Application of The Illustrated Didactic Guide of Guadalajara Museum in blended higher education

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Abstract— **This article describes and analyses the application in blended mode of La *Guía Didáctica Ilustrada del Museo de Guadalajara (Illustrated Didactic Guide of Guadalajara Museum)* Spain, in the course *Museums Education,* as part of the Degree in Primary Education at University of Alcalá (UAH). This educational resource was used as a teaching innovation project to allow students know, interpret and create new didactic resources from the heritage of museums taking as a sample Guadalajara regional museum. For this purpose, various methods of artistic and heritage education have been used including blended teaching and learning, which combined face-to-face and online classes in different phases and activities. In addition, communication and information technologies and social networks have been used for the creation, dissemination and interaction among students. The results obtained have proven to be very positive as the strategies used seem to have increased students´ motivation, fluency, communication and visibility of their work online.**

Keywords— *Blended and online teaching and learning, museum didactic guide, museums education, heritage education, art education*

I. INTRODUCTION

The subject "Museums Education" was taught for the first time in 2018/2019 academic year in the Area of Didactics of Plastic and Visual Expression at the Education Sciences Department of UAH. It was created with the aim of knowing and integrating strategies for teaching and learning the heritage of museums and their didactics in the training of students of the Degree in Primary Education and in the Double Degree in Infant and Primary Education. The subject was taught following the specifications stated in the Teaching Guide, which described the competences, contents, methodology, evaluation and bibliography [1].

Due to Covid-19, the course was taught during the first quarter of the 2020/2021 academic year to 15 students in blended mode, thus in continuous sessions of 180 minutes, combining face-to-face with online classes.

Face-to-face classes were taught in a conventional classroom of the Faculty of Education on the Guadalajara Campus. Online classes were taught through the virtual platform *Black Board Collaborate* as shown in Fig. 1.
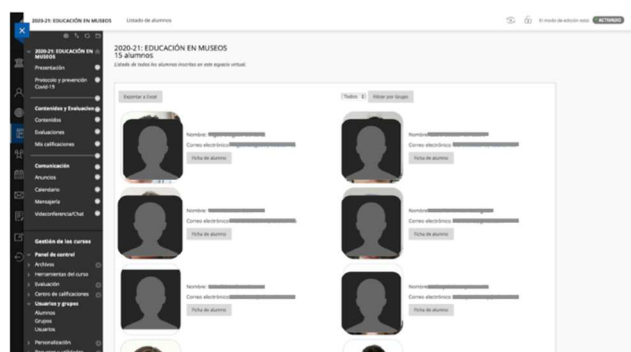

Fig.1. *Black Board Collaborate* virtual platform

One of the activities developed during the course was the implementation of an institutional Innovation Project supported by UAH that included the creation and application of educational resources from the *Illustrated Didactic Guide of Guadalajara Museum* [2]. This tool integrates a chronological tour of the different stages of art history, from Prehistory to the twentieth century, and includes original and creative educational proposals from the heritage and art exhibited in the provincial museum, as illustrated in Fig.2. The purpose was to contribute to the creation of didactic resources that can be applied through artistic methodologies [3] and heritage education [4], [5], [6].
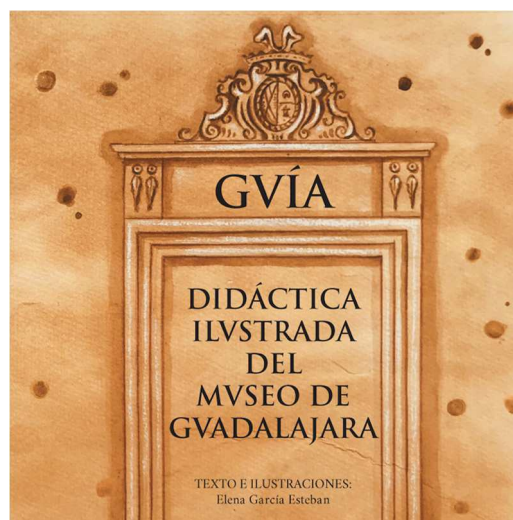

Fig.2. Cover of the *Illustrated Didactic Guide of Guadalajara Museum*.

