COLLABORATIVE DISCUSSION WITH SOCIAL NETWORKS IN ARCHITECTURAL PRESERVATION SUBJECT

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Abstract

The didactic experience that follows is framed in the subject of Architectural Preservation (4.5 credits every four months), taught at School of Architecture of the Universitat Politècnica de Valencia in collaboration with the Universitat Politècnica de Catalunya. The subject has two complementary learning lines, mainly based on Preservation Theory and Project Practice. Both didactic activities, developed through face-to-face experiences in classroom and group autonomous work, have a critical and personal feedback from the students. Throughout various academic years the teachers have implemented some educational dynamics such as the exercise of the debate and the reflection in group. Furthermore, discussions on current issues are crucial to train students in good professional practice of conservation of historic architecture. In addition, the discipline taught is continuously reflected in the reality in a dynamic way, interlinking daily preservation and practical design theory, thus making this synergy life object of debates, activities or social reflections. Therefore, the teachers of the subject, given this fertile context, have proposed to generate the "Res-Arquitectura" platform, taking advantage of the potential of one of the best-known social networks employed today, facebook. So, the material produced in the suggestive mixture between the discipline taught in classrooms and its multiple forms crystallized in society is compiled, organized, shared and commented. In this way, a cooperative collaborative exercise is generated where students themselves enrich the current news in the field of the conservation of built heritage with their analysis. Thus, a group of students each week selects a topic of debate. This debate gives birth to many thoughts reflected in the facebook page. At the same time, this page also encourages a sense of educational community in the framework of the subject. This type of activity helps students to understand that the conservation of architectural heritage is a subject of current importance, present in the society and object of debate. It also shows them that the subject taught enables them to form part of this debate.

Keywords: social network platform, teaching synergy, educational community.

1 THE DIDACTIC CONTEXT

The architectural preservation teaching discipline at Architecture schools in Spain has very different treatments depending on the schools and their curricula. This text authors came as a teachers from two different Spanish institutions; the Universitat Politècnica de Valencia and the Universitat Politècnica de Catalunya, where the way how the discipline is taught is different depending on the curricula of the two institutions. In the Universitat Politècnica de Valencia, along the fifth grade bachellor's degree in Architecture subject, a first learning level is provided, which will be extended to the fourth grade next year. This subject is compulsory in both cases.

Furthermore there is an official master at ETSA from Valencia in Conservation of the Architectural Heritage, where architects and civil engineers may deepen in this learning professional area.

In the Universitat Politècnica de Catalunya case, there isn't any compulsory subject during the bachellor's degree in Architecture. There are two optional subjects shared between bachelor's students and official master students. Both subjects must deal with the coexistence of different levels sharing a first learning level with a second more critical level.

In addition, there are two masters in Universitat Politècnica de Catalunya. The official one, aforementioned, with a more academic point of view, and the professional one more linked to the professional practice. Both of them has as a common element, the same goal of deepen in the preservation discipline.

1.1 Architectural preservation subject in Universitat Politècnica de Valencia

Since the academic year 2008-2009, when it was implanted in the curriculum, part of the authors of this text have been teaching the subject Architectural Preservation in the Escuela Técnica Superior de Arquitectura (Universitat Politècnica de Valencia)

Architectural heritage is one of the areas of the architect activity and architectural preservation is one of their professional responsibilities. Architectural preservation subject, as the unique compulsory subject in the curriculum (both in 2002 and 2010 curricula) devoted to this part of architect profession, brings up learning objectives that allow students achieve enough skills to exercise with quality this professional attribution: to adequate historical and cultural and the Architectural Preservation theory knowledge; to adequate knowledge of the vernacular architecture bases; to have capability in exercising the criticism in the architectural preservation; to have capability to intervene and conserve, to restore and rehabilitate the built heritage; to have capability to catalog architectural heritage and to plan to protect it. To achieve these skills, contents of history and theory of architectural preservation in Europe and Spain are thought, with the study of the methodology and intervention in the architectural heritage, intervention criteria, project approaches and the basis of the intervention technics. The course intends to have a comprehensive and formative character that allows students to develop their own discipline vision through the exercise of criticism, reflection, discussion and argumentation. The formative character of the subject consists as well in the need of incorporate clearly a necessary orientation to occupational exercise. The used methodology provides lectures and practical cases of different type, study and analysis of intervention cases, critical reading of texts, discussions on various topics, and the development of the study and project for an historical building.

