (with learning objectives and learning time), in which there is some form of learning support but it is not part of the formal education and training system.

Non-formal learning can be designed and delivered within and outside of the regulated educational sphere. It is descriptive, can have a short duration and be flexible in its aims and management, does not necessarily assess the trainee's absorption of the subject, and can result in no qualification or one that is not recognised under the national qualifications framework. Learning can be achieved by participating in lectures and seminars (including open online courses), practical work (such as learning on-the-job), private study, or informal retrieval and research.

Tacit knowledge

The nature of traditional craftsmanship is 'knowledge-in-action', commonly referred to as tacit knowledge. Using tacit knowledge means making intelligent use of the body as an instrument, judging from a sensory choreography of hand, eye, ear and brain [158].

Volunteer (in cultural heritage activities)

A freely participating adult over 16. Volunteering is non-formal learning, integrated within planned activities with learning objectives that do not explicitly follow a curriculum and may vary in duration. This type of learning depends on the intention of the learner and does not automatically lead to the certification of acquired knowledge and skills. The skills and attitudes developed by volunteers in this non-formal learning include: interpersonal skills, teamwork, self-confidence, discipline, responsibility, planning skills, coordination and organisation, project management and the ability to solve practical problems. It enables people to enjoy heritage while acknowledging their individual and collective responsibility for it, taking part in the democratic process. The methods used are very different form the pedagogy used in formal education, as the emphasis is on learning by action and peer learning.

'World of work' terms

Occupations are not the same as jobs, which are not covered by the European Skills, Competences, Qualifications and Occupations (ESCO). Their distinction is based on the following definitions.

Job
A 'set of tasks and duties carried out, or meant to be carried out, by one person for a particular employer, including self-employment'. Example: being the pilot of a Boeing 747 aircraft for the Paris to New York route is a job; and 'commercial pilot' or 'airline transport pilot' are occupations, or groups of jobs to which this job belongs. Occupations can be used as job titles. An employer recruiting for this position might give the vacancy advert an occupation name, such as 'airline transport pilot[159].

Occupation
A 'set of jobs whose main tasks and duties are characterised by a high degree of similarity'[160].

Workplace learning
Study type that involves the acquisition of knowledge, skills and competences by carrying out – and reflecting on – tasks in a vocational context, either at the workplace or in a vocational education and training institution.

Cultural heritage terms

Conservation-Restoration (action)
'Conservation-Restoration refers to the process of care, as well as the professional field of practice concerned with material heritage.'

'Conservation-Restoration negotiates action on and participation in cultural heritage so as to preserve its physical and historical integrity and cultural agency.'

'In short, the aim of Conservation-Restoration is to prolong the life of heritage assets and make them available to the public (including researchers), without compromising their authenticity and significance'[161].

Conservation-restoration (concept)
'Cultural heritage is a diverse, yet finite and irreplaceable resource. Authenticity, integrity and sustainability are core values informing the care and use of heritage today, and are the measure of how successfully it is transmitted to future generations. Together with technical diagnostics, considerations such as these inform the need, nature and extent of actions and measures to be carried out by the Conservator-Restorer, on a spectrum of Preventive Conservation, Remedial Conservation and Restoration. Each of these represents different levels of intervention, depending on the condition, form, function and intended purpose of the cultural heritage asset. Scientific methodologies employed in the analysis of materials and processes of deterioration are combined with humanistic concerns around authenticity, value and significance in the negotiation of sustainable preservation outcomes'[162].

159
European Commission (2017b). *ESCO handbook: European skills, competences, qualifications and occupations.*

160
International Labour Organisation, *International Standard Classification of Occupations (ISCO-08) – Conceptual Framework*, 2012.

161
Conservation-Restoration of Cultural Heritage, factsheet appended to the Cultural Heritage Strategy for the 21st Century, prepared by ECCO, 2018.

162
Conservation-Restoration of Cultural Heritage, factsheet appended to the Cultural Heritage Strategy for the 21st Century, prepared by ECCO, 2018.

Cross sectoral

Relating to or affecting more than one group, area, or section [163].

Interdisciplinary approach

An approach to curriculum integration that generates an understanding of themes and ideas that cut across disciplines, and of the connections between different disciplines and their relationship to the real world. It normally emphasises process and meaning rather than product and content by combining contents, theories, methodologies and perspectives from two or more disciplines [164].

Living Human Treasures

Living Human Treasures are people who have a very high degree of the knowledge and skills required for performing or recreating specific elements of intangible cultural heritage. The name 'Living Human Treasure' proposed by UNESCO in 1993 is an appropriate title to designate the bearers of knowledge and skills. There were already a variety of titles among the systems that exist: Master of Art (France); Bearer of Popular Craft Tradition (Czech Republic); National Living Treasure (Republic of Korea); and Holder of an Important Intangible Cultural Property (Japan and Republic of Korea).

The Living Human Treasures programme aimed to encourage States to grant official recognition to talented tradition bearers and practitioners, thereby contributing to the transmission of their knowledge and skills to younger generations. Members established different systems, some selecting people, and others creating national lists based on skills, knowledge and customs. The selection should be based on the value of the traditions and expressions concerned as a testimony of the human creative genius, their roots in cultural and social traditions, their representative character for a given community, as well as their risk of disappearing. Living Human Treasure was set up in 1993 and discontinued when the Convention for the Safeguarding of Intangible Cultural Heritage, 2003 entered into force [165].

Mediator

Mediators are involved in communication, engagement and advocacy. They attempt to reintroduce the narrative of cultural heritage in wider civil society, using diverse means of communication, including digital tools [166].

Professional

Professional refers to competent members of the heritage workforce, both employed and self-employed, with knowledge and skills gained through qualifications and experience gained on the job from activities directly related to work processes associated with cultural heritage [167].

Preventive conservation

Based on the principle that prevention is better than cure, preventive conservation refers to a systematic and integrated approach to care, based on strategies developed for the maintenance and upkeep of heritage. Preventive conservation is central to any consideration of the use of and access to cultural heritage, and also supports the long-term success and appreciation of interventions made during remedial conservation and restoration.

Remedial conservation and restoration intervene directly on the material fabric of the heritage item. In contrast, preventive conservation occurs where a site-specific evaluation of the factors (physical, chemical, biological, environmental and human) that are contributing to deterioration recommend a management regime built around suitable methods of storage, handling and use. These recommendations also encompass loan, travel and environmental control including pollutants such as dirt and dust.

163
https://en.oxforddictionaries.com/definition/cross-sectoral

164
International Bureau of Education, UNESCO: http://www.ibe.unesco.org/en/glossary-curriculum-terminology/i/interdisciplinary-approach

165
Guidelines for the establishment of National Living Human Treasure systems (no date).

166
Voices of Culture, 2017, p. 8.

167
Adapted from Voices of Culture, 2017, note 7, p. 6.

The diagnostics and risk-assessment behind preventive conservation, and the design of suitable and specific management regimes, are the work of a Conservator-Restorer. Whereas specialised education is required to intervene directly on cultural heritage to safeguard it, devising long-term management plans is an iterative and multidisciplinary process, involving many different actors and stakeholders [168].

Remedial conservation

'Remedial conservation is a 'knowing' intervention to the fabric of the cultural heritage; it is a calculated action, governed by a strict set of parameters to achieve a specified outcome. All remedial conservation is intended primarily to stabilise or retard the deterioration of the heritage and to diminish future risk without compromising its material and historical integrity. Involving cleaning, repair and consolidation, such interventions can and often do ameliorate or reverse prejudicial changes leading to significant improvements in physical condition and visual appearance. The type of remedial conservation undertaken is determined by the nature of the heritage and the material from which it is made. Interventions require dexterity and skill in application and technique combined with knowledge of materials, their manufacture and the processes of deterioration' [169].

Restoration

'Restoration consists of direct action carried out on damaged or deteriorated cultural heritage with the aim of facilitating its perception, appreciation and understanding, while respecting as far as possible its aesthetic, historic and physical properties' [170].

Transdisciplinary approach

An approach to curriculum integration that dissolves the boundaries between the conventional disciplines, and organises teaching and learning around the construction of meaning in the context of real-world problems or themes [171].

Transversal competence

Transversal competence is 'Used in the context of multiple cultural heritage environments and multiple roles relating to cultural heritage' [172].

Transversal knowledge, skills and competences are relevant to a broad range of occupations and sectors. They are often referred to as core, basic or soft skills – the cornerstone for a person's personal development. Transversal knowledge, skills and competences are the building blocks for the development of the 'hard' skills and competences required to succeed on the labour market [173].

