Research Article

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Educational Strategies in Cultural Landscapes. Are we complying with the Faro Convention?

Elena Zubiaurre¹, Bolette Bele², Véronique Karine Simon³, Guillermo S. Reher⁴, Ana Delia Rodríguez⁵, Rodrigo Alonso⁶, Benedetta Castiglioni⁷

- 1 Facultad de Ciencias de la Educación, Alfonso X El Sabio University/Universidad Alfonso X el Sabio, EST-AP, IH-CSIC, Madrid, Spain
- 2 Norwegian Institute of Bioeconomy Research/Norsk institutt for bioøkonomi–NIBIO, Trondheim, Norway
- 3 Norwegian Institute for Cultural Heritage Research/Norsk institutt for kulturminneforskning–NIKU, Oslo, Norway
- 4 Comillas Pontifical University/Universidad Pontificia de Comillas; C. Universidad Comillas 3–5, 28049 Madrid, Spain
- 5 Colegio Madres Concepcionistas, Burgos, Spain
- 6 Museum of Human Evolution/Museo de la Evolución Humana, Burgos, Spain
- 7 University of Padua/Università degli studi di Padova, Padua, Italy

Corresponding authors: Elena Zubiaurre (ezubiiba@uax.es), Guillermo S. Reher (gsreher@comillas.edu)

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Abstract

The Faro Convention¹ underlined the importance of educational initiatives related to heritage. This paper focuses on the educational dimension of landscape, as a means to better facilitate its social acceptance and hence its inclusion in planning and management processes. The relation between landscape education and social perception, through a few European examples will be analysed to ascertain whether the principles of the Convention are being complied with effectively.

The authors introduce four case studies of heritage-related education carried out in three European countries (Spain, Norway and Italy). These case studies provide the possibility to coherently analyse a wide range of activities and initiatives occurring at various scales and levels: geographic, local and sectoral. In addition, they describe the pedagogical potential of cultural landscapes and cultural heritage, and highlight some of the educational strategies and measures currently used in this field.

Keywords

Children, communities, cultural heritage and knowledge, educational initiatives, educational system, cultural land-scapes, cultural heritage, exchange, training

Introduction

Following the spirit of the *Convention on the Value of Cultural Heritage for Society*, the "Faro Convention", the importance of educational initiatives related to heritage goes beyond the need to teach people how to preserve or protect their heritage.² It lies also in the capacity of educational strategies to create *heritage communities*, the communities of interest formed not only by experts and professionals, but also other stakeholders. In this way, a social dimension is addressed that involves individuals and groups in an open and inclusive way. The multiplicity of actions – activities and practices – related to

education promote a better knowledge of heritage, but they also foster identity, ownership, communication and research, creating tools that enable the whole society to participate actively and consciously in these processes. In accordance with the specific article titled "Cultural heritage and knowledge", the parties to the Faro Convention have committed to³:

- "Facilitate the inclusion of the cultural heritage dimension at all levels of education, not necessarily as a subject of study in its own right, but as a fertile source for studies in other subjects.
- Strengthen the link between cultural heritage education and vocational training.

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- Encourage interdisciplinary research on cultural heritage, heritage communities, the environment and their inter-relationships.
- Encourage continuous professional training and the exchange of knowledge and skills, both within and outside the educational system".

This framework could be useful to create educational proposals in which, on the one hand, pedagogical tasks and concerns are re-situated and emphasized – heritage embodying a teaching resource – and on the other hand, heritage can be vindicated as a right for individuals and communities – heritage as a social value. Cultural landscapes contain immense educational potential in both these directions. Cultural landscapes represent a meeting point between different disciplines and between different social agents, allowing the development of cross-disciplinary and interdisciplinary strategies that integrate different social sectors. The Faro Convention Action Plan Handbook 2018–2019 outlines that:

[Cultural heritage education] refers to the development and implementation of diverse and creative formal and non-formal educational activities, curricula, and games for children under 18 years old, in line with the principles of the Faro Convention. Such action is developed through active involvement and cooperation between the community members, artisans, children, parents, educators and administrators.⁴

In this paper we will review different case studies in order to identify and analyse the specific strategies being used, and to emphasize the results, social benefits and degree of compliance with the Faro Convention's aims stated above. The main objective will be, therefore, to answer the question of how said Convention's principles are being complied with, starting the basis for a more scientific approach to this type of dissemination.

Theoretical framework

Protecting cultural heritage requires the recognition of the necessity, and participation in the process, of all society.⁵ This was laid bare by the Convention of the European Council to value Cultural Heritage in Society, held in Faro in 2005.⁶ The document resulting from this meeting has been converted into one of the framework pieces to understand many of the heritage initiatives of recent years,⁷ building upon previous Council of Europe⁸ and UNESCO advances.⁹ Faro successfully immersed the value of cultural heritage firmly in society, and away from artistic or aesthetic aspects.

A fundamental guideline of the Faro convention is the concept of heritage communities.¹⁰ Heritage communities are made up of people who value specific aspects of a cultural heritage which they wish to preserve and transmit to future generations through public policy.¹¹ Consequently, there are various social agents that can participate in the management of cultural heritage, establishing synergies between experts linked to heritage management and social interests. Education, as social midwife to cultural heritage, is the central axis of many of these new initiatives, as shown by the works that have proliferated at the European level in recent years, with the intention of bringing heritage assets closer to society. These studies have emphasized that knowledge of cultural heritage is a common right and its protection a shared responsibility.¹² Education becomes necessary to build these heritage communities.