The learning-teaching methodology used in the Architectural Preservation is based on applying different techniques depending on the type of training objectives, competencies and contends; giving a participative master classes, giving a master class for each topic to provide the students a basic and structured information; seminars and debates that consist on practical classes in classroom during which students think about or discuss about a topic proposed in advance by the teacher, it is mainly about support activities to the theoretical reflections about the subject with the main objective to develop an ability in being critics in students as well as a dialectical ability; practical work that consists in a specific work of study and preservation project that the students have to develop in group throughout the course; classroom activities or brief classroom practice classes related to practical work, which constitute the bridge between the master classes and the development of paragraphs of practical work related to the topics covered in these units, through the immediate implementation of the concepts explained in the master class, applied to the chosen building for the practical work; tutorials that are both made in class during practical tutored work sessions in class so that students have the opportunity to solve their doubts in class, as well as in the teachers office; didactic visits for students to know something specific that has to do with the subject; complementary activities that depending on the ability shown along the course different types of activities(conferences, seminars, workshops, and so on,) are advised to the students.

Each one of the programed activities is aroused to achieve some specific skills both related to critical thinking and project management skills in the architectural preservation field. To strengthen critical thinking capability, seminars and debates are used, meanwhile to improve the project based development; the workshop based on real cases is used.

1.2 Architectural preservation subject in Universitat Politècnica de Catalunya

The other part of the authors taught aforementioned subjects about restoration and architectural preservation at the bachellor's degree in Architecture in the Escuela Superior de Arquitectura de Barcelona, and several more specific subjects in aforementioned masters

The focus of the content is adapted to the different professional profiles to which it is addressed, according to the academic context of the degree of architect, the official master or professional one. Some of the learning objectives are: to provide a suitable method for the restoration intervention, to design the most efficient solutions in strengthening or to repair the existing regulatory context and considering the environmental respect, to value actions more compatible with the heritage values of the building.

In order to achieve these objectives, contents are imparted about knowledge and views on the historical building theories, criteria and procedures for intervention in the restoration and building preservation, characterization and evaluation of the performance of materials, components and

systems that make up the buildings, procedures and intervention techniques, and on intervention projects themselves.

The learning-teaching methodology used in the bachellor's degree in Architecture subjects is based on an experimental collaborative method.

In both subjects the students work in groups of four and are allocated a specialist role at the beginning of the course in architecture, historical construction, history or restoration. The information relating to their specialization is available to them throughout the entire process.

This strategy is intended to be repeated in a sequential way. Firstly the strategy is used in the subject entitled Introduction to Architectural Heritage which is taught with the aim of making a critical analysis of a building already restored; and later the strategy is used again in the subject Restoration Design, with the difference that in the second case the amount of time is extended to allow the group of students to work on the restoration projects. This is a sought alter repetition in order to create an influence beyond the teaching objective towards the training of an attitude.

Both subjects are developed in the context of a case study. In the first subject, Introduction to Architectural Heritage, the students are arranged in groups of four, and each group becomes a Heritage commission which needs to evaluate a built project: the restoration of Castillo del Paborde in Selva del Camp. This simulation is accompanied by a submission of a report which also simulates reality. We will call this the base group.

The simulation has twin aims: firstly it brings the students closer to actual professional activities related to their specialization and secondly and secondly it's used as a structure for the jigsaw activity. Jigsaw is the cooperative working tool in this process. It is a further level of realism applied to the case study, but in this case under the guidance of the teacher.