II. AIM AND METHOD

The general objective of the project was the application of the innovative teaching tool *Guía Didáctica Ilustrada del Museo de Guadalajara* so that students and future teachers can know, interpret and teach the heritage of the museum. The specific objectives focus on:

1. Create educational resources based on the heritage of the Museum of Guadalajara.
2. Combine methodological strategies of blended education.
3. Facilitate the interaction, transference and dissemination of the student teachers´ work.

The Project was developed in the following phases and activities as shown in table 1:

TABLE I
PHASES AND ACTIVITIES OF THE APPLICATION OF THE ILLUSTRATED DIDACTIC GUIDE TO THE GUADALAJARA MUSEUM IN THE SUBJECT MUSEUM EDUCATION

Application of the *Illustrated Didactic Guide to Guadalajara Museum* in the course Museums Education	
Phases	**Activities**
Phase 1. Presentation	Introduction of the proposal. Selection and topics distribution. Brainstorming.
Phase 2. Guided tour to the museum	Guided tour in the permanent collection of the Museum of Guadalajara.
Phase 3. Research work	A. Theoretical research work (TRW) of museum pieces and design of a didactic unit for Primary Education. B. Plastic research work (PRW). Technical, plastic-artistic interpretation of selected pieces from the *Didactic Guide of the Guadalajara Museum*. C. Personal involvement and work dissemination (PI/WD). Delivery and presentation of the final proposals in a short briefing to the rest of the group. Didactic proposals and conclusions.
Phase 4. Dissemination and interaction in social networks.	Dissemination and interaction in social networks of the subject: *Facebook* group "Projects and Museums Education in UAH".

III. RESULTS AND DISCUSSION

The following lines explain and describe each of the 4 phases and activities that were carried out for the application and development of the proposal:

- **Phase 1.** Presentation

The project was communicated through an online presentation in the virtual platform, where complementary information and the Didactic Guide in downloadable PDF file were also attached. The purposes of the project were similarly presented, as well as all the objectives, contents, phases and activities, methodology, and the academic evaluation of the exercise. Once the proposal was submitted, each of the 15 sections of the contents of the Didactic Guide was assigned by lot to each student, thus beginning a brainstorming of possible related tasks.

The students were very receptive to the proposal, since the project involved new knowledge and could have some future use, either when working with this museum or with another.

- **Phase 2.** Guided tour to the museum

The guided tour of the permanent collection of the Guadalajara Museum was carried out by the technical staff of the institution during the morning of November 6, 2020.

The large group of 15 students, the teacher and a museum technician were divided into three groups to comply with the sanitary measures of COVID-19, which allowed a maximum of 6 people inside the room-.

Each session lasted approximately 1 hour, in which the students toured all the rooms of the exhibition with the appropriate explanations about the collection and the museum, and were able to make the questions and observations they considered necessary about the selected pieces, as illustrated by Fig.3.

Fig. 3. Guided tour at the Guadalajara Museum

- **Phase 3.** Research work

Based on the themes and examples proposed in the Museum's Didactic Guide, each student investigated and interpreted a different heritage piece. Depending on each work, the students chose one material and artistic technique or another. A total of 15 creations inspired by the original pieces of the museum and the Didactic Guide were obtained.

The students had to carry out three types of work or activities to meet the objectives, content and evaluable competences of the subject, as shown in table 2.

TABLE II
EVALUABLE ACADEMIC WORKS

Evaluable academic works	
A. Theoretical Research Work (TRW)	Theoretical research of the museum pieces and their possible application to the primary classroom. Design of a Didactic Unit.
B. Plastic Research Work (PRW)	Technical, plastic and artistic interpretation of selected pieces from the Illustrated Didactic Guide to the Guadalajara. Artistic-plastic work.
C. Personal Involvement and Work Dissemination in social networks (PI/WD)	Dissemination and interaction in social networks of the subject: *Facebook* group "Projects and Museums Education in UAH". Communication, digital and audiovisual work.