Teaching people to preserve or protect cultural heritage is important, but education needs to help create the sense of belonging to heritage communities, as well. One of the main issues of the Convention is understanding and articulating the diversity of perspectives in heritage. How this diversity can affect youth perception of heritage, and hence their role in the heritage community, has been explored elsewhere.¹³ Nonetheless, diverse perspectives need not breed different or competing heritage, but rather heritage tends to englobe those perspectives within a single complex understanding. With a social dimension, individuals and groups will be able to connect with the heritage experience in an inclusive way. This route connects groups of experts and social interests, through education, enhancing and facilitating access to cultural heritage. Educational initiatives involve improving knowledge of heritage, promoting identity, sense of ownership, communication and research. Education allows society to participate actively and consciously in the processes of heritage identification, management and protection.

Moreover, the participation of schoolchildren in the heritage experience has distinct pedagogical advantages because cultural landscapes offer an excellent learning opportunity. Students learn best from close and direct experience, from their own experimentation with reality. Approaching a cultural landscape allows the connection with the environment and the link with heritage, creating a direct and balanced relationship. In short, cultural heritage, cultural landscape and heritage education are concepts that go hand in hand and are necessary to face current heritage management and conservation challenges. Aware of this need, the CHeriScape Project¹⁴ has analysed these issues, the results of which will be presented below.

Methodology

The data for this paper are drawn from four rural landscapes in Spain, Norway and Italy. These four cases were selected because they are relevant in three dimensions: they have a high interest as representative cultural landscapes of different historical periods, are subject to specific management, and they are scientifically and socially relevant. These case studies also meet another essential condition to be able to carry out our study: they have developed educational strategies with schoolchildren: the methodology focuses on students of pre-primary, primary and secondary education – with students between 3 and 18 years – and their interaction with cultural heritage in landscapes that are steeped in it. In each case study, the specific methodology is different, as it needs to adapt to diverse conditions regarding funding, purpose, ambition, duration, etc. Each case will describe the main educational initiatives aimed at children and young people in primary and secondary school, and emphasize the strategies followed in each case. In this way, it will summarise how educational projects achieved outcomes for people and communities, and their results.

- 1. Atapuerca, World Heritage Site (Burgos, Spain), children and youth aged 3 to 18.
- Pino del Oro, Roman mining landscape (Zamora, Spain), children aged 12 to 13.
- 3. Transhumance landscape in Kjolden, Luster (Sogn og Fjordane, Norway), children aged 4 to 12.
- 4. The local Landscape Observatory of the Brenta Canal (Veneto, Italy), children aged 9 to 13.

Case 1. Archaeological site of Atapuerca (Burgos, Spain)

Brief description of the case study

The Archaeological Sites of Atapuerca were World Heritage listed in 2000. Scattered over the Atapuerca Mountains, they are 15 km away from Burgos in northern-central Spain. The chronology of the sites ranges from almost one and a half million years ago until the early 20th century. In that span of time, at least five different human species have settled these mountains. The site is managed through the Sistema Atapuerca, Cultura de la Evolución, an integrated system seeking to bring together all the institutions and initiatives working toward common goals of the Atapuerca Project.¹⁵ The latter also includes infrastructures around the Archaeological Site, which is open to the public: CAYAC (an access point to the Sites from Ibeas de Juarros), and CAREX (an archaeological experimentation centre) at Atapuerca itself; as well as some at the city of Burgos, like the Human Evolution Museum. See Fig. 1 for the spatial relation between these places. In the following sections, we will analyse current educational programmes, highlighting the most successful ones at the different centres included in the Sistema Atapuerca.

Educational proposal related to the structure of Atapuerca Project

Guided tours to the Archaeological Site

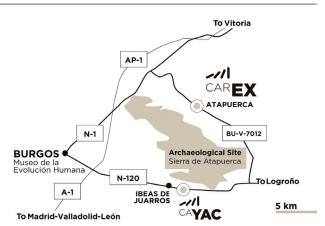


Figure 1. Map of the *Sistema Atapuerca, Cultura de la Evolución.* Source: Rodrigo Alonso (Museo de la Evolución Humana).

The very first and probably still the most successful initiative are the guided tours through the Archaeological Site that take place all year round. Since the 1990s the guided tours have been managed by local or regional entities, local entrepreneurs and specific companies. Currently they are organized by Atapuerca Foundation. In the first years few people visited the site, but attendance has grown steadily; among the visitors, students of all ages abound. Tours start from CAYAC, an access point for the sites that also serves as information point and meeting place. This location is the confluence of two World Heritage sites: the Archaeological Site of Atapuerca and The Way of St. James. Each visit lasts about 75 minutes and they focus on various topics: climatic changes in Europe, the process of hominization, hunter-gatherer societies and then more specifically about the species to be found on the site, and their daily life.