Each one of the groups becomes multidisciplinary as described before, which means that it also fits the reality of a heritage commission. Each member of the Group is given a specialization and the expertise that goes with it. Every base group has each type of specialization.

The exercise is carried out using the jigsaw process, while the case study is the framework in which it happens.

The teacher provides the material to the students, giving them a reasonable amount of time to read and understand the case. The session dedicated exclusively to the cooperative work starts in the first class after reading the material. It is carried out in the following sequence:

Initial meeting between specialists: the aim is to resolve any doubts and to achieve a greater degree of knowledge, but also to improve the student's abilities as specialists in preparation for subsequent work in the base group.

Subsequent meeting in the base group to characterize the building: this will involve making an initial assessment and evaluating it, in order to be able to write a critical report about the action taken. Each specialist has to bring the knowledge that they acquired through reading the material and through participation in the meeting of experts. This is the moment that all of the participants are committed to the exercise. They also have the added responsibility that the global vision of the group depends on their explanation.

From this point on there is a virtual space made available for every group of specialists, so that the in-depth discussion about the evaluation of the building remains open.

Finally, in the last session the evaluations carried out by every heritage commission group and base group are pooled together.

2   INTRODUCCION OF SOCIAL NETWORKS AS A WAY OF LEARNING

Social networks represents nowadays a way of exchanging and of expression of great strength and wide possibilities. Most of the net users use social networking facebook and university students are among the users. It is said that 83, 9% of the net users use social networks and that 89,9% of them are in facebook (1). This data makes the net in an extraordinary way of communication and broadcasting. A quick and superficial look at social networks may not reach to see the potential that they may have in communication level and the scope they can reach among user. Most of the same students understands facebook as an space of personal entertainment more than a space of work and learning. In spite of this, the enormous potential of communication and interactivity that supposes,

introduces an element of interest that lack other means used normally used in education. Social networks, and facebook among them, represent the new generation of internet(Web 2.0) that allow people to produce their own content, add, change and delete information from a site and create their own in a simple way. In this way, users are no longer merely "consumers" and become producers of content of the new web [4]. These characteristics are perfectly attached to the education promoted by The Bologna process which is based on autonomous learning, active, critical thinking, collaborative, etc. [5] and specially through the net facebook that results easily acceptable by students since most of them already use it in other areas. Through this mean, the teacher acquires the role of teacher guide in the process of learning rather than the teacher who imparts contents [6]. Teacher provides topics, ideas, topics for discussions that may Foster searches by the student as well as encouraging their critic capability of thinking over the various topics proposed. The possibility of incorporating the use of this social network as means of learning the discipline of the architectural preservation was born out of a series of reflections. Firs at all, social network represents a way of communication and interaction of spectacular scope. Secondly, it is permanently updated, active, dynamic that allows a quick insertion and almost instantly a piece of news, an event or any issue or question that is pretended to be proposed to the public. Even more, as a mean in permanent activity allows an extraordinary connection with the moment and the possibility of launching doubts and questions about something that is happening in this precise moment.

2.1   Facebook page Res-Arquitectura / Restauración Arquitectónica / Architectural Preservation

Facebook page "Res-Arquitectura / Restauración Arquitectónica / Architectural Preservation" was born in September 2012 as an experimentation for teaching the discipline of the architectural preservation. The page is administrated by the same teachers authors of this article as an interesting collaboration experience between a group of teachers of the subject in the Polytechnic University of Valencia and another group of teachers from the Polytechnic University of Catalonia. Administrator control the contents of the page that is strictly linked to the discipline of the architectural preservation avoiding any kinds of comments related to other types of social, political or cultural issues.

This discipline is understood in this context in a broad way and the topics included in this page include news about congresses, meetings, courses, text presentation, books and so on. News related to architectural preservation, architectural heritage, movable heritage, both material and immaterial, etc. and whatever is on the wave and of interest in this field.

