

## Cultural heritage and its dissemination through linguistic and technical learning in Higher Education

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### **Abstract**

*This paper presents the first results of the innovation and educational improvement project FUSIONA, which combines the transversal learning of German as a foreign language (GFL), the interdisciplinary learning, the cultural and scientific-technical heritage protection and its social dissemination. The principal objectives of this service-learning project are, on one side, to redesign a practical task of the course of GFL and, on the other side, to spread the cultural heritage of the four museums of Universitat Politècnica de València (UPV). Transversal skills, like effective communication, teamwork or social and environmental commitment are enhanced, and collaborative learning is put into practice by the design and edition process of informational videos. Thereby, GFL and Audiovisual Media students and teachers work together in order to create and evaluate the outputs. The currently quantitative and qualitative results show that interdisciplinarity is also feasible when language learning, media technique and culture join together.*

**Keywords:** *Interdisciplinarity; German as a foreign language; scientific-technical heritage; transversal skills; collaborative learning; service-learning.*

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## **1. Introduction**

One of the high-impact educational practices (Kuh, 2001a; 2001b; Kilgo et al. 2015) put forth and endorsed by the Association of American Colleges and Universities (AAC&U) is service-learning (SL) (Tapia, 2007; Battle, 2011). The SL project presented, combines the transversal learning of German as a foreign language (GFL), the contents and techniques of the course Audiovisual Media (AM) and the interdisciplinary learning methodology, with the aim of detecting the cultural and scientific-technical heritage protection and fostering its social dissemination. The main goal of the project, named FUSIONA (fusion of art, science, technology, society and German language) is to develop effective oral communication in GFL, thus enhancing the interaction of the students who carry out an interdisciplinary task. The task consists in the design and edition of an informational video about the cultural heritage of their university.

In the last years, the idea of diversifying the practical tasks of the course Academic and Professional German A1 (from now on, German A1) attending to new contents and formats, such as video recordings had grown up among some course teachers. At the same time, we got the perception that the UPV cultural heritage and its four museums are really unknown by the society and by the students themselves. This fact has been demonstrated with the responses of a questionnaire, which was passed before the experience. During two hours 144 students from different bachelor and master degrees at the UPV answered to the question: Do you know about the museums at the UPV? 72,9% negatively, and 27,1% positively. These figures were our starting point.

The paper is structured as follows: in Section 2 we describe the interdisciplinary innovation approach to teaching; in Section 3 we describe the methodology followed in the experience; in Section 4, we summarize the results; and some conclusions are arisen in the last Section.

## **2. Interdisciplinary innovation**

The Project involves two aspects. On one hand, it is necessary to remake the format and content of the practical tasks, which are fundamental for students' performance. They prepare them not only for the academic tests that evaluate the different linguistic skills (speaking, listening, writing and reading), but also for their future professional lives. However, these tasks should also help students to become social responsible citizens, as the University Social Responsibility (USR) points out (Ali, Mustapha, Osman, & Hassan (2021) and is stated in the UNESCO with its call for pursuing the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda.

Traditionally, all the four practical tasks have been oral presentations. According to the opinion of students and teachers, other outputs could be introduced, as for instance, videos

or audios. This is the reason why we started the project together with other lectures of the subject Audiovisual Media, in which the quality of these formats is taught, contents that are impossible to be dealt with in GFL. The teachers of Audiovisual Media transmit some basic theoretical knowledge to the students of GFL and the students of Audiovisual Media evaluate the videos.

The project involves the development of three of the skills our students are required. Graduates of the Polytechnic University of València official degrees must show that they are capable of: (1) Demonstrating proficiency in digital communication using a variety of support media adapted to the situation and audience (effective communication); (2) Helping find solutions to challenges or projects, showing empathy and assertiveness when sharing ideas, reflections and arguments within collaborative work (Teamwork and leadership); and (3) Contributing to the design, development and implementation of solutions that meet social demands, taking the Sustainable Development Goals as a reference (Social and Environmental commitment).

On the other hand, we want to enrich the learning of the foreign language together with that of the artistic, scientific and technological heritage of our university. The professional work of the museums management teams aims to pursue the SDG 11, as they protect the cultural heritage, the education for the sustainable development supporting research and cultural participation.