Visits and workshops at CAREX

CAREX complements the field visit with the display of different prehistoric techniques within a recreated environment. In 2015 it became an experimental archaeology centre, member of EXARC (an international network of Archaeological Open-Air Museums and Experimental Archaeology associated with ICOM). The visit consists of a 90 minute guided tour to the archaeological centre, accompanied by instructors from the research team. It is based on sensory and active learning, and users claim that it is the experience there that is the most satisfactory. The visit includes demonstrations and the possibility of trying flintknapping, cave art, hunting and making fire.

Visits and activities at the Human Evolution Museum

The Human Evolution Museum (MEH) opened in July 2010 in the centre of Burgos. It displays original remains from the sites and deals with the origin and evolution of our species. In addition, more than 2000 m² are destined to temporary exhibitions, workshops, conferences and other educational initiatives. The only guided visits to the museum are for student groups; they consist of a

90 minute guided tour accompanied by members of the education staff. It includes the identification of original fossils of the sites, an explanation of how the different hominid species evolved in the last four million years, and an insight into how the brain worked in order to make the first stone tools. "MEH, another classroom at your school" is a special activity for teachers who are interested in using part of the museum's permanent exhibition to dig deeper into the curricular material of their courses. In this case, teachers are the ones who explain, for 60 minutes, any selected part of the exhibition to their students.

Workshops

A whole series of workshops offering different possibilities depending on the age of the audience have been developed to complement the three types of visits. All the workshops at CAREX are related to experimental archaeology and many of them need to be carried out in open spaces, usually for students in primary or secondary education. Meanwhile indoor workshops at the Museum are carried out especially for the younger ones, from pre-primary to primary.

· Other local initiatives

At the same time, the resident population of the two villages directly related to the site (Atapuerca and Ibeas de Juarros) are trying to profit from their proximity. Not only do they include the expected tourism facilities (accommodation, restaurants ...), but also with additional offers such as the safari tour Paleolítico Vivo. In this case, there is a wildlife park filled with reintroduced animal species such as Prewalsky horses, European bison and aurochs. Educational visits there are available for any level from primary to university. Other activities in the area exist, albeit not necessarily related with the Site itself.

All main activities are shown in Fig. 2, along with further information of categories, locations and regular customers is provided for a better understanding of the educational strategy. The range of activities available is suitable for teachers to address a variety of topics covered at various educational stages (pre-primary, primary, and secondary education curricula) and helps achieve learning standards marked by the government. Specific scripts have been designed for each activity and the guides are trained to adapt their narrative to the different levels.

In short, after 40 years of excavations and dissemination, the project is now very large. It is safe to say that throughout these years most actions have been carried out by strongly promoting the educational dimension of the project. More than 150,000 visitors have come every year since the opening of the MEH. In 2010 alone, about 70,000 visitors went to the Archaeological Sites of Atapuerca and another 55,000 to CAREX. Figs 3 and 4 describe the numbers for 2016, including the number of students and their educational stages.

Analysing Figs 3 and 4, we can conclude that in 2016 the total number of visitors at the Sistema Atapuerca (Archaeological Sites + Museum of Human Evolution + CAREX) were 274,275 people of whom 16.55% were school groups (See Fig. 5). At the sites the students were 19.91%, while at CAREX they were 21.58% of the total. Apart from scientific achievements and recognition of the sites gained through the years, we could emphasize the fact that just the inclusion of Atapuerca in the educational laws is an enormous success: educational curriculums of primary, lower secondary and upper secondary in most regions of Spain now include this topic. This implies recognition of the educational value at all levels of the scientific results of the project. This achievement is compounded by the inclusion of Atapuerca in national textbooks of history and science, as the oldest site in Spain.

Hand in hand with these two, visiting the Archaeological Site and the set of complementary infrastructures, is a recurring activity for educational institutions. Engagement with heritage is intensified also by the exhibitions at MEH including actual fossils or even experimentations

Participants	Tools (or practical actions) in the different sites
Schoolchildren and youth	Different discourses (adapted to participants level)
• pre-Primary (3-5 years)	Museum visits
• Primary (5-12 years)	Field trips with participative activities
• Secondary (12-18 years)	Use of photographs, replicas, etc.
Adults	Diverse technical workshops with guided tours
	Sensory and active learning (training in techniques)
	Field trips
	Permanent and temporary exhibition
	Conferences, other educational initiatives

Figure 2. Summary of the tools and practical activities used at Atapuerca. Source: Véronique K. Simon (NIKU).

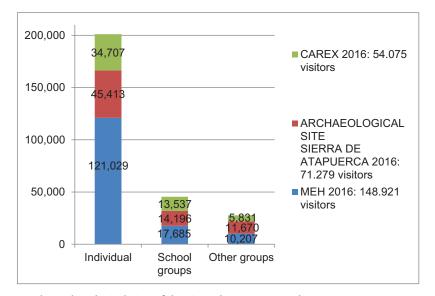


Figure 3. Visitors to MEH, the Archaeological Sites of the Sierra de Atapuerca and CAREX in 2016. Source: Rodrigo Alonso (Museo de la Evolución Humana).



Figure 4. Visitors by stage of education in 2016. Source: Rodrigo Alonso (Museo de la Evolución Humana).