Fig. 1. Home page "Res-Arquitectura / Restauración Arquitectónica / Architectural Preservation"

This page is aimed mainly to students in both institutions who are doing subjects related to architectural preservation in Grades, Post-grades as well as doctorate. Even though its short life, it has been able to be of interest to a broader sector of public and they have started to interact with it.

In its almost four month life a rate of 200 users had been reached, boarding to a nearly 50,000 more people. The majority of users are between 18 and 34 years old answering perfectly to the profile of college students to whom this page is aimed. Most of them are Spanish and Spanish speakers and as the initiative was launched with teaching experience of the Universities above mentioned, most of the users belong to the environment of these two universities. There is also a certain percentage of users belonging to different contexts.
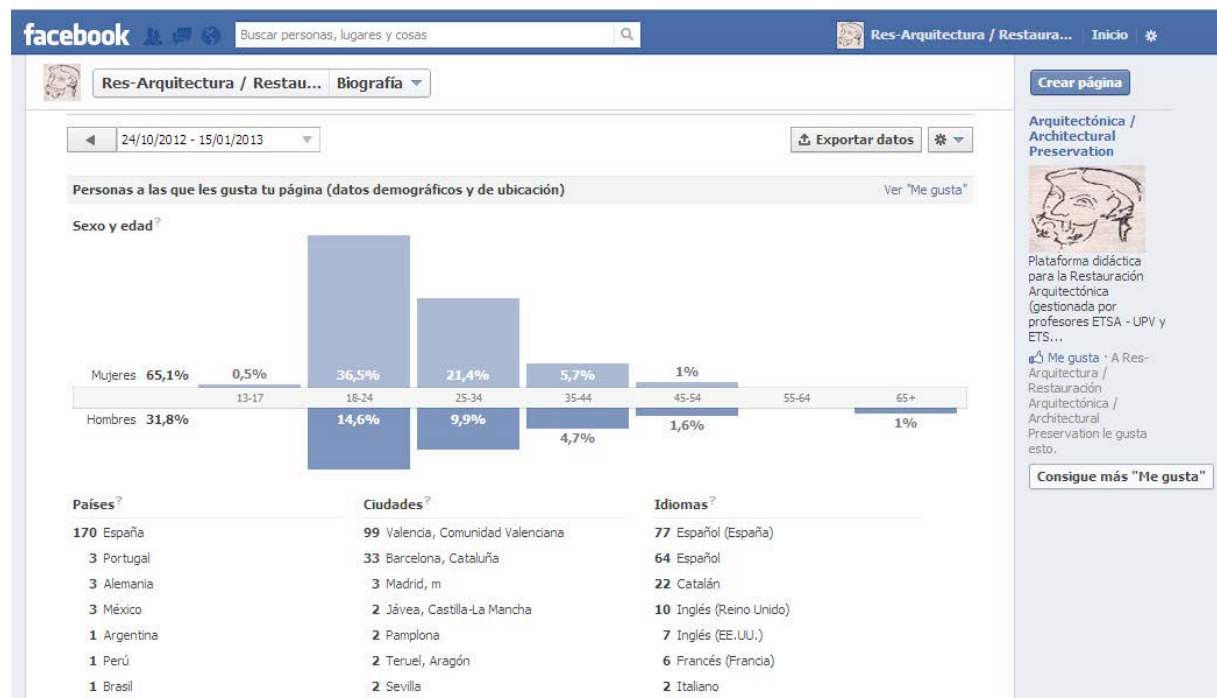

Fig. 2. Demographic and location statistics of users of the page "Res-Arquitectura / Restauración Arquitectónica / Architectural Preservation"

2.2 Learning goals linked to the web-page.

The Facebook web-page "Res-Arquitectura / Restauración Arquitectónica / Architectural Preservation" was designed with accurate learning objectives. Firstly the emerging character of the issues published in facebook allow students to fit the preservation discipline as a real part of the contemporary world and helps them to discover the global character of this kind of discipline, which concerns not only at the experts but at the rest of the society in the whole world. The actuality, internationalization and the opportunity to broad horizons works as an incentive for the students.