Once the theoretical and practical work was finished, each student made in class a brief audiovisual presentation of their research to the rest of the group in a short information session of about 10 minutes. Didactic proposals that could be carried out with primary school students were also provided.

The academic evaluation of this task was presented as a system of continuous and quantitative evaluation around learning standards, procedures, methods and criteria of evaluation and qualification. These were established in the Teaching Guide of the subject for achieving the certification as future teachers for the exercise of this pedagogical activity in the field of Primary Education. This proposal was one of the tasks of the continuous evaluation of the subject and accounted for 30% of the total mark. For the final evaluation of the students, a detailed rubric was used . Qualification criteria and headings were measured over 10 as detailed in table 3. Appraisal considered 1 as the maximum point and established a degree of achievement in 4 quality levels: Regular: 0.25 points; Good: 0.75 points; Very good: 0.75 points and Excellent : 1 point.

TABLE III
QUALIFICATION CRITERIA AND HEADINGS

Qualification criteria and headings
1. PRW. The work presents visual coherence and unity of work.
2. PRW. The work presents technical varieties of materials and quality in the selected technical processes.
3. PRW. The work presents dexterity in the use of graphic-plastic techniques and visual procedures. It shows dedication for the achievement of a correct finish of the techniques used.
4. PRW. The work presents originality in the use of narrative resources and creativity to produce an attractive visual image.
5. TRW. The work meets the specific objectives. It shows capacity for synthesis and underlines relevant aspects such as structure, wording, and clarity.

6. TRW. The work presents mastery in research methods in the subject and evidence of knowledge of the subject.
7. TRW. The work shows the author´s capacity for critical analysis and exercises its criteria based on solid arguments based on Education in museums.
8.TRW. The work shows the author´s mastery and knowledge of the objectives, contents, competences, procedures and motivations of Primary School students as well as the existing education laws in this regard.
9. PI/WD. The work shows the author´s ability to present his plastic work in a creative and original way in the form of an image or multimedia.
10. PI/WD. The work shows the author´s ability to communicate, participate, collaborate and be involved in the elaboration of the project and its dissemination in the virtual platform, forums and social networks (of the course) as well as to interact with the rest of the group.

Self-assessment and hetero-evaluation methodologies were used based on the 10 headings, obtaining a numerical average score of 8.03, in grades between 5 and 9.5, as shown in Fig. 4. The students involved in the project seemed to be committed, made original proposals and generated their own criteria for positive assessment.
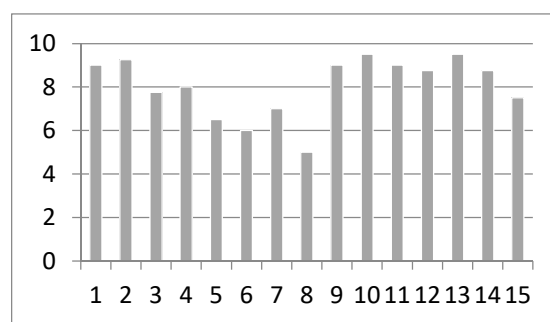

Fig. 4. Academic qualification of students' work

- **Phase 4.** Diffusion and interaction on social networks

To promote the dissemination of the proposal, students had to share one or more images of the piece recreated in social networks, in this way it was possible to interact between the students and / or with anyone else outside the project, beyond the classroom itself. To do this, a group of the social network *Facebook* was created to share news related to this project.

This social network was used among all the existing ones because, in addition to being a digital tool widely used by all types of adult population, it allows to make groups or pages where subjects can create and add content as well as multimedia publications directly, freely and easily. This tool provided us with very concrete and quantitative data on the subjects, the scope, reactions, visualization and dissemination of the published news.