Figure 5. Students during the field visit. Photo: Susana Santamaría (Fundacion Atapuerca).

the sensory reality of prehistory at CAREX. The last great achievement, in terms of education, is the close collaboration of the Cervantes Institute with the Atapuerca Foundation. Together they develop activities promoting worldwide knowledge of the paleoanthropological findings from the site. This includes some experimental archaeology workshops held at numerous centres of the Cervantes Institute since 2010.

Case 2. Roman Mining Landscape Pino Del Oro (Zamora, Spain)

Brief description of the case study

The mining area of Pino del Oro is located in Zamora, very close to the border with Portugal. This region is part of the cross-border natural park of Los Arribes del Duero (see Fig. 6). For this reason, it has historical and environmental values, which increase its educational potential. From a historical perspective, several mining structures, used for mineral extraction and treatment, are found in Pino del Oro. Many of them are unique in the Iberian Peninsula.¹⁶

Two archaeological routes with panels have been created to enable visitors to see the mining structures and Roman and pre-Roman settlements. Among the various outreach initiatives are efforts to involve the educational community, mainly in secondary education. That is why teacher-training courses have been organized, in order to provide teachers with useful tools to bring the landscape to their students. Besides, a guide has been created, which

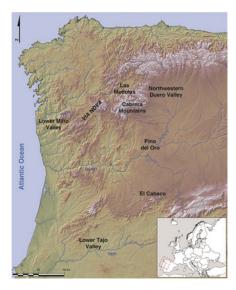


Figure 6. Location of Pino del Oro and main mining areas of the northwest of the Iberian Peninsula. Source: EST-AP, Institute of History-CSIC.

can serve the purpose of a handbook for both teachers and students. This last educational proposal is described in detail below, including the execution and assessment of results. The handbook was created as an educational tool for teachers and students, and tested by doing the first school visit to the cultural landscape of Pino del Oro.

Main objectives

The specific objectives of the educational proposal are as follows:

- Transfer of scientific knowledge to increase the perceived value of cultural heritage, thereby bridging the gap between the scientific world and schools;
- Design a theoretical and methodological strategy for learning from cultural landscapes. Offer keys to show the potential of the landscapes as a teaching resource;
- Break from standard classroom lectures in social sciences, and use out-of-classroom experience;
- Facilitate the acquisition of multidisciplinary knowledge, providing an integrated framework that combines history, natural sciences, exercise;

Motivate students to learn about their landscapes, to create links between them and their heritage.

Audience

Our research group has collaborated with two high schools in Madrid (Spain) where we did a preliminary study to prepare materials and then implemented them. This research was carried out with groups of students aged 12 to 13 years (first year of lower secondary education), according to the official school programme.

Planning and development

An important part of this proposal was the design of an interdisciplinary teaching guide for Pino del Oro. This handbook is divided into three parts:

- The first part contains activities intended to prepare the visit in the classroom. For this purpose, a previous assumptions questionnaire is very important to assess underlying knowledge. We asked about their knowledge of history, geography, natural sciences... but we also asked about their concept of heritage and its importance.
- The second part takes place in the field (see Fig. 7). A route is marked with stops, where the students should carry out specific activities. This is a fundamental part because direct observation of the territory and its elements is essential in the teaching-learning process. After a brief explanation at each stop, students have to do search, interpretation or reconstruction activities, as if they were archaeologists for a day.
- Finally, the third is a part of self-assessment that is done back in the classroom. This is fundamental in order to test the result of the activity.

To develop the guide we collaborated with two secondary schools in Madrid. Before the visit, the initial assessment revealed that students had unstructured information as a consequence of clichés which are frequently based on television programmes. Besides, they recognize the importance of heritage for being old, unique and



Figure 7. Students during the field visit part. Photo: EST-AP, Institute of History-CSIC.

Participants	Tools (or practical actions) in the project	
General public	Archaeological guide	
	Publications and brochures	
	Video	
Stakeholders	Lectures and seminars	
	Scientific meetings and museum exhibitions	
Children (Secondary)	Teacher training courses	
	Guide (handbook)	
	Direct experience: (part of experiment with 12-13 years old students)	
	1. Preparatory activities with questionnaire	
	2. Field trip with direct observation	
	3. Class assessment	

Figure 8. Summary of the tools and practical activities used at Pino del Oro. Source: Véronique K. Simon (NIKU).

unrecoverable. That is, they understood that heritage is distant from our everyday reality and therefore it must be preserved.

With these starting points, activities for the field visit were prepared aimed at strengthening the attachment between students and heritage, accepting it as an essential part of our own society. The key was to show students that cultural heritage had information about our shared past and that they were directly involved in maintaining and valuing it. This requires that students internalize the educational experience in the same way it does with other daily experiences. Thus, students go from being a recipient to engage in the construction of their own knowledge, establishing themselves as the protagonist of the training process. Through direct experimentation and approach to heritage, students created stronger links with the landscape, thereby no longer perceiving it as something distant or alien.

These initiatives facilitate teaching cultural values to new generations of students, in order to incorporate them into heritage communities. This work should not only rely on formal education and school activities. It is necessary to build more bridges between the scientific world and education. Unfortunately, coordinated actions are more exceptions than the norm. In the future, we will continue working to promote collaboration in order to include the cultural heritage dimension at all levels of education.

