

CSIC High Specialization Course on Cultural Heritage Intervention Models: Research, Protection, Conservation and Valorization: A training Experience from a complex research programme. Orejas, A.; Rodríguez, A.D.; Ardanaz, C.; Hombrados, Z.; Paz, A.; Rueda, A. *18th EAA Meeting, Helsinki 2012.*

In late 2007 the then called Ministry of Education and Science decided to fund the Research Program on Technologies for the Conservation and Valorization of Cultural Heritage (TCP) within the CONSOLIDER -INGENIO 2010 call. In it 16 research groups take part, from the CSIC and 4 Spanish universities, articulating traditionally distant disciplines directly involved with Cultural Heritage. The base for working is the culture of cooperation and collaboration between groups in an interdisciplinary way. TCP is the only funded proposal of the call that focuses on the study of Cultural Heritage.

In this slide you can see an example of the different disciplines involved in the project, with the four main lines of restoration, research, conservation and valorization.

In TCP the perception of Cultural Heritage becomes an essentially integrative concept. It encompasses both the traditional approaches that focus on movable and immovable cultural assets, and broader perspectives such as cultural landscapes. These deal with the synthesis of natural and cultural heritage, considering both material and immaterial values.

The program has its own research projects, which are carried out through specific actions designed to create scientific and technological fundamentals. These can be used as best-practice examples of the comprehensive study of cultural heritage, while achieving effective, sustainable and consistent interventions. The aim would be to produce exportable models of diagnosis-intervention assessment, which could be applied on other assets at risk, whatever their characteristics and location.

In order to create these models, the team has established a work plan articulated by:

- Demonstration Projects: that are creating and testing these models in specific cultural sites or deposits.
- Exploratory Projects: that are developing and testing innovative techniques and methods.
- Transversal activities: which are designing protocols, and ensuring active participation in social and scientific policy, knowledge transfer and dissemination activities, etc.

This last point also includes training. The main objectives of the project included this commitment. The aim was to create a postgraduate training strategy for preparing, in a truly specialized way, professionals with technical or scientific profile, who can become the best professionals working on cultural heritage.

Of all the graduate training formats available in Spain, it was finally decided to opt for a CSIC High Specialization Course model. This was the only viable solution for respecting the relation between the number of hours and training workload and other commitments on behalf of the staff. Teaching was mostly carried out by CSD-TCP members. This course was an alternative possibility, different from formal university education. It also benefited from greater freedom in designing the course, choosing the participating teachers, and establishing the relationship between practical and theoretical aspects.

The main objective of the course is to provide specific knowledge and specialized tools to students. These are based on top-level science and technology focused on seeking answers and innovative solutions to the challenges cultural heritage faces; therefore keeping in sight the goal to contribute to its sustainability and valorization. This goal lies at the very foundations of the Consolidar call and more specifically, also within TCP: strengthen and highlight the link between the interdisciplinary research, the professional practice and the social visibility of research through training, dissemination and knowledge transfer.

To address these issues, the course is divided into 8 modules, which refer to all areas of heritage intervention, coordinated by specialists from CSD-TCP. Of these 8 modules, 3 are of compulsory attendance because they address core issues: current challenges to cultural heritage; diagnosis, prediction of damage and action protocols and new trends in research and conservation.

The other 5 modules are more specialized: Landscape Archaeology, urban built Heritage, movable goods, new ICTs applied to Heritage and how to develop projects and economic reports.

The teaching staff is international –there are people from 5 different countries–. As for their disciplinary backgrounds, 46% of them are specialists in archaeological disciplines, 12% in construction sciences, and the remaining percentage is divided among professionals on asset and intervention management and other stakeholders involved in Cultural Heritage.

The interest raised by the course can be summarized in the following graphics, and briefly we can say that there was an initial contact on behalf of 56 people. Of the 43 that were accepted, ultimately the final number of inscriptions was 22. Here we have to mention the interest that the course raised abroad. Unfortunately, the impossibility of providing accommodation and travel grants, coupled with the poor Spanish employment panorama today, made it very difficult for foreign students to assist.