168
Council of Europe, Strategy 21, *Preventive conservation of cultural heritage in less than 1,000 words*, 2018.
169
Council of Europe, Strategy 21, *Conservation-restoration of cultural heritage in less than 1,000 words*, 2018.
170
http://www.ecco-eu.org/fileadmin/user_upload/ECCO_professional_guidelines_l.pdf
171
International Bureau of Education, UNESCO: http://www.ibe.unesco.org/en/glossary-curriculum-terminology/t/transdisciplinary-approach
172
Voices of Culture, 2017, note 10, p. 11.
173
https://ec.europa.eu/esco/portal/escopedia/Skill_reusability_level

APPENDIX III:

COMBINED SWOT (SHORT VERSION) [174]

The open method of coordination transfer of knowledge and skills in the field of tangible, intangible and digital heritage

Strengths in the heritage sector

1. INCREASING ACCESSIBILITY
(LT, VL, NL, ES, UK, AT, PT, SE, CZ, SK)

- **Databases** on traditional crafts and craftsmen, safeguarding methodologies (VL, LT, NL, SE, SK) (http://www.tautinispaveldas.lt/).
- The **Atlas** of the Intangible Heritage of Andalusia (ES).
- **Manuals and video instruction**s (AT, PT).
- **Web portals**, some especially for the education of children (CZ, VL, PT).
- Projects to make information (maps, cadastral plans, books, heritage sites) **digitally accessible**: www.onb.ac.at/digitale-bibliothek-kataloge/ATtrian-books-online-abo/; Registar kulturnih dobara; Hrvatski državni arhiv; Zagreb (UK, AT, PT, SE, HR); https://historicengland.org.uk/services-skills/education/heritage-schools/.
- **E-learning** such as 'Heritage crime for police officers' – a scenario-based online training course designed to support police officers – and other webinars (UK): https://historiceng-land.org.uk/services-skills/training-skills/online-training/.
- **Access to free downloadable technical advice**, e.g. from Historic England (https://historicengland.org.uk/advice/technical-advice/) and Historic Environment Scotland. https://www.engineshed.org/publications/.
- **Using new techniques (such as scanning, drones) to investigate heritage (**https://www.engineshed.org/about-us/the-scottish-ten/**) and BIM for heritage [building information modelling]** (https://historicengland.org.uk/images-books/publications/bim-for-heritage/) (UK).
- Development of **3D-technology** for cultural heritage (VL, PT).
- Development of **smartphone applications** (PT).
- **Cooperation** within digital heritage networks (NL).
- **Publishing** activities (CZ).

2. NATIONAL COOPERATION/NETWORK
(AT, VL, PT, NL, RO, SK, HR)

- **Excellent networking** distinguishes the federal monuments authorities as well as the increasing number of crafts centres (AT).
- **Platform for knowledge exchange** between higher educated heritage professionals (WTA) (VL)
- **Networks of heritage professionals** (Museum Network, Monastery Network) (VL, PT).
- **Close and widespread collaboration** in the heritage sector, functioning as a learning network of practice and expertise (VL).

- Heritage professions have strong and recognised **professional orders and associations**, with an active voice in the defence and promotion of these professions (PT).
- **National Centre for Heritage Education**: bringing together all courses in movable and immovable heritage (NL).
- **Network** of museums (RO, NL, CZ).
- Well-developed **institutional frame of professional cultural institutions** concerning the safeguarding of cultural heritage at national, regional and local level (SK).
- **Statement of Conservation Principles** for Cultural Heritage in Wales, will enable organisations to work collaboratively to develop strategic objectives: https://www.llgc.org.uk/fileadmin/fileadmin/docs_gwefan/amdanom_ni/dogfennaeth_gorfforaethol/dog_gorff_strat_cad_dig_12_15S.pdf (UK).
- **Partnership**, including the benefits of accessing funding from a wider range of sources (UK).
- **Strong inter-connected system** of Welsh Archaeological Trusts: http://cadw.gov.wales/about/partnershipsandprojects/aboutpartners/welsharchtrust/ (UK).
- Increased **participation** of heritage NGOs (HR).

3. FORMAL EDUCATION
(UK, SE, CZ, VL, PT)

- **Historic environment work-based placements scheme run by the Chartered Institute for Archaeology**, funded and hosted by Historic England to develop sector capacity in key technical skills: https://historicengland.org.uk/services-skills/training-skills/work-based-training/historic-environment-placements/ (UK).
- **Strong formal education and research** in traditional fields (such as restorers, art historians) (SE, HR, AT).
- **Enhanced craft education and training** (SE).
- **Formal educational programmes** in the museum sector (CZ).
- Establishment of **sectoral practical training** centres by the government to ensure that learners gain practical skills that match labour market needs, using the latest technologies and equipment (LT).
- **Interdisciplinary training centers**: the Pranas Gudynas Restoration Centre (https://www.ldm.lt/en/pgrc/) (LT).
- **The School of Crafts of The Centre for Folk Art Production and the Centre for Traditional Culture** (SK).
- **A very diverse and qualified upper-level education** (postgraduate, master's and doctorate) is distributed by many universities and polytechnics all over the country (PT).
- **Several regions** of the country have intermediate and professional training (level 4 of qualifications) of very high quality (PT).
- **UNESCO Chair** on Critical Heritage Studies and the Safeguarding of Intangible Cultural Heritage, at the Vrije Universiteit Brussel, with links to UNESCO and similar chairs (VL).
- **Guest-speaker**s from the heritage sector in various formal programmes (VL).
- **New internships** organised in formal programmes (VL).

4. CONTINUED PROFESSIONAL DEVELOPMENT/LIFELONG LEARNING/ NON-FORMAL EDUCATION (UK, AT, VL, NL, CZ)

- **Training programme** in the essentials of historic environment management: https://historicengland.org.uk/services-skills/training-skills/essentials/ (UK).
- **Heritage Lottery Fund Skills for the Future** programme (UK).
- **Professional development courses** for museums: https://gweddill.gov.wales/topics/culture-tourism-sport/museums-archives-libraries/professional-development/courses-and-events/?lang=en
- **Interdisciplinary training** programmes: https://www.archaeological.org/pdfs/sitepreservation/AIA_2014_Workshop_Summary.pdf (UK).
- **Succession planning** for museums – training of young conservators by retiring staff. Succession Planning Framework in Wales: https://gweddill.gov.wales/topics/culture-tourism-sport/museums-archives-libraries/professional-development/succession-planning-framework/?lang=en
- **Training in traditional craftsmanship** is an important basis for works of art and building culture. The results we consider tangible cultural heritage; the skills and processes are intangible (AT).
- **The non-formal training programme** of the Kartause Mauerbach Information and Training Centre for Architectural Conservation is well know for its practical approach (AT).
- **Courses and seminars** outside schools, networking days (AT, NL).
- **Research project** 'Educational role of the National Heritage Institute: Education as a key tool for improving the care of the cultural heritage of the Czech Republic' (DF12P01OVV014), financed by the Ministry of Culture in 2012-2015 (CZ).
- **National Monument Institute** (CZ).
- **Croatian Conservation Institute** organises internships, training and professional development for students and future experts in the field of conservation and restoration, and cooperates with universities in Croatia and abroad. See http://www.h-r-z.hr/en/index.php (HR).
- FARO, Erfgoedacademie, Paix-Dieu and Stadswinkel Brussel are support centers for cultural heritage that develop **non-formal learning programmes** for professionals (VL).
- Support in developing a strategic research agenda and heritage portal in Europe (for example, the EU's Joint Programming Initiative on Cultural Heritage) to improve the **quality of heritage managment and conservation practice** (VL).
- Netherlands Institute for Conservation, Art and Science (**NICAS**): focus on innovative scientific research and restoration of collections (NL).
- People with **more general knowledge** get more interested in craftmanship. This results in craftspeople being taken more seriously and getting a vote when decisions have to be taken. This makes transfer of knowledge easier (NL).
- Good examples of **informal educational programmes**: The Art of the Connection 015 (the Central Bohemian Region Gallery Project), Touch the 20th Century (a National Museum project); and the Sladovna Písek project 'Children of the Lionheart' (CZ).
- In the area of art collections, presentations are very positive activities done by the **professional association of the Council of Galleries of the Czech Republic** (CZ).
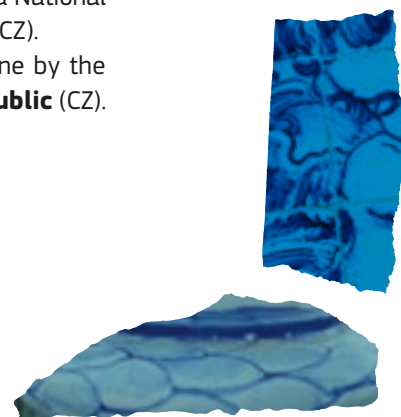
5. ACCREDITATION AND CERTIFICATION
   (UK, IR, LT, iT, AT, VL, PT, NL, ES, SE, CZ, SK)

- **Grant schemes** and **legislation** stimulate demand for conservation-accreditated professionals: http://www.min-kulture.hr/default.aspx?id=34 (HR) (UK, IR, PT, SK, HR).
- **MODIFY** – a European Erasmus+ project to develop Heritage Accreditation for Project Managers and Heritage Asset Management: www.modi-fy.eu/ (UK, AT).
- **Formal descriptions** of heritage professions in the fields of conservation-restoration of movable and immovable heritage, archaeology, architecture, art history, libraries and archives, e.g.: http://www.camera.it/_dati/leg17/lavori/stampati/pdf/17PDL0022280.pdf; https://vivesweb.be/erfgoedacademie/restauratievakman/ (VL, IT).
- Existence of a **National System** of Recognition, Validation, Certification and Qualification for arts and crafts (PT) and museums (CZ, PT, CZ, SK).
- Recent **legislation to promote** the qualification of professionals and handicraft workshops, establishing the National Qualification and Certification System for Traditional Craft Productions (PT).
- **System for securing the quality** of restoration companies with a complete set of guidelines (standardisation): http://www.stichtingerm.nl (NL, SE).
- Restoration **passport**. Digital passport/card on which restoration students and employees can show what skills and knowledge they have: https://www.restauratiepas.nl/ (NL).
- **Cooperation** towards the highest quality standarts in conservation: The Nájera Declaration (ES).
- It is a **legal requirement** for immovable and movable heritage professionals to be certified by the state in order to work in the field, and for them to continue their professional development after certification (20 hours during 5 years) (LT).

