ABSTRACT
The "Virtudes (Oporto): Exhibition at the Google Arts & Culture" project's innovative character resides in the possibility of implementing an integrated cultural management program applied to a concrete object – the Virtudes urban space – of a scientific investigation that is oriented and put to practice as a heritage laboratory, both inside the classroom and in fieldwork contexts. The Virtudes is the only historic and public garden included in the UNESCO Historic Centre of Oporto site. With this project we intend to: 1) create a virtual exhibition in a free access virtual platform (Google Arts & Culture); 2) create an integrated cultural management program solely focused on this urban space, which would also include the following activities: a physical exhibition, a catalogue, artistic workshops developed for different segments of the public and roundtables, exploring a "bottom-up" approach that seeks to profoundly involve and engage both the students and the local community in it.

With this paper, we intend to not only present the pedagogical methodology employed to achieve the projected goals but also to ponder the results of the aforementioned methodologies, especially concerning the pivotal role they had in the enhancement of the students' capabilities, their acquisition of competences, their respective involvement in the project and the obtained results.

Keywords: Oporto; Virtudes; Pedagogical Project; Cultural Program

INTRODUCTION
Sandra Winn (1995) states that "teaching research methods in social science (...) presents a number of dilemmas, including the development of effective means of providing students with practical research experience and the difficulty of engaging the interest of students in a subject

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† "Virtudes (Oporto): Exhibition at the Google Arts & Culture" is a work in progress, currently under development as part of the MA in History of Art, Heritage and Visual Culture, at the Faculty of Arts and Humanities of the University of Oporto. This project was among the ten projects awarded in the 2017 “Pedagogical Innovation Projects” award held by the University of Oporto. The project is the result of a joint effort between two courses: Project and Research Methodology I and Heritage and Cultural Management, and a project that involved a group of 22 students.
which for many is not intrinsically appealing and to which some have a long-standing aversion. One way of addressing these issues is to enable students to participate in a "real” research project.\(^1\)

Hence, the project we present congregates two compulsory courses: Project and Research Methodology I\(^2\) and Heritage and Cultural Management\(^3\), with the involvement of a group of 22 students\(^4\), which intends to conciliate, through the "learning by doing" method, the syllabus and the acquisition of fundamental competencies in the scope of the MA\(^5\). This referred conciliation allowed for the articulation of both courses in a common project, effectively transforming the classroom into a project lab: research methods through student participation in a real project, as well as its implementation by creating a "real" integrated cultural management program focused on the aforementioned urban space (Virtudes). Also, this program contemplates the following activities: a physical exhibition, a catalog, artistic workshops developed for different publics and roundtables, exploring a "bottom-up" approach that seeks to profoundly involve and engage both the students and the local community in it.

The teachers of these two courses are responsible for the coordination of the project and the establishment of partnerships with the Oporto’s City Council and with institutions, such as Cooperativa Árvore\(^6\), that may be involved in the field actions within the communities. To engage students, we have decided to take the following course of action: 1) to make the project part of the syllabus' courses; 2) and to consider the project as a compulsory assessment component in both courses.

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\(^1\) Winn, Sandra. “Learning by doing: Teaching research methods through student participation in a commissioned research project”. Studies in Higher Education 20:2: 203, Doi: 10.1080/03075079512331381703
\(^4\) Ana Clarisse Lopes, Ana Isabel Lino, Ana Maria Campelos, Ana Patrícia Gonçalves, Andréa Diogo, Carolina Furtado, Cláudia Quaresma, Elaine Farias, Eva Rosiere, Francisca Almeida, Isabel Rebelo Da Silva, Joana Duarte, Juliana Moura, Laura Esteves, Lúcia Teixeira, Mariana Carvalho, Marisa Santos, Rodrigo Magalhães, Sara Sousa, Vera Barbosa and Vera Gonçalves.
PEDAGOGICAL FRAMEWORK

The course entitled Project and Research Methodology I aims at tutoring the students in 1) the development of optimal capabilities for conducting research in History of Art, Heritage Studies, and Visual Culture; 2) a mastery in the proper methodologies of research in Artistic Heritage and Visual Culture and 3) the construction of a project of a cultural scope, developing the necessary skills to design and process it, from its cataloguing phase to its dissemination. By stimulating cohesion and cooperation among the students, an enterprising mindset is encouraged and promoted; and one that falls in line with a common objective.