Case 3. Transhumance Landscape in Kjolden, Luster (Norway)

Brief description of the case study

The transhumance cultural landscape Mørkridsdalen, is located deep in Sognefjorden, in Skjolden, within the Luster municipality of western Norway (see Fig. 9). The valley is about 20 km long, stretching from the fjord to the mountains (an altitude variation of 1000 m). It is a transhumance landscape which has provided several archaeological structures and objects,¹⁷ and which still today is used for grazing. Mørkridsdalen became a protected landscape in 2009, due to its ecological, cultural and public enjoyment values.¹⁸

Historical information about the case study area was obtained from different written sources and webpages. Information about the case study was collected during interviews, photos, field visits, written sources, and questionnaires. This case study describes educational initiatives carried out for the benefit of Skjolden primary school and kindergarten in Luster. The educational initiative was taken by the school, local carriers of the cultural heritage and the Norwegian Nature Inspectorate (part of Norwegian Environment Agency). The background for this initiative was the Mørkridsdalen landscape and its protection through community involvement.

Main objectives

The main objectives for this local educational initiative for children (from pre-primary, 4–5 years old, and primary school) in Skjolden, Luster are:

- To learn about local cultural heritage through transdisciplinary teaching;
- Learn to be fond and proud of the local community;
- · Learn to take care of local cultural heritage;
- Strengthen local identity;
- Learn to communicate local cultural heritage values to others in the community.

Planning and development

The school has a seven-year plan so that all children will be included in cultural heritage education. There is

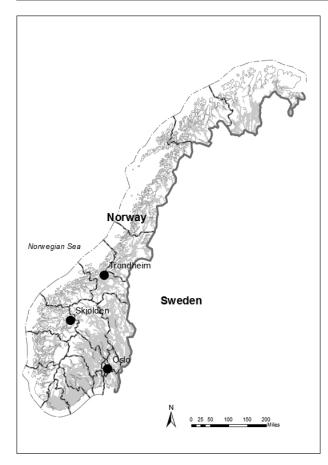


Figure 9. The case study of Skjolden, Luster municipality is located in a transhumance landscape (Mørkridsdalen) in Western Norway. Map source: Norge Digitalt.

an aim that educational activities connected to cultural heritage in the local community are included within the basic skills, developed by the Norwegian Directorate for Education and Training in 2015. One key premise is the integration of the core skills of reading, numeracy, writing, oral skills and digital skills.

Educational material

An informative report and a 35 minute film have been prepared in collaboration between Skjolden School, carriers of local heritage (local farmers and other resource persons) and the Norwegian Nature Inspectorate.¹⁹ Background and aims for the educational initiatives are included and steps in the educational model described.

· Educational model and methods

At Skjolden School, ordinary textbooks are set aside for a period each year. Then the school worked after an educational model focusing on participatory teaching, (cf. National Training Laboratories). Several teaching methods are used in practice, conversation, exploration, writing and reading. In addition, singing folksongs, playing, painting, cooking and woodworking have been



Figure 10. As a part of a participatory teaching model, children from the kindergarten in Skjolden are doing traditional activities of the transhumance landscape. Photo: E. K. Havellen.



Figure 11. Haymaking and knowledge transfer from a local cultural carrier to teachers and children. Photo: W. Weka

a part of the methods. To cap off the project, children transmit their knowledge about the transhumance landscape to their parents and the rural community during visits and performances. For this, they use digital presentations, music and theatre.

- Steps in the educational model
 - Motivational and preparatory activities, learning about concepts, the landscape history, traditional summer farming activities, traditional use of plants species, watching a movie;
 - Fieldwork (two days in Springtime + two days in Autumn, spending the night in the landscape), see Figs 10 and 11;
 - Systemizing of data, reflections, preparing texts, digital presentations, posters, cartoon strips, drawings;
 - Performance for the local community, dramatization.

Experiences and evaluation

The educational initiative and collaboration between the school and other participants about local cultural herita-

ge has been a mutually beneficial situation. The school has focused on cultural heritage in the landscape and basic skills at the same time. During this process, children have developed essential abilities as well as strengthen their local identity and ownership of the landscape. In many ways, the pupils have, at the end of the process, more knowledge about their cultural heritage than their parents do. During this extensive local collaboration, the local community feels greater engagement, and attachment, to landscape protection in Mørkridsdalen. For the management authorities (represented by the Norwegian Nature Inspectorate) this kind of collaboration builds a valuable bridge that facilitates the necessary dialogue with the local community.

Other local initiatives

Skjolden school and kindergarten also focus on Urnes Stave Church in their educational programme. The Urnes Stave Church is from the 12th Century and became listed as a World Heritage Site by UNESCO in 1979 (http:// en.unesco.org/). Skjolden School and kindergarten, local guides and the World Heritage Coordinator in Luster municipality have all collaborated in the initiation of this project.

Case 4: The local Landscape Observatory of Brenta River Valley, Veneto (Canale di Brenta, Northeast Italy)

Brief description of the case study

The Brenta River Valley forms a glacial profile of flat bottom and step slopes in a section known as the *Canale*. The slopes became terraced for tobacco farming until the early 20th century. The Project *OP! Il paesaggio è una parte di te* (Landscape is a part of you) was implemented in the years 2011–2012, in order to launch the first local landscape observatory in the Veneto region. The initiative took place on the basis of a specific agreement between the Bureau of Urban Planning and Landscape of the Veneto Region, Comunità Montana del Brenta, the University of Padua (Department of Geography) and University of Venice IUAV. The Project OP! carried out activities in 2011 and 2012 to promote stakeholder participation and training courses, as well as educational activities for schools. In later years, only the latter have continuously been carried out, mostly due to the personal engagement of the teachers.