6. ENGAGING SOCIETY
   (LIT, UK, AT, PT, SE, CZ, SK, NL)

- **Stimulation** of foklore trades, fairs, festivals and workshops: https://www.youtube.com/watch?v=9VoYGNggI44 (LT, PT).
- Historic England offers **placements to students** from Black, Asian and minority ethnic backgrounds: https://www.historicengland.org.uk/services-skills/training-skills/work-based-training/paid-training-placements/ (UK).
- **Conservation projects** offer great opportunities to engage with the public and to build in skills and training for those working on the project: https://historicengland.org.uk/services-skills/training-skills/heritageskills-cpd/building-skills-and-training-into-conservation-projects/ (UK).
- Scotland's first dedicated building conservation centre, **the Engine Shed**, serves as a central hub for professionals and the general public: https://www.engineshed.org/ (UK).
- **Contests**, awards, prizes and scholarships (for folklore): https://www.youtube.com/watch?v=sLZGad5zgSo (LT, PT).
- **Initiatives by local and regional authorities**, and heritage associations, to stimulate dialogue between commuties and traditional knowledge (PT).
- Summer camps (LT, VL).
- **Tourist routes** (bread, linen, beer, parks and gardens) (LT, PT, CZ).
- **National events such as European Heritage Days, museum weekends, monument and mills days and special years dedicated to heritage**: www.tagdesdenkmals.at (AT, LT, PT, NL).
- **Encouraging communities** to participate, for example by developing heritage masterplans for safeguarding immovable heritage, as well as intangible cultural heritage:

for example, the meadow orchards in Haspengouw and the marly quarries in Riemst: https://www.hln.be/regio/bilzen/gemeenten-ondertekenen-erfgoedplan-voor-hoogstam-boomgaarden~a75aaa0f/ (FL, SE, CZ).
- **Involving unemployed people in the restoration of cultural heritage** (SK).
- **Ambachtshuis Brabant**, a private initiative to match young and adult craftsmen with professional, experienced craftsmen: https://www.ambachtshuis-brabant.nl/ (NL).

7. ENGAGING YOUNG PEOPLE
(UK, LT, AT, VL, NL, IR, SK)

- **Early contact with heritage** increases opportunities for young people to engage and decide to pursue a career, e.g. Young Archaeologist's Clubs and World Heritage Site Youth Ambassador Programme http://www.yac-uk.org; http://www.visitblaenavon.co.uk/en/Education/YouthAmbassadors/Youth-Ambassadors.aspx (UK).
- **Cultural Ambition Programme** – National Library Wales to bring new, young talent from some of Wales' most disadvantaged areas into the heritage sector: https://ccskills.org.uk/downloads/Heritage_Lottery_Fund_Press_Release_English.pdf (UK).
- Educational programmes in schools (CZ, IR).
- **Youth contests: 'Sidabro vainikėlis'** ('Silver Coronet'), which maintains traditional art forms, Tramtatulis folklore contest (LT).
- Children's crafts workshops (LT).
- **Historical and archaeological festivals** (LT).
- **The pilot project Werkraum School** combines apprenticeship and a trade school in a five-year educational programme: www.werkraum.at (AT).
- FARO and Flanders Heritage Agency **encourage** students to choose the heritage sector (VL).
- **Prizes**: Young Talent Monument Prize and Young Talent Museum Prize (NL).
- **Involvment of scholars** in the development of new heritage policy: http://www.kid-smindz.nl http://www.gruts.nl (NL).
- **Erfgoedtalent** (heritage talent), a project to help young professionals to get a job in the heritage field http://www.erfgoedtalent.nl (NL).
- **Activities** for young people organised by NGOs that are skilled in stone masonry techniques (e.g. castle ruins): http://brekov.eu/10_international-voluntary-workcamp-brekov.htm (SK).

8. LAW AND REGULATION, AND FINANCIAL SUPPORT FROM THE GOVERNMENT (LT, VL, PT,NL, SE, CZ, SK)

- **Vocational training costs are fully covered by the state** and this is enshrined in law (LT).
- **Strong policy** (quality label/grants) by government for skills related to safeguarding protected heritage, and a clear view (questionnaire for craftsmen: https://vivesweb.be/erfgoedacademie/wp-content/uploads/sites/28/2016/05/eindrapport-onderzoek-arte-sis-Erfgoedgerelateerde-opleidingen-s.pdf) of training needs (skill-focused and knowledge-focused): https://vivesweb.be/erfgoedacademie/wp-content/uploads/sites/28/2016/05/1_Rapport_30112015_volledig.pdf in heritage (VL).
- **Expert organisation** specialising in crafts heritage and transmission is financed by the Flemish Government (VL).
- **Policy** for assessing heritage skills including **funds** for informal learning (VL).
- **Pilot projects and development-oriented projects** and programmes, with support through calls for funding (VL).
- **State subsidies** for the financing of centres and organisations that support built

heritage craftmanship (https://www.s-bb.nl/samenwerking/meld-en-expertisepunt-spe-cialistisch-vakmanschap; www.rop-nederland.nl/) and non-formal heritage education (https://www.erfgoedopleidingen.nl/) (NL).

- **Administrative agreements** between national and regional governments to stimulate the use of students within restoration projects (NL).
- **Strong legal position** and well-funded infrastructure (SE).
- **Law on the protection** of museum collections (Act No 121/2000 Coll.) (CZ).
- **Specialised subsidy programmes** are created to support of educational projects in museums and exhibition projects (CZ).
- The **legal framework** on safeguarding cultural heritage (SK).
- The Ministry of Culture of the Slovak Republic's subsidy scheme '**Let's renew our house**' supports the activities of NGOs and schools. The grant scheme is small but accessible and popular (SK).
- **Policy and funding to stimulate** participation in safeguarding cultural heritage (SK, SE, VL).
- Cultural activities of regional and local institutions, NGOs and individuals are financially supported by **The Slovak Arts Council** and the new **Cultural Support Fund for National Minorities**: www.kultminor.sk/sk/ (SK).
- Financial **support for creative industries** (SK).

9. INTERNATIONAL COOPERATION
   (LIT, AT, VL CZ, SK)

- Long-lasting **peer friendships** among cultural workers from different countries in long-lasting projects: http://eeagrants.org/Where-we-work/Lithuania/Results-SupPT-ing-cultural-heritage-in-Lithuania (LIT).
- Involvment in the activities of **UNESCO, ICCROM, ICOMOS, ICOM, the European Heritage Heads Forum, Blue Shield, NIPOS, HEREIN, Cedefop and ENCoRE** (LT, AT, FL, CZ).
- Participation in **international fairs** (www.monumento-salzburg.at) and conferences (AMG Museum and Change) (AT, CZ).
- Participation in **online** publications and websites (www.futureforcrafts.org) (VL).
- Participation in **conventions** (Faro Convention on the Value of Cultural Heritage for Society; Convention for the Safeguarding of the Intangible Cultural Heritage) (AT, VL, SK, HR).
- **Jobshadowing** (cfr. Erasmus+) (VL).

10. INCREASE THE IMPORTANCE OF INTANGIBLE HERITAGE
   (PT, VL, SE, SK, LT)

- **The state is giving increasing attention to Intangible Cultural Heritage** (PT, VL, SK).
- **Pilot initiatives** have been produced, fostering crafts transmission and renewal (VL).
- There is a **system of promoting competitions** in several areas of non-professional art, including traditional culture and theatre (www.nocka.sk) (SK).
- **Training and workshops by NGOs** focused on the traditional building crafts: http://www.ainova.sk/en/cultural-heritage/; http://www.nt.sk/en/; http://ozartur.sk/o-nas/; http://www.obnova.sk/temy/restaurovanie-konzerovanie-remesla/remesla (SK).
- Encourage and **support ancient traditions** and worldview through **heritage communities** (LT).