Concerning the learning objectives of the course of Heritage and Cultural Management, we highlight the following, among others: 1) an aptitude for detecting and understanding in full the social and economic requirements that the professional activities in the field of Heritage entail; 2) the acquisition of competencies regarding the creation of an integrated project aimed at managing a heritage asset and its consequent application to Heritage and Cultural Management.

Hence, the articulation between these two courses under a common project – and by transforming the classroom in a project lab, – a project that concerns itself with the improvement and renewal of knowledge – and its diffusion – over an urban space like the aforementioned Virtudes allows for, first and foremost, a unification of different and various fields of study of the corresponding MA in a single project: History of Art as the main scientific field and which has as goal the study and the valorisation of the Heritage latu sensu contributing, in this manner, to its understanding, diffusion and monetisation; while employing the field of Visual Culture, as an interdisciplinary field of study that emerges with diachronic values (as source for the study of the urban space) but also with prospective values, since this project's ultimate goal is the establishment of an exhibition (both virtual and physical).

In fact, one of the many important aspects of the construction of this MA in History of Art, Heritage and Visual Culture is precisely the promotion of relationships between academic activity and the world of work, an aspect that markedly improves the image and the external

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7 “Project and Research Methodology I”.
8 “Heritage and Cultural Management”.
projection of the degree in question, aside from contributing positively to other possible collaborations in future ventures with businesses and institutions alike. Moreover, one of the pivotal objectives of said MA is to train professionals with a solid understanding and knowledge in the field of Heritage and instill in them the ability to intervene in the conservation, maintenance, diffusion, and fruition of heritage sites, as well as promoting awareness and knowledge.

The "Virtudes (Oporto): Exhibition at the Google Arts & Culture" project is framed precisely in most of the intended learning outcomes (knowledge, skills, and competencies) to be developed and acquired by the students⁹:

a) To obtain a solid theoretical background in the fields of Art History, Heritage Studies, and Visual Culture;
b) To produce creative and innovative Dissertations, Internship Reports and Projects anchored in contemporary discussions and proper practices of their field of study;
c) To be able to lead fundamental and applied research programs, either inside their area of expertise and in the interface between Art History, Heritage and Visual Culture;
d) To acquire the necessary skills for fruitful scientific communications and the practice of professions in the scope of the fields of History of Art, Heritage and Visual Culture;
e) To be qualified and apt to perform the role of consultants in institutions, businesses and other public and private organizations in the fields of Art History, Heritage and Visual Culture;
f) To become active agents in the process that is the social mobilization for the intervention and the fruition of heritage assets and sites, as well as being ready to play a central role in the safeguard and the promotion of Cultural Heritage.

The inscription of the Historic Centre of Oporto as a World Heritage Site (1996)¹⁰, allied to the fact that the city centre is a veritable laboratory of urban requalification and revitalisation¹¹ and to the fact that the city was the three-time recipient of the European Best Destinations award (2012, 2014 and 2017)¹² are but a small number of examples that demonstrate the exponential growth in demand for professionals in the field of Heritage; which, in turn, validate the social and economic pertinence of the present project. At the same time, the University of Oporto having as Mission (dubbed the "third mission" in the UP's

⁹ “History of Art, Heritage and Visual Culture” [MA].
Strategic Plan) the production of scientific, cultural and artistic fields of knowledge, the qualification in higher education deeply based in research, the social and economic valorisation of knowledge and the active participation on the improvement and advancement of the communities in which it is inserted, the "Virtudes (Oporto): Exhibition at the Google Arts & Culture", for its role in the diffusion of knowledge, for its accessibility and its inclusive character, equally serves as an instrument for both the communication and the affirmation of the dubbed "Third Mission" of the University in question, i.e., the University's ability to exert a meaningful impact in Society itself, enriching knowledge from both social and economic standpoints.