Statistically, therefore, we had a majority of Spaniards, and essentially women. The diversity of the group can be seen through their academic education and occupation: half the group were professionals trained in the humanities, primarily as historians and archaeologists. Two parties of almost equal number were architects and conservation experts. A final minority were engineers and management experts. The occupations of the students at the time of the course

were divided equally among self-employed, personnel involved in the university, private companies and unemployed.

A key point of analysis by the organizing team was to know what a student expected from a non-formal education such as the one offered by this course. Most of them wanted to receive additional training to the one that can be found in the different official universities, which is usually much more theoretical. In that sense, they wanted to find practical knowledge and concrete experiences.

As an alternative to the stiffness of official teaching, the High Specialization Course has made of its versatility a strength: the schedule –lighter than those of an academic year–, allowed its full compatibility with the possible circumstances arising from the employment status. The timetable of classes, planned as open conferences allows time for debate, guarantees freedom in the transfer of knowledge in a much more personal and customized way than the regulated approach. This system allowed continuous interaction and discussion among all participants.

One of the most attractive aspects of the course has been its diversity, both on behalf of the students as well as the teaching staff, and yet all coinciding in their interest for Cultural Heritage. In this way the course has become a meeting point, a way for allowing an interprofessional approach and the discovery of different shades that enrich the 360-degree view of Cultural Heritage.

Once we have reviewed the strengths, now we also want to reflect a critical view of the weaknesses of the course. The data, both positive and negative, were received by the feedback from students through surveys and direct discussion of each module. Filtering these data, we can group the points to be improved in future editions in the following:

First and foremost is the difficulty for students from outside Madrid to take part in such a long course, because although GSD-TCP Consolider finances part of the tuition so that students can pay a reduced price, so far it has been impossible to find ways to fund the student's stay for the duration of the course.

Given the diverse background of the students and their professional activities, the syllabus of the course was, in some respects, over-specialized in some areas and deficient in others, for example, it placed a great emphasis on the archaeological perspective, but other aspects of artistic or technical nature were not touched. It would be interesting to decide whether to include any of them or, on the other hand, if we should rather tweak the definition of the course to make clear that these issues are not addressed before enrolling.

Another recurring complaint was that, given that the quality and curricula of teachers was excellent, there was little opportunity to learn more about the activities undertaken by the professors or to engage some students in active projects. Possible solutions are being considered on this issue, one of which could be opening the doors of the laboratories on specific days to see how the

protocols explained in class are being developed, depending on the availability of the teachers and the type of ongoing projects.

Finally, having enjoyed such a proactive group of students, they always missed a longer duration in certain sessions that deserved more practical treatment. Therefore, one of the claims for next year is the creation of an extra module which deals with aspects of applicability, employability and allows the review of topics of special interest.

In conclusion, we could say that the course has been successful in various aspects such as:

1. Its status as non-formal training that has successfully created organizational lines that have been attractive for students of very different conditions.
2. Schedules and calendar, which has adapted to the circumstances of workers and students whether they were from Madrid or from other places.
3. As for its thematic approach, based on case studies rather than traditional academic departments. Summarizing the feedback received prior and after the completion of the course, we saw the need for this kind of course, where staff is involved in projects, and they can share their own unique expertise, as a difference from other courses with more academic prominence.
4. And finally, we believe that the real basis of our success is to have managed the creation of a meeting point of experiences, expectations, perceptions and approaches on Cultural Heritage. The richness of interventions has not only been based on the faculty, but also on the students.

Finally we have to acknowledge those students that have managed to advance professionally through the completion of this course, by obtaining scholarships, both for training and research, partially thanks to the contacts made. We hope that their number will increase in future editions, because it will mean that the course has gained in application potential and in harnessing employability.