11. FLOURISHING CRAFTS AND SKILLS
(LT, PT, CZ, SE, ES, HR)

- **Restoration skills** (LT, CZ, PT).
- **Archeologists** (LT).
- **Architects** (LT).
- **Building crafts** (LT).
- **Traditional crafts**: woodwork, textiles, amber jewelers (LT).
- **Professions involved in intangible heritage**: culinary heritage, polyphonic songs, cross-crafting (LT).
- **Established professions** (SE).
- **General communication skills**, and cooperation and improvisation skills, including problem solving. Further artistic education at basic art schools (AT).
- **The computer professions** (ES).
- **Expansion of heritage fields**: landscape, horticulture, interior design (HR).

12. HERITAGE BOOSTS THE ECONOMY
(UK, NL, SE)

- **'Heritage and the Economy 2017'** shows that, in England, heritage directly contributed GBP 11.9 billion in gross value added (GVA: the measure of the value of goods and services produced in an area, industry or sector of the economy). This is equivalent to 2 % of national GVA. There are 278 000 people employed in heritage. Heritage tourism generated GBP 16.4 billion in spending by domestic and international visitors. Repair and maintenance of historic buildings directly generated GBP 9.6 billion in construction sector output: http://historicengland.org.uk/research/heritage-counts/2017-conservation-areas/heritage-and-economy/ (UK).
- **Interaction between craftmanship and design**: http://www.uluv.sk/ (SK, NL).
- **Strong markets** (SE).

13. FUNDRAISING
(UK)

- The Catalyst: capacity building initiatives formed part of a broader partnership between the Heritage Lottery Fund (HLF), the Department for Culture Media and Sport, and Arts Council England. They aimed to encourage **more private giving** to culture and heritage, and to build the capacity and skills of cultural and heritage organisations to fundraise from private donors, corporate sources, trusts and foundations: https://www.hlf.org.uk/catalyst-capacity-building-programme-evaluation (UK).
- Using **crowdfunding**, for example, Save the Sunbathers: https://historicengland.org.uk/get-involved/protect/save-the-sunbathers/ (UK).

Weaknesses in the heritage sector

(AT, CZ, ES, IE, IT, LT, NL, PT, RO, SE, SK, UK, VL)

1. SKILLS AT RISK

> There is **no national survey of traditional professions at risk** on which to base the design of priorities for training qualified professionals in the most critical areas (PT).
> **Not much awareness** for the fact that cultural values can only be conserved through knowledge of craftsmanship (NL). The **issue of the transfer of skills and knowledge** (not only) to the young generation has been **underestimated** for a long time (CZ).
> **Participative skills** have to be further developed (VL).

Tangible heritage: built heritage
> Among architects, **knowledge about** the potential of traditional crafts is **decreasing** (AT).
> **Skills in danger**: *stonemasons* (LT); *workers in stone and dry stone* (ES, VL); *traditional wooden boat builders* (LT); *straw roof thatching* (LT, SK, IE); *currach building* (IE); *painters and plasterers* (stucco) (AT-VL); *traditional jointing techniques* (VL); *restoration of wooden windows* (VL); *decoration carved in wood* (ES); *all skills related to craftsmanship of traditional activities in the countryside/rural space, and handicraft professionals dedicated to wood structures, etc.,* (ES).

Tangible heritage: crafts
> Heritage Crafts Association created a **Red List of Endangered Crafts** report in May 2017. It includes *clay pipe making; clog making; coachbuilding and wagon making; collar making; Devon maund making; fan making; fore edge painting; hat block making; metal thread making; paper marbling; parchment and velium making; piano making; plane making; saw making; tanning; spade making; swill basket making:* http://heritagecrafts.org.uk/redlist/ (UK).
> Also **a loss of expertise** in *uileann pipe making* (IE); *textile weavers, tailors and furriers; metal smiths; engravers an (Fire-)gilders* (AT); *craft production from horn* (SK); *arts and crafts in relation to the restoration and maintenance of cultural heritage* (CZ); and *archaic musical instrument makers* (LT).
> Craft careers **focus on contemporary production**, materials and technologies (HR).

Intangible heritage
> At risk are: *archaic traditions and ways of living related to agriculture and fisheries, as well as archaic singing* (LT) and 'heritage' skills for *music, dance and language* (IE).

Digital heritage
> We are missing *new digital heritage skills* such as archiving born digital heritage, digitalisation policies, augmented reality, etc. (VL, LT). Within *intangible cultural heritage communities*, follow-up is sometimes fragile and hard to find (VL). Heritage professions lack competence in digital technologies (HR).
> There is a **gap between professionals** who possess knowledge in managing new technology and cultural heritage professionals who interpret and safeguard cultural heritage. There is a gap in competence between building conservators and craftspeople working with historic buildings and environments, who have a low digital competence, in comparison with traditional professions in the construction industry. This **gap in digital competence** generates a communication gap. In general, digitalisation has emerged in parallel with an increased administrative focus, which has outlined time and funding for traditional core practices in cultural heritage professions (SE).

2. EDUCATIONAL GAPS

Too theoretical

> Education is becoming **more theoretical than practical** (NL). Archaeologists in the Welsh government note that university courses are **reducing the time spent teaching practical skills**, including excavation, survey and building recording, artefact recognition, geophysical survey, etc. Too much is left to postgraduate level and on-the-job training (UK).

No focus on digital skills

> **No focus on digital skills** in heritage courses (NL). Skills to support intangible cultural heritage need to be more widely trained and adopted in cultural heritage organisations.

Insufficient interdisciplinary training

> In conservation, each trade/profession learns from others in a collegiate approach. However, *insufficient interdisciplinary training*, either formal or informal, is undertaken in award programmes.

No or minimal formal education programmes for heritage

> **Cultural heritage protection programmes are non-existent or minimal** for all heritage professions (except archaeologists). Subjects are integrated into other programmes rather than being taught as stand-alone, independent programmes. No PhD or Doctor of Science (ScD) awards in conservation of cultural heritage or heritage studies (LT).
> The level 3 training offer (**Master, Phd**) is fragmented (IT).
> **No scientific** education apart from conservation-restoration of interiors (NL).
> **Disappearance** of pre-academic education: **vocational/professional schools** (RO).
> **Conservation science** awards are notably absent in Ireland. Some study abroad (often first training on the job with conservators). It is unclear the extent to which science graduates have studied *materials conservation at postgraduate level* (IE).
> **Building conservation** skills without formal training include *blacksmithing, thatching, roof slating and parging, stained glass, architectural metalwork, furniture and timber joinery, plasterwork and painting/gilding* (IE).
> There is only one formal training option left in Flanders for **restoration craftsmen**. There is **no training available for**: *restoration craftsman thatcher, restoration craftsman floorer or restoration craftsman modern building renovation* (VL). Lack of traditional craft education and training: it relies strictly on personal interests and the ability to find a tutor/mentor (HR).
> There are *no specific BA and MA programmes* for the **intangible and museum sector**: there is a gap between formal education and the workplace (VL).

Weak opportunities for training of professionals in heritage

> There is **no centre for excellence in conservation/heritage skills**; no single point of reference for those already involved. There are **no train-the-conservation-trainer programmes** in operation to upskill potential trainers. There is a shortage of subject matter experts able and willing to be involved in course development work (IE).
> The formal education system is designed for completed education. Professionals in cultural heritage have **weak opportunities for further training**. Both academic and vocational formal education are aimed at recruiting uneducated students to longer graduate programmes or exchanging students within the education system. There is *not a good way 'up' from vocational to higher to academic.* Students go abroad (NL). After completing formal education, cultural heritage professionals have weak opportunities for further training (HR).
> There are **no options for regularly organised, specialised training** for generally

educated ('ordinary') *craftsmen in the traditional building crafts*, only occasional work-shops (SK). Gaps and shortages in construction trades working on traditional buildings: 87 % of surveyed contractors do not hold formal qualifications relating to work on traditional buildings, and 75 % of contractors in the survey **have not undertaken any traditional building training in the past 4-5 years**: https://historicengland.org.uk/ser-vices-skills/training-skills/heritageskills-cpd/traditional-building-skills/ (UK).

> **No progression awards/advanced training courses** are available in the *building conservation sector* in Ireland within each designated construction trade, and there is **no formal 'mastercraft' award** (IE).

> Improvements needed in the transfer of skills. Many young employees are described as 'apprentices' by their employers but are not in fact apprenticed. The content of their education is not verified independently to ensure it matches the breadth of knowledge required and contains sufficient and appropriate theoretical content and conservation principles, as well as the full range of hand skills. **Heritage contractors do not engage with formal apprenticeships as the curricula do not cover the traditional skills they require** (IE).

> There are **no educational institutions** established for training in *intangible cultural heritage management* (LT, IT).