Figure 1 Virtudes Garden and its urban implantation. Photo by Joana Duarte, 2016

HERITAGE FRAMEWORK

The elaboration of the cultural management program is currently being conceived in accordance with the values and the principles defined by the Cultural Heritage's international doctrines. This process also considers the heritage value of the object of this project, the Virtudes urban space (an urban space which shall be fully characterized in a later section of the present paper).

The present project aims at playing an inclusive role with the multitude of communities that visit the aforementioned urban space, seeking to implement the guidelines defined in the

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Convention on the Value of Cultural Heritage for Society (Faro Convention, 2005)\textsuperscript{14}. This document is comprised of a set of common references that allow for a clarification of the distribution of public responsibilities in the framework of the democratic process and the individual rights related to cultural heritage in the European space.

The Faro Convention recognises the need for placing the individual and the human values at the centre of a broad and interdisciplinary concept of cultural heritage, equally highlighting the value and the potential of a well-managed cultural heritage asset, as source of both a sustainable development process and of an improvement in quality of life in an ever-changing social landscape.

Furthermore, the Faro Convention grounds itself in the involvement and engagement of all individuals in the continuous process of definition and management of a cultural heritage asset and supports the "usage of policy measures related to heritage assets and the pedagogical initiatives that regard all cultural heritage assets in an equitable manner, therefore promoting dialogue."\textsuperscript{15}

Thus, and by specifically having Article 1, item c of the aforementioned Convention as a starting point, which states that ",(…) the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal", this project has a multidisciplinary nature, by converging in itself several fields of expertise which go well beyond History of Art or Heritage Studies and by integrating in itself environmental and instructional issues of multiple levels, since recognising "(..) that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights" (Article 1, item a)\textsuperscript{16}.

Carlos Alberto Ferreira de Almeida said that

… heritage is everything that possesses quality to the cultural and physical life of man, and that has notorious significance in the existence and the affirmation of different communities; communities that range from neighborhoods and parishes to municipal, to regional and even to national and international communities alike. Heritage is quality and


\textsuperscript{15} \textit{Convention on the Value of Cultural Heritage for Society}.

\textsuperscript{16} \textit{Convention on the Value of Cultural Heritage for Society}.
is synonymous with a rich, and ideally alive, memory. Without quality, be it intrinsic or circumstantial, there can exist no foundation point. Heritage assets cannot be perceived merely as a reserve and, even less, as mere recollections or nostalgia of the past; it must be regarded as being a part of our present.\(^{17}\)

The present project has been progressively constructed, a construction that has as a basis not only the premises presented thus far but also by regarding and comprehending heritage as a conjugational effort between the past and the present. Additionally, we have sought to consider the good practices prescribed by the internationally-established doctrines on the subject-matter, evidencing the need for both the enforcement and the intersection of these measures at various stages and levels. We have also attempted to assert the social utility of heritage assets and to potentiate the role of Cultural Heritage in the Economy (Charter of Brussels on the Economic Role of Cultural Heritage, 2009)\(^{18}\), not only by taking active measures to promote and disseminate its knowledge and understanding along with formal and informal education on the subject-matter but also through activities related to tourism (International Cultural Tourism Charter, ICOMOS, Mexico, 1999)\(^{19}\) and through the environmental quality of the urban space in question (Environmental Impact Assessment, Decree-Law nº 151-B/2013, 31st of October)\(^{20}\) "Heritage, to be accurately defined as such, must be present and alive, in some sense, and must be effectively regarded as prospective values."\(^{21}\)

The International Cultural Tourism Charter (ICOMOS, 1999)\(^{22}\) has the communication of the meaning and the need for preservation of heritage assets as its fundamental goal. Hence, the access to Cultural Heritage site must be made through the host community – and, therefore, contributing to its understanding and the reinforcement of an emotional sense of belonging – and through the visiting community – as means to its promotion and dissemination to tourists. The need for an elaboration of programs and plans that seek to optimise the comprehension

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\(^{21}\) Almeida, Património, 10-17.