The course German A1 is transversal for all the Polytechnic University of Valencia degrees, that is, students of different degrees and grades meet together for this course lectures. In the project 90 students of four German A1 groups (two in the Autumn semester and two in the Spring semester), and 60 students of Audiovisual Media (course of the Design and Creative Technologies Degree) participated during the first year of the experience.

### **3. Methodology**

As a previous step to this experience, the team conducted a study about the knowledge of the museums among the students in the campus. The team carried out a random poll in the leisure area of the campus to establish a starting point for the project. The results, as mentioned before in the first Section, demonstrate that the majority of the students at the campus did not know about the existence of the museums. Those who did know about the museums, informed about which of them they knew (Q3), and which of them they did visit (Q4). The results are summarized in Figures 1 and 2. The answers show that the most known museums are the Informatics and Telecommunications ones, despite the fact that the Sculpture museum is an outdoor museum placed in the same leisure area where the poll was passed.

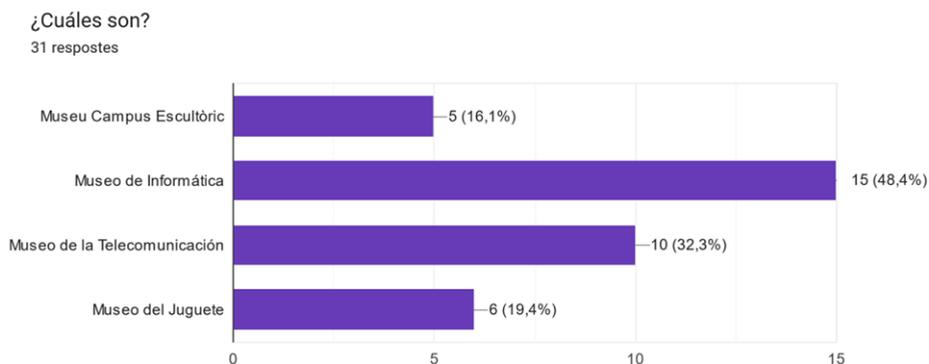


Figure 1. Previous questionnaire Q3: Which museums do you know?

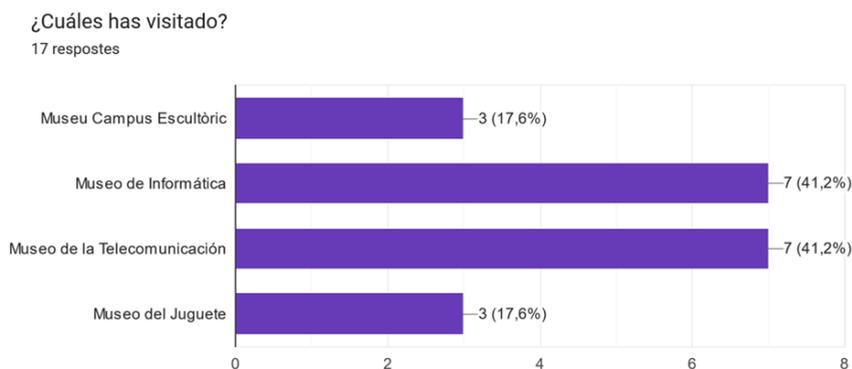


Figure 2. Previous questionnaire Q4 Which ones have you visited?

In order to fulfill the general goal, three specific objectives are outlined:

- To design a new practical task integrating information about the location and one example of the pieces exhibited in the (name of the university) museums.
- To enhance the collaborative (Johnson y Johnson, 1991; Kagan, 1994; Morales, 2007; Prieto, 2007) and interdisciplinary (Fernández et al., 2017) work, both among teachers and students.
- To disseminate the best outputs on social media and in the (name of the University) museums webs, only once after a selection process composed by museums staff, students and teachers.

Table 1 shows the different linguistic structures and possible vocabulary that is expected to be used for the museum description included.