Secondly, students can discuss about the suggested topics, debates, events, and any other introduced new, opening an interesting interaction possibility, not only between teacher and student either between students, but as a part of a teachers and students group from two different Schools of Architecture, allowing an environment where roles disappear and there are only different and valid opinions. This is a very interesting point in the moment that allows the improving of the student self-confidence and reinforces the feeling of being part of a group in which everybody has the same opportunities to opine.

Thirdly, this kind of web-page, allows the possibility of deal with a wide spectrum of topics and some of them offer the possibility to open a critical debate out of the classroom through a social network that the student is using everywhere and in every moment, offering a continuous way of learning.

Finally, the using of this social network, not only allows the student to comment or discuss the topics that the teachers have shared, but allows them to publish and share their own topics, always under the teacher control. This way of doing makes the student feel the owner and editor of the web-page in a sort of a collaborative project that can benefit the world wide community.

2.3 The use of the web-site in the Universitat Politècnica de València

The web-page "Res-Arquitectura / Restauración Arquitectónica / Architectural Preservation" has been used in the Universidad Politécnica de Valéncia as a learning mode, especially in the fifth grade bachellor's degree in Architecture subject called "Restauración Arquitectónica" wich is compulsory for all the Architecture degree students.

In this subject, the web-page has been applied with several goals: firstly it has been a constant way to share information from teachers to students. In this sense, teachers have published in the web-site several news, courses, meetings, conferences, books, and other relevant events. This kind of activity has been proved as an effective tool regarding to the news spreading, that have been read by almost the totality of the web-page users, being shared from them to another facebook users.

On the other hand the web-page has been used to develop student's critical capacity. With this aim students, organized by groups, were asked to bring regularly one breaking and polemic new, related to an architectural preservation real case. They also had to explain the case to the class group and they had to arouse a more deepen comprehension of it. Next step should be the publication of the selected new by the teacher. This kind of practice became a weekly appointment which uses to take no more than five minutes at the end of the session, and served to awake student's interest on the subject, and to increase the class participation. It's an interesting activity because leads the student to an intelligent use of internet sources. This activity hasn't been taken account for the subject evaluation during the present course in order to valuate it only as a volunteer activity, but after this reflection it will be take it account for the next course edition.

The increase of the discussion inside the class group has been also a goal of the use of the web-page, but until now it hasn't worked. Although students use to read regularly the news published in the web-page, until now no more acts more than clicking "I like it" have been taken place. No user has commented any of the published news. Surely, one of the next course edition goals will be the building of a didactic strategy which reaches to improve student's self-assurance needed to show their opinions without fear of mistaking. Collaborative learning methods will be used on the next course edition [2]. With these methods students will have to build, together in group, some kind of new to be published.

In the master subjects, the web-page has been less used than the bachelor's degree ones. The reason could be the student's ratio: there are few students and that promotes a closer contact. That regular and closer contact allows the discussion and debate in the class sessions. The improving of this profile of student participation is another goal for next course editions.

In fact, the master level sessions are based in the discussion around the analysis of real case studio criteria of intervention. The used methodology is the performance of debates during the classes. Most of the times, during the course, these debates last longer than scheduled hours. It would be very interesting to use the web-page to extend this no finished discussions. For this reason in the next course edition students will publish their own case studio in the web-page and will promote to continue the discussion started in the classroom.

2.4 The use of the web-site in the Universitat Politècnica de Catalunya

The use of the web-site in the Universitat Politècnica de Catulunya has some correspondence with the Universitat Politècnica de Valencia, but the methodology applied is different.

The main reason for this different application is that in this case the web-page was introduced to the subject when the course had already begun. For this reason teachers decided to use the web-page as a critical information container where students had to select one of the intervention cases published to perform a debate in the classroom

The subject where it has been experimented is Introduction to Architectural Heritage, one of the optional subjects developed simultaneously with bachelor's students of degree in architecture and master students.