\(^{22}\) International Cultural Tourism Charter.
of the most meaningful characteristics of Heritage (or heritage assets) by these two distinct audiences, as well as the pressing necessity of its protection, is becoming progressively more significant; i.e., programs and plans that actively pave the way for the recognition and the potentiation of the authenticity of the urban space in question and its "spiritu loci" (ICOMOS, 2008)23.

The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (ICOMOS, 2007)24 presents interpretation and presentation both as crucial elements to the effort of conserving Heritage sites and as elementary tools necessary for the public to fully appreciate and comprehend the Cultural Heritage sites. Moreover, since one cannot fully value that which one does not know, we shall take the act of communicating with the public as a core and primordial part in the ampler process of conservation, that is, of a conservation of the memory but always with prospective values in mind.

Thus, it is by having this presupposition as basis, which is, in part, pedagogic in nature (objectives of learning/acquisition of competences), but also by striving for the implementation of an integrated program of cultural management found on the proper practices prescribed by international doctrines, which the 2017 UP "Pedagogical Innovation Projects" award25 brought to an unprecedented level, that the present program is being designed; a program which is, at its core, grounded in the students' active – the above referred "learning by doing" method – and collaborative learning experiences.

**VIRTUDES. PEDAGOGICAL INNOVATION. PROJECT LAB**

The innovative character of the pedagogical project "Virtudes (Oporto): Exhibition at the Google Arts & Culture" resides in allowing for an implementation of an integrated cultural management project and its real-world application to a specific object of study, the Virtudes urban space.

Given the fact that the ultimate goal of the aforementioned project is the dissemination of (scientific) knowledge of an urban space (Virtudes) by means of a digital platform intended
for a global audience (Google Arts & Culture)\textsuperscript{26}, the employed methodology fits in what Winn (1995) described in her paper "Learning by doing: Teaching research methods through student participation in a commissioned research project."\textsuperscript{27} Winn states,

There is a consensus in the literature that competence in conducting research can only be gained through experience of the research process, that some form of practical experience is essential to the learning of research methods and that this experience should be as "real" as possible.\textsuperscript{28}

With this in mind, and having identified the research’s problem, we defined themes/fields of action for each of the participating groups, while attempting to distribute the tasks in the most balanced manner possible, for we considered of the utmost importance that the students "need[ed] to gain an understanding of how the various stages of research fit together in the research process."\textsuperscript{29} In truth, "the learning experience based on Research, and not merely on structured courses ready to be used by teachers and students, is the most defining characteristic of this method of cooperative learning. (...) Thereby, one creates a community of researchers in a class which constitutes a community of Research."\textsuperscript{30}

This methodological option allows from an improvement of critical thinking in the students by the interaction with the remaining members of the group through the presentation of gathered information, through integration and systematization of the collected contents and its oral and written presentation. Besides these aspects, we must also stress the high level of autonomy conferred to each student and to each group, dubbed as "intrinsic motivation," for, indeed, "the students take several decisions as a group" and "proceed to research that which truly piques their interests."

Through this methodological approach, each student's academic background is used inside the group in a process of cooperative and collaborative learning experience, inverting the sense of learning environment (inverted lecture) and seeking to establish the contact with the professor strictly as a manner of sharing individual research conducted by each student.

\textsuperscript{26} "Google Arts & Culture". Accessed April 9, 2017. \url{https://www.google.com/culturalinstitute/beta/}
\textsuperscript{27} Winn, "Learning by doing".
\textsuperscript{28} Winn, "Learning by doing", 204.
\textsuperscript{29} Winn, "Learning by doing", 204.
\textsuperscript{30} Freitas, Luísa V. and Freitas, Cândido V. Aprendizagem Cooperativa. Teoria. (Edições ASA, 2002), 52.
Furthermore, it allows for a potentiation of what Vygotsky defined as ZPD (Zone of Proximal Development) in a social constructivism of learning, \textit{i.e.}, "acting as the element of intervention, the supporting element. In the ZPD, the professor acts explicitly, interfering with the development of the students, bringing about advancements that would not otherwise occur spontaneously."\textsuperscript{31} We shall now present some of the pedagogical and didactic potentialities that this project strives to attain. The results, albeit always nominal but sufficiently supported and tangible, achieved thus far claim a treatment of originality in the process of teaching/learning that we have come to test and improve since it configures itself as a veritable process of researching-acting.