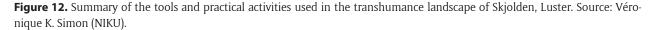
Audience

Landscape education activities have involved more than 1300 schoolchildren – from pre-primary to secondary levels – and 80 teachers from the valley and the neighbouring area. We proposed first a training course for teachers, with a general overview on the topic of landscape and on the peculiarity of the valley, an in-depth focus on educational aspects and the proposal of methodological tools for didactic activities on these issues. Then, the teachers – guided by tutors and involved in a peer-to-peer discussion - organised the activities in their classes, tailored to the children's age, the schedules of their activities (between January and May), the time they decided to spend on this project, and the peculiarities of the valley landscape they decided to work on. At the end of the project, each class prepared drawings, posters, models, presentations or other materials for the final exhibition.

Main objectives

The main aim of the project was to raise awareness of the children regarding their landscape, and to help them to acquire the ability to read it, understanding its peculiarities, its dynamics and its values. In particular, through

Participants	Tools (or practical actions) in the project
Schoolchildren	'Inspiration' report
• pre-Primary (3-5 years)	Film
• Primary (5-12 years)	Collective activities: singing, dramatization, playing, cooking,
	woodworking
	Conversations
	Fieldwork
	Writing
	Reading



the expression of values and meanings assigned to landscape by different actors – the children themselves as well as other actors in the valley –, the local landscape emerges, recognised as a fundamental part of the cultural heritage, relevant both for the collective identity of the inhabitants. In the following, two examples of the works of children are presented, selected for better addressing the complexity of landscape as cultural heritage.

Planning and development

The first example concerns the work of a group of 9-10year old children; it focused on the dry walls (called "masiere") and the terraces as the main features of the valley landscape (see Fig. 12). It was organised in 3 phases. In the first step children focused on the morphology of the valley and of the terraces, their origin and their use: they started by expressing their initial knowledge on them, and then analysed maps and written sources to verify their questions. In the second step, the children met an expert and some elderly people as witnesses of the uses of the terraces today and in the past, in order to understand the origin of this landscape. In the third phase they could experience directly the terraces: they visited the places they had studied and heard about in the previous phases. In the posters and presentations prepared by these children for the final exhibition, it is possible to understand some relevant points of this educational experience. First, in the project the dimension of knowledge and rational understanding has been held together with direct involvement and expression of personal feelings. Second, children expressed an affective bond to their landscape, while yet avoiding any idealisation of it; in fact, the struggle, patience and perseverance needed for living as terraces farmers in the past has been dramatically revealed. Moreover, the local world of their experiences, their families and their hometowns have been put in relation with other parts of the wider world, thanks also to the immigrant children living in the valley. Finally, the past landscape with tobacco cultivation, the



Figure 13. "Everybody lies close to the wall, to find out its secrets". Photo: Project *OP*!

present uses (abandonment, recreation, part-time agriculture), and the ideas and aspirations for the future are all included and connected with each other in the works made by the children.

The second example concerns the work of older children, aged 12–13. They focused on a specific landscape feature, an abandoned limekiln, and its context. In the first step the children went to visit the limekiln and the surrounding landscape, observing them and their relations carefully; they also produced drawings and photographs (see Fig. 15). After that, they used written and internet sources as well as interviews with elderly people for understanding the past uses of the limekiln, integrating its function and the habits of its workers into local history. Finally, they reworked the collected information, discussed it and foresaw new uses for the limekiln within the surrounding landscape.

The digital presentation, produced by the children at the end of their work for the exhibition that concluded the project, is itself interesting from different points of view. The children discussed some complex issues concerning the limekiln: the present aesthetic value of this landscape feature, the economic value of the furnace in the past, and, at the same time, they got to know the struggle and the injustice suffered upon the people who were employed there. Moreover, thanks to a documentary film, they could compare the old limekiln of their valley



Quello che immaginiamo....



Figure 14. The limekiln in the reality and in the aspirations of the children ("what we imagine"). Photo: Project *OP*!

with a kiln still functioning a few years ago in India, where local young children were still forced to work. These steps helped the children by engaging their future aspirations for the site. In their proposals, personal feelings and attachment to the local landscape are fused with the economic and historical values associated. One of the children proposed to transform the limekiln into a museum.

Results

The educational activities carried on during the project OP! Landscape is a part of you can be largely considered as a process of 'constructing heritage', and the creation of a heritage community. The children were invited to recognise and express the values they associated to their landscape and to all the features within it that recall the past. On the one hand, they achieved a detailed understanding of what happened in the past; on the other hand, they valued the past using present criteria, sharing ideas and discussing them in the class groups. In this way, students were encouraged to reflect upon the current relevance of the historic elements in the landscape evaluating together why there was relevance, and how much of it - and to consider how to enhance and promote this importance in the future. This process contributes to provide the community with a more self-aware and rooted approach of inhabitants to their everyday landscape, and to plan preservation and enhancement within a more sustainable strategy.