> **No training** is offered specifically in *heritage interpretation*, although content in tourism courses may touch on this set of skills (IE). The demand for new knowledge and skills in traditional professions changes rapidly, not least for *digital skills*. The Bologna system has opened up programmes at Bachelor and Master's level, but specific course content that attracts professionals is not accessible.

No training for stakeholders

> In the field of cultural goods protection (including the fight against illicit trafficking) there are **no training programmes for stakeholders** (customs officers, specialised carriers, art and antique dealers and the widest public, especially tourists visiting geographical areas where there is an increased risk of trafficking in cultural goods). In the Framework Educational Programmes of Schools, there are not sufficiently grounded subjects focusing on history, national identity, art history and cultural history, nor in general, programmes that cultivate society, including teaching competences in the preservation of cultural heritage (and related educational programmes on museum presentations, museology, etc.). There is a lack of programmes in the field of literacy support, technical education support and formal science education. Also problematic is the status of programmes to recognise cultural identity and historical sources of society's values (CZ).

Low quality of education/training/teachers

> Not everybody is satisfied about the quality of *formal education*. Education is not flexible, and there is not much room for innovation (NL).

> *University degree courses* do not teach practical heritage management skills. Recent graduates can find it difficult to get their first permanent job and are required to persevere with short-term 'training' contracts until they can get a foot on the ladder. Recent graduates do not have the skills required to get posts with national heritage organisations (UK, HR).

> In England, among Built Heritage Sector Professionals such as **architects**, **surveyors and engineers**, 65 % of building professionals do not feel that their *formal education* prepared them adequately (skills-knowledge) for working on traditional buildings (UK): https://www.citb.co.uk/about-citb/construction-industry-research-reports/search-our-con-struction-industry-research-reports/skills/uk-built-heritage-sector-professionals-current-skills-future-training/ *The training programmes at architectural schools* pay little

attention to cultural heritage issues (history of art and architecture). Educational systems do not promote common sense, the skill of developing a proportionate response to situations and the ability to rely on good sense and personal judgement (AT, SE).

> The frequency, duration and quality of existing *non-formal training* varies greatly and is not always guaranteed (VL).

> *Vocational training* lacks quality: low standards, lack of master trainers, old-fashioned programmes and teaching tools, and no correlation with the needs of the state or businesses (LT).

> Emphasis in **construction** *education and training* is almost exclusively on modern construction methods and materials, and on energy efficiency. This gives construction professionals, site managers and operatives/technician tradespersons little formal preparation for dealing with traditional materials and the different structural requirements of traditionally constructed buildings (IE).

> The *dual education system* does not build enough on its own strengths; traditional techniques and materials are not considered; new technologies are not combined with traditional knowledge (AT).

> There is a threat of insufficient hourly remuneration of teaching and *insufficient qualification of some teachers* **in the field of cultural heritage**. Most of the Czech cultural/ *memorial institutions* lack sufficient qualified lecturers (CZ). The quality of teachers is also an issue: construction teachers instead of teachers skilled in heritage building construction. Administration/bureaucracy takes up teachers' time instead of giving them more time to educate (NL).

> Moreover, in our cultural and educational environment, there is a general **lack of 'friendly'/didactically stimulating spaces for the education of the younger generation**. The teaching of social science at primary and secondary schools should be improved, especially history and education for creative expression and cultural awareness (CZ).

Gap between content formation and the reality of the labour market

> **Poor correlation and cooperation between academic training and heritage needs in the labour market** (RO– IT-NL– HR).

> **Limited contact between university courses and organisations engaged in the practice** of archaeology, e.g. Archaeological Trusts in Wales. Limited awareness among graduates about the different organisations involved in managing the historic environment, how the historic environment is protected/managed, and the roles and tasks performed by archaeologists and heritage managers working in the historic environment. Limited awareness among graduates (and universities?) about the statutory protection of the historic environment and the practice of archaeology, and historic environment management, including the application of legislation, guidance and conservation principles, etc. Archaeology students are not taught generic working skills such as project management, budget management, specifying archaeological work or managing excavations. Some universities offer programmes (usually postgraduate) in historic environment conservation and building history (UK).

3. PROBLEMS WITH QUALITY ASSURANCE IN PROFESSION

#### Lack of occupational profiles/no formal organisation sector

> Creating **EQF** descriptions is questioned in the field of education, so profiles (and opportunities to fill gaps with training) are **lacking** there.

> **No national occupational/professional profiles** have been drawn up for owner, worker and educator roles in conservation. The building profession's conservation accreditation schemes, operated by the three building profession institutes, and its contractor registration scheme, are **not accredited** to ISO 17024:2012. These schemes are voluntary and do not have the benefit of legislative underpinning. Holders of conservation accreditation/heritage registration are not given preference in the public construction procurement system, meaning there is less incentive for professionals to gain accreditation and for contractors to gain heritage registration. The system does not seek demonstrable competence by crafts/tradespersons in order for them to be engaged, which does not encourage the uptake of formal award programmes by unqualified but experienced operatives (IE).

> **Without standards for professional competence**, and assessment frameworks for education and training, the quality of cultural heritage is at risk. High-quality and responsive solutions may be outcompeted by lesser ones if the procurer or purchaser lack assessment tools or cultural heritage competence (SE).

> It is essential to reorder and **improve the map of qualifications, training programmes and approvals** (ES).

> **No national occupational standards** describe conservation activities, so there is no benchmark or standard for curriculum content to ensure it matches international best practice (IE).

> **Improper management**, poorly identified activities, operational obstacles (CZ).

> There are too many different needs and interests, too many people involved **without central direction**. **No cooperation**. Nobody feels really responsible (NL). Low social prestige in the field of pamphlet care, incomprehensible information about the field, lack of-information, the enclosed nature of the field, poor communication between professional organisations and the public, etc. (CZ).

Standards and guidelines in the field are not known/used

> **European standards** in the fields of cultural heritage are not known in the sector (VL).

> The **guidelines for restoration quality** are not obligatory for owners and companies (NL).

No structural financial investment in knowledge transfer

> **Dependence on public funding**: there are problems in making traditional handicraft and sloid profitable. Consequently, financial insecurity limits the possibilities for taking apprentices and transmitting knowledge and skills within production. In the current economy, a large part of conservation, restoration and traditional crafts depend on public funding. Archaeologists are strongly dependent on legislation that demands their professional involvement. Employers for archaeologists are few and homogenous, and still have a stronghold in public administration. The governmental subsidies for church conservation has a large impact on job opportunities for craftspeople, conservators and restorers, and if reduced, jobs would decrease proportionally. Traditional uses of cultural landscapes have a weak market as the products are collective goods and are therefore dependent on subsidies. The homogenous structure, with strong dependence on public funding, subsidies and discretionary authorisation is a threat (SE). The demotivating low financial valuation placed on university-educated professions is crucial. Another issue is the division of staff involved in the development of formal and non-formal education in schools (Teachers Act) and outside schools, in memory institutions, even though they work under the same Framework Education Programmes. The fact that they cannot be
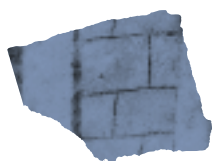
classified as pedagogues, even if they have the appropriate education, leads to lower social prestige for their work, l**ower financial recognition, and the outflow of qualified and promising staff from the memory institutions**. The attempt to over-standardise and bureaucratise the creative areas also has a negative impact (CZ).

> Moreover, in our cultural and educational environment, there is a general **lack of 'friendly'/didactically stimulating spaces for the education of the younger generation**. The teaching of social science at primary and secondary schools should be improved, especially history and education for creative expression and cultural awareness (CZ).

> Expertise is expensive: whether it is traditional and rare craftsmanship, or advice from a cultural heritage professional, such as an archaeologists (HR).

> Lack of funding for advanced education, training and knowledge transfer in the cultural heritage sector (HR).

Low inflow of professionals in the sector

> **Low number of students**: because of the niche position of the restoration branch, not many restoration experts are needed. There are therefore only small numbers of students taking these courses (NL). The ageing of cultural heritage professionals and lack of generational replacement is also an issue (HR).

> **The number of certified professionals is very few** compared to the conservation and restoration needs of the movable and immovable heritage (RO).

> The range of formal education in the field of cultural heritage is good, but **applicants are declining** in several fields. Museology, furniture conservation and conservation science are fields where low application numbers are threatening the existence of this education (SE).

Gap in interconnection between academics and craft people

> Academics and craftspeople have **different understandings of traditional skills and competences**. A lot of craftspeople have little knowledge of the preservation of authenticity or misinterpret the term 'conservation'. On the other hand, a lot of academics show little respect for practical knowledge of skills and materials. Due to the low attractiveness and social status of crafts, and of physical work in general, there is a **dichotomy between theory and practice**, and vocational and academic education (AT). There are still **problems in the interconnection between theoretical and practical workplaces** (i.e. verification over the long-term in museums and galleries of the validity of the theoretical outputs of specialised university fields) and the transferability of good museum practices into theoretical research (CZ).