**THE OBJECT OF STUDY: VIRTUDES**

The Virtudes urban space stands out for its singularity; a singularity that has been effectively preserved during the last centuries. The Quebec Declaration on the Preservation of the Spirit of Place\textsuperscript{32} calls for "the protection and promotion of the spirit of place, that is, their essence of life, both social and spiritual alike." According to the same document "the spirit of place is made up of tangible (sites, buildings, landscapes, routes, objects) as well as intangible elements (memories, narratives, written documents, festivals, commemorations, rituals, traditional knowledge, values, textures, colors, odors, etc.), which all significantly contribute to making place and to giving it spirit". In the urban space that is Virtudes there is a "Spiritu Loci" that must be effectively preserved, but with prospective values in mind.

There was a multitude of factors at play that made Virtudes our object of study and the present communication. The first of these, perhaps the most notable one in the context of the learning/teaching process, is that the urban place in question has the capacity of acting as a test lab, allowing for analysis and data comparison, thus enabling the potentiation of practices and exercises regarding research, knowledge and communication-related outputs.


\textsuperscript{32} \textit{Québec Declaration on the Preservation of the Spirit of Place}. 
The urban place presents itself as a luminary instance of the phenomenon that is urban development. The construction of an urban front angled toward the exterior of the wall is a common occurrence in European cities with a medieval configuration, whose capacity for providing lodging space for both new residents and new equipment alike declines quickly, prompting the planning of new solutions for the ever-growing urban expansion. On the other hand, this urban expansion frequently extends itself to former peri-urban estates, which were used for recreational and productive purposes, as is the case with Virtudes.

The remarkable nature of our object of study, Virtudes, resides in the endurance of the pristine configuration of its geomorphological characteristics. Today, the percentage of human occupation remains as steady as it was over the course of past centuries, which contributed to significant preservation of both the slopes and the valley through which the Frio river ran, a tributary of the Douro's river basin. The terracing process operated on the slopes permitted a booming agricultural production of plants; in fact, one of the country's most important gardens resided there, a garden that excelled not only in its diversity of species in it but also in its experimental character, by being the breeding ground for new varieties of trees and shrubs that still permeate and distinguish both private and public gardens alike in the city today. The Virtudes' intrinsic heritage value doubtlessly contributed to its usage nowadays: to the urban front, which is constantly modernised by new uses and equipment.
alike while maintaining its former uses and equipment and by shying away from excessive adjustments that typify the City Beautiful Movement, it is added a public garden with regularly scheduled cultural events, especially music events. This present-day usage of the referred urban space as a venue for cultural events also played a substantial role in our choice; the alluring nature of Virtudes is a vital element in the motivation of the students.

Figure 3 Virtudes Urban Space. Google Earth view. Accessed the 9th of April, 2017

PEDAGOGICAL AND RESEARCH AIMS

Collaborative research

The project's first phase, that which pertains to Research, was put into practice over the course of the Project and Research Methodology I course (1S, 6 ECTS), lectured and supervised by the authors of the present paper, distributed between 1S/2OTs (Lúcia Rosas) and ITC (Maria Leonor Botelho). Throughout the time frame in which this course was lectured, scientific research was lead; said research was supervised and put into practice in the classroom, also through fieldwork and research conducted in Archives; these three activities were always closely supervised by the lecturers, as one of the two always accompanied the students in them.

The project began with the undertaking of a field trip that both students and lecturers took part in, to the urban zone in question, i.e., the Virtudes. This primary observation had as the main aim of the relevant role of empirical experience in the process of learning. The following steps consisted in the identification of the theme and the adaption of the
methodology to adopt, as well as the circumscription of both the problem and the objectives to accomplish.