**Table 1. Linguistic resources**

<b>Introduction</b>	<i>Hallo, heute besuchen wir das _____ (Name vom Museum) / Hallo, wir präsentieren heute das _____ (Name vom Museum).</i>
<b>Location</b>	<i>Das _____ (Name) Museum liegt im Gebäude (Gebäude), an der _____ (Hochschule). / Die Skulpturensammlung liegt in den Gärten von der UPV, es ist eine Open-Air-Galerie.</i>
<b>Area / sections</b>	<i>(Name vom Museum) _____ ist _____ m 2 groß und hat _____ Sektionen. Historia y piezas Das Museum gibt es seit _____. Hier findet man _____ (Geräte / Spielzeuge, Apparate / Skulpturen, usw.).</i>
<b>Example piece</b>	<i>Zum Beispiel, das ist ein/-e _____ (Nomen). Das ist kein/-e _____ (Nomen). Es ist _____ groß / breit / etc. Cierre Wir finden das _____ (Museum) _____ sehr interessant! Komm und besuch es!</i>
<b>Schedule</b>	<i>Das _____ (Name Museum) ist von _____ Uhr bis _____ Uhr geöffnet. Am _____ (Wochentag) ist es geschlossen. Entrada Der Eintritt ist frei.</i>

The document handed to the students, which explain the new practical task, describes also the steps to follow, and the necessary linguistic elements of the German language to accomplish it. The five steps are: (1) Choose a museum (better if it is not the one of your faculty); (2) Write a brief description of the museum (name, location); (3) Choose a piece in order to present it; (4) Write a brief description of the piece; (5) Express in an oral way the written description and record it in video format.

Two or three students at most of a group have to present contents orally and are also video recorded. If they are three, more contents have to be prepared. Linguistic structures and resources needed for oral discourse are shown in Table 1.

The highest grade to be obtained in this combined task is 0,75 points (video recording: 0,25 + oral expression: 0,5) from a total of 10 points of the final grade of the subject.

The new rubric for assessment has include oral expression, pronunciation, vocabulary used and grammar correction. The teachers of GFL design and implement this rubric.

To complete the assessment of the practical tasks of the Project, the teachers of Audiovisual Media devise a rubric related to technical aspects. This rubric serves as a tool and a guide to record videos, and an assessment tool for the students of the Audiovisual Media subject, who will be in charge of evaluating this aspect.

In order to select the best products to be disseminated on social media and webs, those people representing the museums of the UPV will meet the teachers of the two subjects.

In addition, once the Project is finished, each person participating in the team will be capable of assessing the process followed, so as to improve the implementation of each phase. This discussion among the agents of the project is crucial for its quality. Perception of students, teachers and service beneficiaries –museums in our case- are crucial. This evaluation happened the day of the final presentations, after their assessment and selection in front of a public audience, as is suitable for a project of ApS. In this event, certificates from museums and teachers were given to students participating in both subjects; they certify the participation in an ApS project, including two subjects and four UPV museums.

#### **4. Results**

Table 2 summarizes the museums selected by the different groups. It can be noted that Informatics and Toys museum were only selected by four and eight groups, while Telecommunications and Sculpture museums were selected by twelve and ten groups respectively. This does not fit the distribution of general knowledge of the museums previously analyzed (Figures 1 and 2). Hence, possibly, the practice has improved some general knowledge of museums in the campus.

**Tabla 2. Museums selections**

Museum	Group A1A1	Group A1A2	Group A1A4	Total
<b>MUCAES</b>	2	2	6	10
<b>TELECOM.</b>	4	6	2	12
<b>JUGUETE</b>	3	3	2	8
<b>INFORMÁTICA</b>	1	1	2	4

Additionally, students took a questionnaire after the delivery of the practice. The answers show that the experience is positive, and highlights the possibility of changing the room by an outdoor activity. The answers also show that students appreciate the opportunity of improving their knowledge of the cultural heritage exhibited in the University museums.

## 5. Conclusions

The implementation of this project started during the first semester of the academic year 2022-23, so it is not yet concluded. A second experience is needed to compare and better evaluate if the collaboration has been profitable for as many students as possible. The objectives and the methodology of this project could be transferred to other GFL levels, like A2, B1 or B2 also offered at the UPV. Given the transversal kind of the course, that is, a foreign language, it could be also implemented in other languages like French or Italian. We do not mention here English or Catalan, because the museums already offer their information in these language on their webs.

It could be also interesting that other courses, different to those of foreign languages would incorporate information about the cultural heritage in order to enrich the students education. The history of the diverse disciplines is essential to understand the current achievements; a historical point of view is necessary to better understand the present, in all fields, even in the artistic, scientific and technological ones. This kind of transdisciplinary task opens the problem to set the balance in the assessment of the different skills, it is a challenge to develop a transdisciplinary output performing all the skills with similar proficiency.

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