The selected case studio has become a sort of warm-up exercise, previous to the real case study: instead of the long process (four weeks) where the students, arranged in groups of four, are transformed into an Heritage commission which needs to evaluate a built project, the discussion based on the web-page case, has been a only two hours classroom discussion.

The rules of this short debate are similar than the long process: students work in groups of four and are allocated with the same specialist role that was given at the beginning of the course in architecture, historical construction, history or restoration. Obviously there is a big difficulty in this express debate: students only have the information posted on the web-site, and that fact leads to a more superficial discussion. But it has had at least two positive consequences: firstly, students can develop their critical capability in their role in only on session, which allows the increase of their self-assurance, and secondly they have been able to select in a critical way, from a lot of latest and polemic cases which one will fit better in the classroom discussion.

For next editions it will be very interesting to find some methods to improve this selection by defining better the exercise needs.

3   CONCLUSIONS

After this first four month, as an outcome of the experience developed with the "Res-Arquitectura / Restauración Arquitectónica / Architectural Preservation" web-page, there is no doubt that it has been a positive experience and it's possible to reach several conclusions in order to develop future lines of research. Firstly, facebook, as a social network, has been confirmed as a very interesting mode to create new learning incentives for students and to develop several capabilities.

Certainly, there are a lot of improvements to be developed concerning to this experiment, especially in the group interaction with the web-page, with the goal of improving the comments related to the news published.

Furthermore, it would be interesting if the users of the web-page would increase in number and in diversity, spreading their diffusion not only in Spain but in the world wide with the aim to promote this kind of discussions. In this point is interesting to incorporate this experiment at different schools and courses. This expansion process has begun sharing the web-page with the master of Historic Preservation de la School of Design de la University of Pennsylvania students where Camilla Milleto and Fernando Vegas are teaching actually. This first foreign expansion can creates interesting exchange experiences if the main goal explained before is reached.

And finally, the current web-page kept in this accessible mode, can perform to an interesting opinion forum between experts and students. To reach it we need better promotion measures linked to the specificity of the discipline.

REFERENCES

[1]   Túñez, M. & Sisto, J. (en prensa). Las redes sociales como entorno docente: análisis del uso del facebook en la docencia universitaria. Píxel-Bit. Revista de Medios y Educación

[2]   Garrigós, I. et alii. (2010). La influencia de las redes sociales en el aprendizaje colaborativo. Jornadas de Enseñanza Universitaria de la Informática (JENUI), Universidad de Santiago de Compostela, pp. 531-534.

[3]   Meso Ayerdi, K. et alii. Las redes sociales como herramientas para el aprendizaje colaborativo. Presentación de un caso desde la UPV/EHU. El gabinete de comunicación y educación. Publicación on line de la Universidad Autónoma de Barcelona. www.gabinetecomunicacionyeducacion.com/files/adjuntos/

[4]   Rama, M. & Chiecher, A. Hacia una nueva docencia. Perspectivas de estudiantes universitarios acerca de la participación del docente en las redes sociales. RED-DUSC. Revista de Educación a Distancia-Docencia Universitaria en la Sociedad del Conocimiento, 6. pp. 3-16. On line: http://www.um.es/ead/reddusc/6

[5]   Esteve, F. (2009). Bolonia y las TIC: de la docencia 1.0 al aprendizaje 2.0. La Cuestión Universitaria, 5, pp. 59-68

[6]   García Sans, A. (2008). "Las redes sociales como herramientas para el aprendizaje colaborativo: una experiencia con Facebook" [en línea] http://www.mentalidadweb.com/wpcontent/uploads/2008/07/comunicacion_facebook_annagarci asans.pdf

[7]   Merelo Guervós, J.J., Redes sociales: una introducción. Redes. Revista hispana para el análisis de redes sociales. Revista on line: http://revista-redes.rediris.es/webredes/