Figure 4 Field trip at Virtudes – Cooperativa Árvore House. Photo by Cláudia Quaresma (2016).

Once the object of study was defined (i.e., the Virtudes urban space), the class was split into small workgroups, in a total of six groups with an average number of four students each. We based our choice on Panitz’s statement (1996), "cooperation is a structure of numerous interactions designed toward facilitating the achievement of an objective or a final product." Furthermore, it is widely reported that "experience has proved that more than four members in a single group hinder the work of the group as a whole."34

The process of active learning on the part of the students has been progressively performed in two concrete stages, the first of which focused on scientific research (that is, learning what truly means to do scientific research on this project, from its infancy to its conclusion). Since we are dealing with research conducted in the field of History of Art, and after proceeding with the data survey regarding the components of the urban space in question (assumed as the research's problematic nucleus), we began by 1) collecting and analysing in a critical manner documentary, cartographical and iconographical sources about the Virtudes urban space; 2) reviewing the literary output produced on the object of our project.

33 Freitas and Freitas, Aprendizagem Cooperativa, 22.
34 Freitas and Freitas, Aprendizagem Cooperativa, 40.
Table 1 Workgroups and research themes developed by students at Project and Research Methodology I (2016/2017).

<table>
<thead>
<tr>
<th>STUDENTS</th>
<th>THEME</th>
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<tbody>
<tr>
<td>Ana Campelos</td>
<td><em>Virtudes</em> Garden's Flora: were new species introduced in the Garden after the rehabilitation work conducted by the Oporto's City Council?</td>
</tr>
<tr>
<td>Cláudia Quaresma</td>
<td>The <em>Passeio das Virtudes</em> and the rupture of the tribunal</td>
</tr>
<tr>
<td>Juliana Moura</td>
<td>Methodological contributions to research on the <em>Quinta das Virtudes</em></td>
</tr>
<tr>
<td>Maria Moura</td>
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<td>Mariana Carvalho</td>
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<td>Rodrigo Magalhães</td>
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<tr>
<td>Ana Patrícia Gonçalves</td>
<td>The <em>Virtudes</em> complex. Taipas street and Dr. Barbosa de Castro street</td>
</tr>
<tr>
<td>Andréa Diogo</td>
<td></td>
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<tr>
<td>Joana Duarte</td>
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<td>Marisa Santos</td>
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<tr>
<td>Carolina Furtado</td>
<td>The <em>Virtudes</em> Garden. Methodological contributions to its study and understanding</td>
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<tr>
<td>Francisca Pires de Almeida</td>
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<tr>
<td>Vera Gonçalves</td>
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<tr>
<td>Ana Clarisse Lopes</td>
<td>Housing in the <em>Passeio das Virtudes</em>: typology and the applications of materials</td>
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<tr>
<td>Ana Isabel Lino</td>
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<td>Isabel R. da Silva</td>
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<td>Lúcia Barros</td>
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</table>

The research supervision was led by the lecturers at a multitude of levels, be it in the classroom (critical analysis and discussion of the myriad of sources examined), in the fieldwork performed in the aforementioned urban space or the Oporto's Historical Archive. Winn contends that "a close supervision of student groups is a key strategy for ensuring that each group operates in a way that not only provides an efficient means of getting the work done but is also beneficial to the student's experience in research."^{35}

The project in question was introduced to the students as an integral part of the research methods' syllabus. Through the "learning by doing" method, the classroom, as well as the Project and Research Methodology I course, were converted into veritable research laboratories. The compulsion of unpublished sources, coupled with the deep understanding of

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^{35} Winn, *Learning by doing*, 211.
the important steps that were being taken to the comprehension of the urban space, greatly stimulated the students, which, in turn, operated a positive effect on the quality of the presented results.