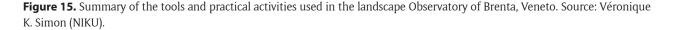
In the case of this project, education on landscape and heritage met each other within a common aim of achieving deeper awareness of the different values connected to the living environment and increasing personal attachment towards it. This combined approach has been effective primarily because of its two basic characteristics. From the point of view of landscape, the educational process has not been considered as just providing information, only in relation with knowledge transmission, but has been conceived as a literacy process oriented towards strengthening the ability to read the complexity of the landscape. From the point of view of heritage, its values in the local landscape were not pre-defined and firm, thereby empowering students to contribute themselves to a debate that included diverse definitions done in different times and by various types of stakeholders.

Analysis

This paper has sought to identify the strategies connecting young people's education to cultural heritage and landscape. A few attempts have been made at exploring and developing educational strategies or assessing how children learn about the past and cultural heritage, especially in the field of museology.²⁰ However, little direct research has been undertaken on children and their conceptual understanding of heritage,²¹ or on children's connections to cultural landscapes. This is notwithstanding UNESCO's important role in children's approach to cultural and natural heritage since the 1990's.²² The cases described above show that it is possible to bring cultural heritage and landscape closer to the school community through education. And the advantages that this closeness entails, regardless of whether the projects are large or small, are many.

Atapuerca is a paradigmatic case of a 'great' project scale-wise, which includes a permanent infrastructure, specialised personnel, economic resources, a high number of visitors and fixed activities. This has enabled the creation of stable collaboration networks in schools and the site has become a recurring school visit destination. The best example of the project scope has been the incorporation of Atapuerca in the educational syllabus. At a much more modest scale, the other Spanish case study, in Pino del Oro, confirms that it is possible to exploit

Participants	Tools (or practical actions) in the project
General public	Animation, activities based on participation
	Surveys and fieldwork
	Training courses (for experts)
	Festivals
	Conference and exhibitions
Schoolchildren	Teacher training courses
• pre-Primary (3-5 years)	Classroom activities (different topics)
• Primary (5-12 years)	Poster creation, presentation of work in exhibitions
• Secondary (12-18 years)	



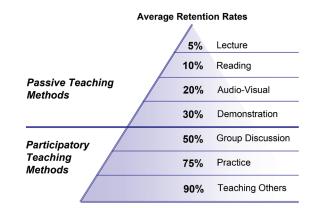
the didactic potential of cultural landscapes with fewer resources. Through a marked itinerary, a handbook, and some courses for teachers, the basic tools to facilitate the approach to the landscape are given with a minimum investment. The cases of Norway (Skjolden) and Italy (Brenta) have been carried out in the same direction. The different activities that have been carried out have made it possible to create bridges between the local landscape and the school world, taking advantage of their pedagogical potential.

All the projects generally contribute to a better knowledge of the past, and a better understanding of the uniqueness, fragility and the dynamics that shape landscapes. They basically contribute to the acknowledgement of the inherent qualities and values of our cultural heritage and landscapes, thus strengthening the local identity and ownership of the landscape from an early stage. The methods and tools implemented in the cases described above have directly contributed to facilitate the dialogue and communication between generations (Skjolden), and have also assisted in reducing the general gap between layman and expert (Pino del Oro and Brenta). All of them have provided core knowledge about heritage and traditional skills to the children, supporting their active participation in social activities and holding debates on the topic. Throughout the different initiatives, the researchers have identified a general increase of interest for, and better reflection about, the future relevance of cultural heritage. These initiatives also provide a valuable introduction to the sustainable role of heritage in planning, for a wide age range of children and youth. Although Logan points out that, "there remains little done so far for younger, elementary school children",23 the case studies prove that it is possible to involve and motivate the youngest, provided that relevant educational approaches, methods, and materials are used.

Heritage as a teaching resource

In all the case studies presented above a methodology based on direct experimentation is promoted. Direct participation contributes significantly to learning, that is, it has clear pedagogical advantages (cf. National Training Laboratories). The practical activities used in the different cases to educate children of all ages are diversified, but still respond to a common pattern. They focus on a balanced combination of physical and intellectual activities. The originality of the four case studies is that they are tailored for the context in which the cultural heritage takes place and adapt to the participants age, knowledge, etc. Different resources have also been mobilized that adapt to the scale of the project: guided tours, workshops, experimental activities, etc. These activities are chosen to involve and emphasise children's interest in both the "conceptualisation of heritage" and "its teaching and dissemination".24 Overall, they manage to bring out a wide range of possibilities that underlines the role of the landscape as the ideal setting for educational innovation.

The Learning Pyramid*



*Adapted from National Training Laboratories. Bethel, Maine

Figure 16. Learning Pyramid. National Training Laboratories Institute (Bethel, Maine) http://siteresources.worldbank.org/ DEVMARKETPLACE/Resources/Handout_TheLearningPyramid.pdf.