4. NO POLICY TO PROMOTE CRAFTS AND HERITAGE PROFESSIONS

> **A lack of promotion of heritage careers** and a clear 'pathway' into heritage/archaeology for school children. The work of the Heritage Schools Programme can be seen in their digital channel: https://vimeo.com/heritageschools; https://historicengland.org.uk/services-skills/education/heritage-schools/ (UK).
> There is **no national plan for promoting** crafts and heritage professions (RO).
> There is a **lack of markets** for craft products (RO).

5. LACK OF COMMUNITY ENGAGEMENT AND/OR VOLUNTEERING

> The museum sector **needs to be more diverse and flexible**. Diversity in the sector would be less of a problem if there were real engagement with communities (UK).
> **Communities are not always involved** in an effective and consistent way in the definition of strategic plans, and in the selection of priority investments to allocate to the recovery and increasing the value attributed to historic centres and heritage buildings (PT).
> **Raising awareness among young people**. Companies and schools do not succeed in making young people enthusiastic about immovable heritage (NL).
> The **lack of interest** from the society **in volunteering** in heritage, except for museum pedagogy projects with short, specific deadlines, and only for carrying out work, not creation (RO). The Volunteer Culture in Austria is not very pronounced, due to insurance problems, labour law and low social status (AT).

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Opportunities from outside the heritage sector

1. EUROPEAN QUALIFICATIONS FRAMEWORK (EQF) AND VALIDATION OF PRIOR AND INFORMAL LEARNING (AT, NL, VL, IT, SE, ES)

> **Validation and appreciation of tacit knowledge and prior learning** is improving. The new project 'MODIFY' promotes exchange and accessibility (AT). New systems are developed to recognise and credit the learning process of volunteers (VL).
> The **European Qualifications Framework (EQF)** for lifelong learning classifies levels of qualification on the basis of knowledge, skills and competences (AT).
> The **International Standard Classification of Occupations (ISCO)** provides methods for classifying education programmes that are related to qualifications by level and field (SE). The system of certificates of professionalism has a catalogue of 26 professional families. Each one proposes a series of modules of professional training (ES).
> The corresponding **European Qualification Assurance in Vocational Education and Training (EQAVET)** (SE).

2. NEW DIGITAL TECHNOLOGIES (IT, SE, HR, NL)

> Work is continuing with **open access databases** to enhance search and retrieval of cultural historical information, thereby providing the opportunity to facilitate safeguarding and communication (SE). Europeana: https://www.europeana.eu/portal/en (HR).
> **Heritage can play a key role in digitisation policies**. The current Dutch government has a new emphasis on digitalisation (NL). The Italian Digital Library is responsible for developing and implementing the National Plan for the Digitisation of Cultural Heritage *[Piano nazionale per la digitalizzazione del patrimonio culturale]*: http://www.iccd.beni-culturali.it/index.php?it/150/news/369/nasce-la-digital-library-della-cultura-italiana (IT).
> **3D models** to improve existing databases with cultural heritage information in the form of texts, images and drawings (SE, HR).
> **3D printing** could be used in conservation and museum exhibition, to replace or restore original material and constructs for the sake of preservation or exploration (SE).
> **Interactive multiplatform** to visualise historical and future appearances, and to connect sources and cultural historical information to a 3D environment that people can access themselves (SE, HR).
> **Game applications** may reach out to too many people (SE, HR).
> **The use of virtual reality and mixed or augmented reality** may enhance sensory interpretations of cultural heritage, such as sound, light and movements (SE, HR).
> The adoption of **Building Information Modelling** (IE, HR).
> **GPS and photo scanning** may be used in crowdsourcing and control of cultural historical information (SE).
> The use of **algorithms** in, for instance, diagnosis and advice on historic buildings and environments could facilitate and ensure quality and best practice (SE).

3. NEW LEARNING APPROACHES AND TRAINING FORMATS

New learning theories (AT, NL, VL, CZ)

> **Shift to informal learning, social learning** (from colleagues) (VL).
> **Shift to focus on talents and talent management** (instead of focus on gap in competencies) (VL).
> Traditional craftsmanship is more than skills; it is **an attitude with ethical values**: working in a team, slowing a practice down, solution-oriented thinking, trial and error, etc. (cf. Richard Sennett) (AT).
> **Lifelong learning**. Accumulation of knowledge and skills does not end after leaving school (NL). It is necessary, in future, to use the appeal of the authentic environment of monuments, and the monument fund, more actively and efficiently, not just for schooling and leisure activities, but also for the benefit of lifelong learning (CZ).
> **Experience pedagogy**, which is applied in the authentic environment of historical monuments. Different types of workshops where you can try something or make it with original technologies (CZ).

New training formats (AT, NL, LT, CZ, IE)

> **Dual education system**: a combination of working and learning (AT).
> **Vocational training**. Familiarise the students at the VMBO (Pre-vocational secondary education programme) with heritage education (NL). The introduction of the 'AD-traject' (short higher education) makes the path from vocational to higher education more accessible (NL).
> **Funded projects to transfer knowledge**: https://monaghantourism.com/index.php/heritage/285-st-peter-s-tin-tabernacle. This included: a short training course in stained glass repair, delivered by a stained glass conservator (IE). Pilot on Living Human Treasures: http://www.livinghumantreasures.be (VL). Create more projects in intangible heritage/crafts with craftsmen, bottom up (NL).
> **Subsidies for pilots/early years of a new course**, to show the value of the course and convince the museums that students with that kind of knowledge are worth the investment (NL).
> **Teach the teachers**: teach masters teaching techniques (LT).
> **Cross-over training** of RIBO (Education, Restoration and Innovation in construction in Overijssel), combining different areas of the restoration crafts (NL).

E-learning (AT, NL, VL, IE)

> **Blended learning**, life-long learning, distance learning, modular training and on-site assessment are all beneficial to upskilling professionals who cannot afford to take a block of time away from their business (IE, VL, NL).
> **Social media, video and TV programmes** (NL), e.g. online platforms, databank of learning tools (digital passport, digital scanning) (NL, AT).
> **More investment in e-learning** in heritage education (NL). Special funding programmes correspond to this needs: www.aws.at/foerderungen/aws-impulse-xs/ (AT).

Apprenticeships (UK, AT, LT)

> **The involvement of apprentices increases** in the preservation of historical sites, guided by a restorer (AT).
> **Apprenticeships policies**: encourage apprenticeships and encourage businesses that take on apprentices to share teaching costs (LT). The UK reform of apprenticeships, with a target of 3 million apprenticeships, starts between 2015 and 2020 across all sectors.

An Historic Environment apprenticeship is in development. These new vocational pathways will ensure that a historic environment career is more accessible to all, and address some of the significant skills shortages and lack of diversity in the sector: https://historicengland.org.uk/services-skills/training-skills/work-based-training/heritage-apprenticeships/ (UK).

Networks of knowledge sharing – face-to-face and digital (NL, VL, IE)
> **New face-to-face networks** strengthening craft practices (VL).
> **Online knowledge and contact platforms** such as http://www.etwie.be/kennisbank and immaterieelerfgoed.be (VL). Investment in one technical solution for a knowledge network that includes smaller users outside of that network would make the distribution of knowledge more efficient (smaller organisations would more easily be able to join) (NL).
> **Larger heritage institutions share their knowledge with smaller ones**: c.f. Beeld en Geluid and the National Archives (NL).

4. WORKING WITH VOLUNTEERS
(UK, VL, NL, CZ, SK, ES)

> **Growing numbers of volunteers available**: Possibility of engaging young or retired people as volunteers in the cultural heritage sector (VL, NL) and increasing the number of participants from deprived areas: http://cadw.gov.wales/docs/cadw/publications/heritage-counts-final-eng.pdf (UK).
> **Encourage young people to volunteer**. Some good examples are the Cultural Volunteer Project in Historic and Artistic Heritage of Malagueño: http://www.asociacionzegri.com/volpatri.php and La Factoría Maritima Vasca: http://www.albaola.com/es/site/voluntariado (ES).
> **New types of volunteering: micro-volunteering, online, virtual, crowdsourcing volunteering**. These can appeal to new audiences as they can be flexible in time and place (UK, VL).
> Cynefin project has online volunteering tasks including transcribing, geo-referencing and clipping. This is backed up by volunteering workshops events across Wales: https://www.library.wales/discover/projects/end-of-project/cynefin/cynefin-local-projects/.
  - Glamorgan-Gwent Archaeological Trust Historic Environment: volunteers have been training to input archaeological information taken from 'grey literature' into the historic environment record. This information immediately supports decision-making by helping with heritage management and planning advice. The volunteers learn skills related to heritage and database/record management.
  - Itineranova project at the Leuven community archives aiming for the complete and unabridged digitalisation of the most extensive Ancien Regime source that it has, gradually enabling it to be consulted online (http://itineranova.be/in/home?_lang=eng).
> **New skills in volunteering management** (UK, CZ):
  - The National Trust took on trainees for an 18-month on-the-job training programme, which included gaining an Institute of Leadership and Management Level 3 qualification in Volunteer Management (UK).
  - Volunteering has become an item on the National Heritage Institute's agenda. Unfortunately, there are no coordinators for volunteer activity (CZ).
> **Better legislation to support volunteering work** (CZ, SK).
  - State support for volunteers in the heritage sector in Slovakia is excellent and could act as a model example for the other countries (SK).