Concerning the system of assessment of the students, it was required that each student group produced: 1) an oral presentation of the main results; 2) a research report, which should systematise in it the research process concerning the intended objectives, research methodologies, achieved results, sources and bibliographical references; 3) a proposal of a thematic nature to integrate the narrative in the virtual exhibition; which would be put together in the second semester, under the scope of the Cultural and Heritage Management course.

Outstanding grades achieved by the students denote that they fully understood the purpose of their participation in the project, objectives were attained and competencies acquired; and, above all, they showed enthusiasm and profound personal involvement with the project. Indeed, and again quoting Winn (1995), "assessment is another key mechanism that can be used to encourage student involvement in the whole of the research project."

The quality found in the students' literary output on this matter justifies their publication, conferring a unique opportunity on the students to disseminate the results of their research through the publication of a group paper in the form of an e-book (complete with ISBN) which shall be organised in two distinct parts: 1) scientific papers that deal with the Virtudes urban space; 2) a bilingual catalogue (in English and Portuguese) of the virtual exhibition.

**From a virtual exhibition to an integrated cultural management program**

Although the first virtual exhibitions took shape in the last decade of the 1990s, it is in the twenty-first century that these types of exhibitions gain momentum; this is due to booming technological developments and the consequent establishment of hosting platforms, such as the Google Arts & Culture, among others. In the scope of the MA in Portuguese History of Art of the Faculty of Arts and Humanities of the University of Oporto, the present-day predecessor to the MA in History of Art, Heritage and Visual Culture of the same University, there were several virtual exhibitions

organised; the first of which concerning "Oporto World Heritage" (2015)\textsuperscript{37} and the second of which concerning the landscape and heritage assets of the county of Sabrosa, in the winegrowing region of the Upper Douro (2016)\textsuperscript{38}. Both exhibitions aimed at presenting a fresh new look on the Historic Centre of Oporto inducted to the UNESCO's World Heritage List in 1996, and the territory and heritage assets of Sabrosa, itself part of an included site in the List in 2001.

The virtual exhibition on the Virtudes urban space is a founding element of an integrated project of cultural management, a project which falls in line with the mission that the University of Oporto may have, concerning social, economic and territorial development in the Cultural Heritage sector, be it with regards to the city of Oporto or in international context alike, through the impact and reach that the GAC platform has concerning the dissemination of knowledge.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image.png}
\caption{Learning by doing class: students designing the virtual exhibition. Photo by Maria Leonor Botelho (2017)}
\end{figure}

Hence, the conception of the aforementioned virtual exhibition stems from the construction of a narrative of this heritage site based on the contributes put forth by the conducted research. The motto of this exhibition is already chosen; it is as follows: In all the City, one finds neither a more genial nor a more agreeable place; for, aside from its alluring


position framed by even Edifices, in a single glance one's eyes revel in a sight that encapsulates the City, the Sea, the River, the Ships, the Hills, the Meadows, the Estates and the Palaces.\textsuperscript{39}

This experience, along with the remaining foreseen activities, instil and convey the importance and pertinence of the presented contents in the students, the notion of direction of the discourse, independent from the means of diffusion of the message, through the selection and the communication of a new look over the object, \textit{i.e.}, the narrative.

Since the students seem to hold in significantly high regard the "learning by doing" method as a learning method that transforms the classroom in a veritable project laboratory; and given the fact that the financing for several tasks was secured by the University of Oporto's Pedagogical Innovation Projects award, we are now progressing through the second phase of the project, a phase directed towards the dissemination/communication of knowledge.

The students are in the process of designing the integrated cultural program themselves by employing their own diverse set of competencies, thereby attaining active and pivotal roles in the program above and testing their skills and knowledge. This is an \textit{apropos} choice; for in this second phase the work groups are organized optimally, a manner that allows for each individual's academic background and skills to play a particular and pivotal part in the project while also enabling the acquisition of competencies that each student wants to potentiate in the future.

To supervise and manage the entire process of production, we have resorted to the Moodle platform where, \textit{via} various activities (uploads and downloads of documents, forums, etcetera), we manage several ongoing actions and attempt to potentiate the cooperative learning of the students and their respective competencies.