Studies show that outdoor fieldwork as a teaching strategy has positive impact on learning.²⁵ However, to secure long-term effects both preparatory and follow-up activities should be a part of the educational strategy. Practical examples from our case studies show how such long-term effects can be obtained. The Pino del Oro case contains preparatory activities which include an assessment of underlying knowledge and understanding of what heritage is, before visiting the landscape itself. Back in the classroom again, a self-assessment is prepared. In the Skjolden case, different activities such as reading texts and watching a movie are done before fieldwork. After the fieldtrip, pupils have to systemize their data and prepare posters, cartoon strips and a performance for their local community. Also in the Brenta Valley River we see that the educational process is organized in different phases, before they get direct experiences of the valley landscape. This case also includes final product, posters and presentations, which are prepared for the final exhibition.

Effective teaching challenges children's thinking, provides motivation as well as information and matches the context to the content.²⁶ One of the main barriers for practicing outdoor and experimental based educational methods is the teacher's lack of confidence in teaching outdoors.²⁷ In the case study from Norway, this transition is carried out through knowledge transfer from cultural carriers to teachers and children. This form of local involvement also strengthens the bonds between the school, the local community and management authorities.

Heritage as a social value

There is a connection between landscape and collective identity. This aspect has been especially developed in the cases of Skjolden and Brenta, but also, in Atapuerca and Pino del Oro. The idea that the landscape is a part of you is present in different cases. In them, the students develop the feeling of ownership of the landscape and, therefore, participate in its protection. In this way, education on landscapes also involves the responsibilities of human actions in the landscape itself; students become stewards. Zanato Orlandini identified the following landscape functions in the classroom²⁸: first, reading landscape and decoding signs (hermeneutical function); second, being able to deal in practical terms with the territory, by managing, planning and protecting it (pragmatic function); and third, developing local identities, open up to otherness (social function).

Children are not passive receivers in the process. They seem to successfully negotiate a new set of values and meanings attached to cultural heritage and landscape. These are rooted in the constructed memories that connect their context to the past. As Smith claims, "childhood memories and the emotions that they invoke, are used in a number of ways to negotiate [...] wider social understanding of the past, and what that means for present values and the identity they underpin".29 The experiences children have of places and events that have shaped history are qualitatively different from those of adults,³⁰ and the four case studies described in this paper show that the methods involved in developing these experiences are crucial. The results also emphasise the necessity for the presence of welltrained personnel on site. This factor has a very direct impact on the conceptualisation of heritage ingrained into students. This echoes the findings of the University of Huelva, that states "relevance of academic background, initial training and professional context with regard to the conceptualisations of heritage held by the different groups".31

The case from Brenta also raised the issues of a difficult legacy, social and human injustice, and the memory of child workers in the landscape of the past.³² The Brenta initiative fostered a strong sense of empathy among the children; it also broadened their understanding of the working class by linking the past to still important issues in certain developing countries, putting the story in a larger, more contemporary context. Such narratives expose the children to a sensitive approach of social practices where children are concerned, and facilitate a fertile source for studies in subjects other than cultural heritage.³³ The case studies analysed here have generally shown several possibilities of using cultural sites as an ideal setting for civic and social education, and for a better understanding of the social heritage connected to a particular landscape.

Achievements and challenges

The challenges for the future raised in the four cases are convergent. Although each project shows a different degree of development, and the differences in scale are very large, they include the following common interests:

 Deepen the progress made in educational initiatives related to heritage. In all cases, the projects have been evaluated very positively, both by the wider community and by the national management authorities;

- Promote collaboration with local communities and educational centres, with the aim of creating stable and lasting networks;
- Expand programmes to other levels of education to ensure that heritage is an axis of school education;
- Need to pose long-term challenges to maintain networks created, and prevent them from being activities that only exist for a limited time span.

All of the projects stand apart from the old-fashioned boundaries between traditional academic subjects and interactive, experience-based narratives. The methods are open to children, if the various ages are acknowledged in the techniques used. Children appreciate them, in particular activities encouraging interpretation and experimentation.

Conclusions

The case studies substantiate the fact that the way cultural heritage is taught from childhood has a profound influence on our understandings of that heritage. They also show that cultural landscapes offer great didactic advantages. The different projects and initiatives described in the four case studies are meeting the objectives of the Faro convention mentioned in the introduction. They all "facilitate the inclusion of the cultural heritage dimension" at diverse levels of education from kindergarten to secondary school, and provide knowledge in the subject of study but also as "a fertile source for studies in other subjects". Half of them clearly "strengthen the link between cultural heritage education and vocational training" by establishing direct links between cultural heritage and national educational systems. Most of them contribute to reduce the knowledge gap by supporting "interdisciplinary research" on cultural heritage and children's education. Finally, all the cases "encourage continuous professional training and the exchange of knowledge and skills [...] within the educational system".34

It is, however, necessary to move forward towards a more incorporated system, so that not only isolated, local projects are carried out, but also that heritage education becomes an inherent part of the educational system. As claimed earlier in this paper, research and interest in the field of youth education and the cultural heritage are still showing pioneering results. The challenges for the future include the need for continuity. The creation of sustainable programmes, where the initiatives run over the very long term, is key to achieving this goal. It is then necessary to establish a link with - and within - the local communities (between generations, between expert and layman, and interdisciplinary), work on contemporary concepts of heritage identity and cultural communication, and explore the relationships between children and cultural heritage in the natural environment.

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