5. INCREASING INTEREST AND PARTICIPATION IN HERITAGE
(AT, NL, VL, SE, HR, UK, PT, IE)

> **Increasing visitor numbers** to heritage sites (UK, PT): http://historicengland.org.uk/research/heritage-counts/2017-conservation-areas/heritage-and-economy/.
> **Successful heritage fairs, days and weeks** (IE, VL): there are opportunities to inform the public more effectively (through these events and social media channels) about the crafts and skills that have shaped our building and artefact traditions, and that are sought-after by employers and clients (IE).
> **Growing citizen participation** in general (e.g. in policymaking). Participation is now a basic function of cultural heritage work (VL).
> **Growing interest in crafts** in general, due to a lack of hand skills used in daily life (AT, NL, VL, HR).
> **Growing interest for intangible heritage** (VL, SE).
> **Growing public awareness of cultural heritage values** is enhanced through education, research and public information. Cultural heritage is considered an important counterforce to short-sightedness in a rapidly changing society (SE).
> A lot of attention for **born digital heritage** (NL).

6. CROSS-SECTORAL PARTNERSHIPS (LT, NL, VL, UK, IT, SE, CZ, RO)

> **Partnerships between heritage institutions and other civil sectors** (tourism, education, labour market, health, poverty, local communities, business centres, construction agencies etc.) can support the development of heritage. Here are some examples.
>   - The Construction Industry Training Board has joined forces with the Welsh government's Historic Environment Service (Cadw), Historic England and Historic Environment Scotland in a landmark partnership. This will ensure the construction industry is equipped with the knowledge, understanding and skills to ensure the continued use of traditional buildings: https://historicengland.org.uk/services-skills/training-skills/heritageskills-cpd/traditional-building-skills/ (UK).
>   - The public institution 'Europos Parkas' ('Park of Europe'), an open air museum, completed the restoration of Liubavas Manor Watermill near Vilnius, and its adaptation to cultural and public needs. See: http://www.liubavas.lt/museum-today (LT).
>   - The National Strategy for Internal Areas (Strategia Nazionale per le Aree Interne), which aims to promote local development projects linked to the enhancement of natural/cultural capital, tourism, local know-how and craftsmanship: http://www.agenziacoesione.gov.it/it/arint/ (IT).
> **New connections with creative industries** such as fashion, architecture, design and film (NL).
>   - (Re-)emergence of crafts as a creative industry (VL).
>   - Heritage as a source of inspiration for creative expression (CZ).
>   - The development of patronage, and of cultural and creative associations, and effective action to ensure conceptual cooperation across civil society organisations to achieve their goals working with the public administration, are also positive steps (CZ).

7. HERITAGE AS A KEY-FACTOR IN SUSTAINABLE DEVELOPMENT

Cultural heritage is considered an important counterforce to short-sightedness in a rapidly changing society. It could be positioned as a vital ingredient in the sound management of change, and respond directly to environmental, economic and social sustainability (SE).

Environmental sustainability (AT, NL, VL, SE)
> **Traditional crafts and materials are a source of inspiration** for sustainable/ ecological architecture (AT, SK).
> **Increasing number of renovations and restorations** demand crafts competences (AT). Buildings and environments from the post-World War 2 era are in urgent need of maintenance and development. Cultural heritage professions have opportunities to expand their field in taking part of this process (SE). Restoration projects are getting more complex (sustainability, renovation, new uses), which stimulates the need to increase and optimise the transfer of knowledge (VL). There is a strong movement among small NGOs with volunteers saving and restoring heritage monuments (SK).
> **Climate issues in heritage organisations** and policy (VL).
> **Maintenance, repair and recycling** are the main requirements to achieve the goal of a sustainable society and to mitigate climate change (SE).

Social sustainability (SE, HR, AT, VL)
> **Faro convention: increasing participation of local communities** (HR, VL, AT). Local development programme, Cres, was successfully implemented and validated in regional physical planning documentation (HR). This community-led project is based on these key principles:
  - **cooperation as a new model for heritage organisations** (AT);
  - **integration of newcomers** (including refugees), as some new cultural groups bring in strong traditional skills (VL);
  - strong links between **heritage and health/wellbeing** (elderly people, dementia, poverty) (VL).

Economic sustainability (PT, NL, SE)
> **Heritage as an economic asset for a country** (PT)
> **New systems of financing heritage development** in a more sustainable way, e.g. the 'bouwloodsen' in Germany. A permanent money flow can keep heritage conservation at a high level (NL).
> **New sustainable economic sectors**, such as horticulture, landscape management, culinary crafts and local food production, have many links with heritage. They bridge tangible and intangible aspects of cultural heritage, and may enrich professional cultural heritage work with new perspectives and tools (SE).
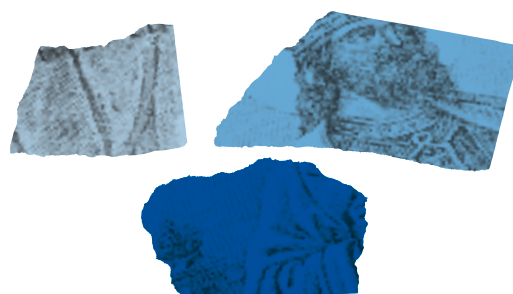
8. COOPERATION BETWEEN HERITAGE SECTOR AND FORMAL EDUCATION

Joined forces with higher education (CZ, UK, RO, SE)

> **Joint projects with universities**: cooperation of theoretical workplaces at universities with memory institutions, and more joint projects (CZ).
> **Research strategies and PhD routes**: collaborative research partnerships on developing the next generation of heritage researchers (collaborative doctoral partnerships, doctoral training partnerships, doctoral training centres) (UK). National proposals for complex research-development projects aimed at strategies for crafts revival (RO).
> **Heritage as a research topic for other sciences**. Social sciences such as public management, business administration, economics and law show interest in cultural heritage in both education and research. Cultural heritage is, however, a distinctive focus for management, brand design and tourism (SE).
> **Development of new university programmes**, such as study programmes specifically aimed at mediating and protecting cultural heritage (CZ).

Better heritage-education in primary and secondary schools (AT, CZ, RO, SE)

> **More attention on heritage in primary education**: young people link cultural heritage with the dusty past due to weak communication and wording concepts, poor narratives and an increasing shortage of cultural education (visual and handicraft education, cooking) in general (AT, RO).
> **Vocational craft education (secondary level) can integrate heritage skills.** Today, these vocational courses focus on new production only. Courses in cultural history perspectives and traditional skills and materials are lacking, even though these professions will work with historic buildings to a large extent (SE).
> **Improvement of teacher education** in the field of history and related cultural identity. Cultural heritage could contribute through the education of educators and development of learning tools/didactic methods to make cultural heritage knowledge and skills basic elements in the educational system, e.g. multi-level seminars at the Terezin Memorial on Holocaust teaching in schools (CZ).

9. LEGISLATION TO SUPPORT TRANSMISSION OF KNOWLEDGE AND SKILLS (VL, RO, CZ)

> **UNESCO 2003**: development of a Global Results Framework for monitoring the convention, in which transmission and education (formal, non-formal and informal) is a key thematic area (VL).
> **Legislation supports knowledge sharing in the field of intangible heritage and crafts.**
>   - The Flemish Parliament Act on Cultural Heritage, 2017, pays more attention to intangible cultural heritage, and on developing a Living Human Treasure programme (VL).
>   - Craftsmen Law: a project initiated by the Ministry of Culture and National Identity through the National Institute for Heritage with a deadline of 31 December 2017. It is intended to regulate the title of 'craftsman' and stipulates their rights and obligations in order to encourage people to practise the craft and transfer their knowledge. This the first time this category has been taken into consideration (RO).
>   - Greater financial and moral support from the Ministry of Culture of the Czech Republic for the organisation of international and major national conferences and meetings (CZ).

Threats from outside the heritage sector

1. ACADEMISATION OF SOCIETY
   (AT, NL, LT, PT, CZ, SK, ES, VL, HR, SE)

> **Vocational careers do not attract young people** (PT, ES, SK, SE).
> **Decreasing status for executive activities** (NL).
> **Strong focus on formal diplomas** in the workplace in general (NL, HR, VL).
> **The educational system in Europe favours academic training** over vocational training. However, in the words of the Swiss author Rahm, academisation generates a higher quota of young unemployment and does not counteract the skills shortage (AT).
> **Academic programmes have reduced the time allocated to practice** and we are therefore losing skills (LT, VL, CZ). For example, in LT, there is a two-tier system (Stage 1: study theory and practice, and only after graduation can you enter Stage 2: learn real skills).
> **Informal training and education is not recognised by the state** (LT).