The selected *Facebook* group was created in 2018 and has the name of "Projects and Museums Education in UAH", with the researcher / professor as administrator and[1] 361 members that have been added in recent years, mostly students of the Degree in Infant and Primary Education of the

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[1] This *Facebook* group was created on 2018 to share the works of the students of the UAH in relation to the heritage and the museums. The Innovation Project UAH/EV998: *Women's Wings to the Guadalajara Museum*, was the first project where the students could spread his works through a social communication digital support [7].

UAH. In this public group you can consult the works created by this group of students, among others.

Of the 15 students enrolled in the year 2020 in the subject Museums Education joined 11, and published 10 news about the project, generating 165 reactions of some kind between "likes" and comments, and more than 1.613 visualizations of the published content, obtaining an average of 161.3 visualizations for each news, as shown in table 4.

TABLE IV
POSTS AND STUDENT INTERACTIONS ON THE *FACEBOOK* GRUP: "PROJECTS AND MUSEUMS EDUCATION IN UAH"

Publications and interactions of the students in the group of *Facebook:* "Projects and Museums Education in UAH"			
Posts	Reactions (likes)	Feedback Direct	Views (scope)
10	60	5	1.613
Media	6	0,5	161,3
Oscillation	3-9	0-2	97-219

IV. CONCLUSIONS

The application of the *Illustrated Didactic Guide of Guadalajara Museum* as a tool to be used in higher education, together with the analysis of the results after having developed this proposal with students of Primary Education in contexts of health crisis and partial confinement, have shown that it is possible to meet the proposed objectives: knowledge of the heritage of the museum and creation of didactic resources. This has been possible with the development of activities with blended methodologies (alternative face-to-face and online classes) and the use of technology to transfer and disseminate the tasks carried out by the student teachers beyond the limits of the university.

In this sense, it is noteworthy the positive impact offered by social networks such as *Facebook* as an educational tool to create, share and transfer content in an agile, active, participatory and motivating way among students.

As future lines of research, it is intended to implement a reference model for the teaching and learning of the heritage

of the Guadalajara Museum that can be used and transferred to multiple educational areas including formal education at different academic levels -from early childhood education in schools, to higher education-. Similarly, this proposal can be applied in non-formal education including activities for all audiences in the museum. An alternative can be to apply this method in informal education through networks and internet, thus complying with the principles of Sustainable Development Goal 4 of the Education 2030 for a comprehensive and integral education, lifelong learning for all throughout the life [8].

REFERENCES

[1] Education Sciences Department (2019/2020). Museums Education [Cod. 430064]. University of Alcalá.. [Online]. Available: https://www.uah.es/es/estudios/estudios-oficiales/grados/asignatura/Educacion-en-Museos-430064/

[2] E. García Esteban, "Guía didáctica ilustrada del Museo de Guadalajara". Monotipos, 2019a.

[3] R. Marín, "Educación patrimonial y metodologías artísticas de investigación basadas en las artes visuales (MAIbAV)". I Congreso Internacional de Educación Patrimonial. Mirando a Europa: estado de la cuestión y perspectivas de futuro. [Comunicaciones]. Madrid: IPCE, pp. 211-223, 2014.

[4] M.L.P. Horta, E. Grunberg and A.Q. Monteiro, "Guia Básico de Educação Patrimonial". Brasília: IPHAN/ Museu Imperial,1999.

[5] O. Fontal Merillas, "La educación patrimonial: teoría y práctica en el aula, el museo e Internet". Gijón: Trea, 2003.

[6] A. Carrión Gútiez (Coord.) "Plan Nacional de Educación y Patrimonio". Ministerio de Educación, Cultura y Deporte, Secretaría General Técnica, 2015.

[7] E. García-Esteban, "Proyecto de educación patrimonial y artística: Alas de mujer para el 180 aniversario del Museo de Guadalajara". Erph_Revista electrónica de Patrimonio Histórico, 25, pp.155-176, 2019b, doi:10.30827/e-rph.v0i25.17891

[8] UNESCO (2016). Education 2030: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning for all. [Online]. Available: https://unesdoc.unesco.org/ark:/48223/pf0000245656