Additionally, the ongoing construction of the cultural program aims to, above all, granting the project visibility, transporting it out of the laboratory that is the classroom, and

allowing the students the effective implementation of said program, making a lasting impact on the communities and the diversity of audiences.

Thus, along with the virtual exhibition, we shall implement the following activities:

- The design of a logo which will bring an image to the project and will standardize all output, be it literary, visual or other, produced
- The execution of a physical exhibition, with identical contents to those of the virtual exposition and whose layout is already being planned
- The communication of the project through and on a myriad of platforms: newsletters (through partnerships to come), social media (Facebook, Instagram, and Twitter), flyers, posters, and so on.

Since the integrated cultural program in question is envisioned as being inclusive, constant and active interaction with both the host community and the visiting public at large is a highly important element to it. The International Culture Tourist Charter\textsuperscript{40} supports a dynamic approach and action between Tourism and Cultural Heritage, by stating that:

- The presentation of programs of interpretation must be made in a relevant and accessible fashion to the host community and the visitants alike, assuring diverse levels of signification;
- One must always provide a high level of public awareness and the necessary support for the long-term survival of Natural and Cultural Heritage assets;
- And one must always draw attention to the cultural diversity of the host community and its respective region.

With these remarks in mind, we have planned some activities in tandem with the host community to be conducted in loco, such as:

- Guided tours, headed by the students themselves (the history of the urban place and, at the same time, attempting to raise awareness and to promote education about heritage sites and assets);
- Workshops (that will take place in the Cooperativa Árvore, our partner in the project\textsuperscript{41});
- Theme day(s) with planned and diverse activities, always in tandem with future partnerships (Oporto City Council, ICOMOS – Portugal or Smart Waste Portugal);
- Universidade Júnior [Junior University] Program (proposal approved after assessment)
- Roundtables featuring students involved in the project, as well as researchers or other notable individuals.


\textsuperscript{41}Cooperativa Árvore. Accessed April 9, 2017. \url{http://www.arvorecoop.pt/}
CONCLUSION

With this project, we have attested, as Winn stated, "how can research methods be made meaningful and relevant to social science students who typically study this subject not out of interest but because it is a compulsory component of a [degree] course, and many of them have a long-standing aversion to the quantitative and technical aspects of the subject."\(^{42}\)

As Clutler (1987) remarked, "teaching research methods through providing students with experience of conducting a research project is one way of engaging the interest of students. Not only is «learning by doing» less arid and classroom-based learning, but it also links research methods with a substantive issue."\(^{43}\)

Indeed, we find that in these types of methodologies the usage of coaching tools, \textit{i.e.}, the guidance of the students towards success, under a systematic process of learning, geared towards change, where both tools and resources for specific tasks are provided and which boost the performance in the fields that interest them.\(^{44}\) To these aspects, we must also refer the enhancement made to interpersonal relationships and to the students' self-esteem as well as the improvement of the capacity for accepting the viewpoints of their peers.\(^{45}\) These aspects pave the way for a future in a professional position and prepare the potential researchers for tasks that entail not only comprehending and assessing but also commissioning or supervising the research done by others.\(^{46}\)

This project attests to the importance of scientific research in the production of contents in the scope of Heritage and Culture, pedagogical context included, involving a varied group of students in an MA course. It also acts as a catalyst by potentiating the students' academic backgrounds into a common project. Furthermore, given the fact that the students learn how to proceed with research and, above all, for its operative component – a component that directly stems from active learning – these types of projects are of the highest importance for their innate potential to facilitate vocational choices inside the MA in History of Heritage and

\(^{42}\) Winn, \textit{Learning by doing}, 204.
\(^{43}\) Winn, \textit{Learning by doing}, 204.
\(^{45}\) Freitas and Freitas, \textit{Aprendizagem Cooperativa}, 21.
\(^{46}\) Winn, \textit{Learning by doing}, 203-204.
Visual Culture's second year; whether it pertains to a Dissertation, an Internship, a Project, or whether it is a theme that the students aim to address.

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