2. DEMOGRAPHIC IMPACT ON WORKFORCE: RECRUITMENT PROBLEMS
   (UK, CZ, IT, RO, HR)

> **Ageing of cultural heritage professionals and lack of generational replacement** (IT).
> **Emigration:** brain drain and loss of skills (RO).
> **Social diversity not well represented:** newcomers are not working in the heritage sector (RO).
> **War for talent:** demographic changes in population ageing and in the long-run mean a significantly smaller number of children are born than is necessary to maintain a viable population (CZ).
> **Gender issues**: in the building sector, women are rare. There is a need for role models for women holding senior positions.

3. HARMFUL VOLUNTEER DEVELOPMENTS
   (LT, CZ, IE, ES)

> **Volunteers replace professional profiles.** Work with volunteers should be developed under a fair system of cooperation, but never working as a professional (ES, CZ).
> **Volunteering initiatives damage heritage:** informal local 'training' initiatives often take place as part of heritage enhancement (such as Tidy Towns: https://www.tidytowns.ie/), and are often publicly supported and funded. There is a lack of awareness of the potential damage to heritage, such as through graveyard clean-up work, because of ad-hoc training by people other than competent practitioners and trainers (IE).
> **Volunteers are not appreciated enough:** expectations are that they come in fully prepared and qualified. On the other hand, there is no willingness to teach them on the project, and there is a negative attitude in society because of expectations of high-academic achievers and overachievers (LT).

4. REDUCTION OF PUBLIC FUNDING AND INSTITUTIONAL INSTABILITY
(UK, AT, NL, VL, PT, CZ, IT, RO, SK, LT)

> **Decreasing political interest in heritage (at various levels)** (AT, NL, CZ).
> **An uncertain and underpaid sector** (IT, RO):
>   - in general, more financial resources are needed to improve the safeguarding of cultural heritage (SK);
>   - workforce retribution is inadequate for the high degree of specialisation and hard work needed in heritage professions (RO);
>   - widespread tendency to use overqualified staff (IT).
>   - without continuous financial means, no constant stream of work is possible (NL).
> **No continuity of skills transfer** (UK, IT, PT), a lack of generational replacement (PT), and a growing number of freelance jobs and temporary contracts, which are not good for the continuity and transfer of skills. Moreover, freelancers do not benefit from work-place education opportunities (NL, VL, UK).
> **Increasing competition for additional funding:** financing only from grant or project budgets is unstable and uncertain, and also inefficient and administratively burdensome (CZ).
>   - Some funding is available nationally or from the EU, but the calls are highly competitive (AT).
>   - Financial means for the digitalisation of heritage are now the same as for the other cultural fields (arts) (NL).
>   - There are too many traditional craft centres (sometimes more than one per municipality), which leads to the need to compete for public money, and a lack of trained masters (LT).
> **Impact on development and innovation:** impact on the ability of staff to attend external conferences and training courses, and engage with fellow professionals (UK).
> **Impact on educational programmes:** if there is no market for specific skills, there will be no formal education for them either. Formal education follows the changes in the labour market. (NL).

5. MARKET CONDITIONS AND COMMERCIAL PRESSURE
(UK, LT, NL, VL, PT, CZ, RO, SE, ES)

> **Increasing need for business skills at the National Library of Wales (UK)**.
> Strong emphasis on entrepreneurship and public-private partnerships (VL).
> **Strong focus on projects and events**, losing focus on values and sustainability. Too much attention goes to projects or events of low cultural value with a temporary impact (LT).
> **Courses organised by market players:** when the market circumstances are not good, these courses can collapse (NL).
> **More flexibility in the labour market:** increase in insecurity for employees and conservation of knowledge within companies (NL).
> **Time pressure in today's society (burn-outs).** Transmission of intangible cultural heritage, and especially crafts skills, are often long and intense processes of knowledge transfer and training (VL). Apprentice training and knowledge transfer between novice and master is declining (SE).
> **Pressure to create cheap products that sell** (PT, RO): threat of the acculturation of traditional forms of expression, with the importing of models and products changing the tradition and threatening the survival of local producers (PT). Procurement directives are determined by price policies, which prevent higher quality tenderers achieving best industry standards (AT).

> **Strong focus on the economic impact** of heritage organisations (ES). Focus more on achieving results (museums: number of visitors; building companies: profit) than on conservation of knowledge (NL).
> **Entertainment and light research:** in the current discourse of community involvement, popularisation of scientific facts and pursuit of customers, visitors and 'likes', there is a threat that empirical studies, source criticism and scientific facts will be undervalued (SE).

6. NEGATIVE VIEWS ON HERITAGE
   (LT, CZ, SE, HR, SE)

> **Negative representation of heritage in the mass media**, e.g. negative views on intangible heritage (LT).
> **General image of heritage as dull, boring and dying** (CZ).
> **Cultural heritage as esoteric and ostentatious activity:** regarded as expensive and cumbersome. Listed and authorised cultural heritage is asymmetrically represented among privileged social groups and formal elites (SE).
> **Social and economic added value of heritage and skills questioned** (VL, CZ):
   - more urgent issues such as global warming (VL);
   - the financial contribution of culture is also not fully accepted, but is perceived as a consumer of public finances (CZ).
> **Heritage as an obstacle to development, growth and prosperity** (SE, HR).
> **Close association of heritage with nationalism,** identity politics and even cultural chauvinism and racism. There is also a threat that cultural heritage professions could give up their integrity and lose credibility by taking political stands, e.g. making political statements instead of professional and scientific judgements (SE).

7. CONFLICTING INTERESTS PUT PRESSURE ON HERITAGE ASSETS
   (UK, NL, AT, PT, CZ, IE, VL, ES, HR)

> **Mass-tourism: heritage 'attractions' are unable to cope with visitor flows** caused by mass-tourism, resulting in timed tickets, visitor management and other measures (UK, NL, ES, HR). Conservation works to culturally important places are often not included by promoters, and conservation oversight may be absent when funding bodies assess proposals. In some cases, proposals to increase visitor accessibility, or deal with increased visitor numbers, have adverse impacts: http://www.getty.edu/conservation/publications_resources/teaching/case/olita/resources/docs/Visitation.pdf (IE).
> **Conflicting interests with other public sectors** (labour market, education, government, students, movable, immovable, conservation/re-use/conversion and health care) (NL, CZ).
> **Less focus on proactive maintenance** (AT).
> **Urban rehabilitation strategies** are too permeable to business visions and pressure from the tourism sector, without safeguarding authenticity and other heritage values (PT). The particular skills required to design, specify and carry out works are secondary to the aim of rejuvenating inner-city areas (IE).
> **No protection of skills in case of a conflict** (VL).
> **The heritage sector is seen as a fast solution to unemployment** (ES).

8. IMPACT OF DIGITALISATION, ROBOTICS, AUTOMATION AND NEW TECHNOLOGIES (UK, AT, NL, SE, HR)

> **Replacement of manual skills with digital crafts,** such as drone-based building fabric assessment and 3D printing: https://historicengland.org.uk/advice/technical-advice/; https://www.engineshed.org/about-us/the-scottish-ten/ (UK). The flood of industrial products has an impact of knowledge of old materials and traditional skills (AT, NL, HR).
> **More standardisation** of craftwork. (NL).
> **E-procurement** is a big challenge for small and medium-sized businesses, and from 2018, it will be obligatory (AT).
> **Uncritical digitalisation:** the questions of authenticity, ambiguity, administrative costs, value for the public and the use of digitalisation and digitisation are seldom debated (SE, HR, UK).
> **Gap between digital and analogue professionals** (SE, NL, UK). There is a threat that the gap between professionals in cultural heritage (with deep knowledge and skills in interpreting cultural history, diagnosing and taking conservation actions) and professionals with knowledge and skills in new technology will grow larger (SE).
> **Open access** to digital film, and digital reproduction and distribution, may threaten the integrity of local crafts and immaterial property (SE).

9. LEGISLATIVE RESTRICTIONS (AT, CZ, PT)

> **Legislative complications:**
  - invitations to tender must follow a complex of standards and requirements, and quality often lags behind (AT);
  - clarification of volunteer insurance issues, not only in the case of occupational injuries but also damage to the health of others, or to the organisation's property, caused by the volunteer (CZ).
> **Copyright restrictions and legal deposit legislation** (AT). **Not enough regulations:** works and interventions for safeguarding and conserving assets in built heritage and movable heritage frequently do not use specialised and accredited professionals (PT).

APPENDIX IV:
OPEN METHOD OF COORDINATION PARTICIPANTS

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- Ireland, Nessa Roche
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WG 3: Lifelong learning
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WG 4: Knowledge transfer
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Portugal, Rui Antonio Ferreira da Silva
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