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Active methodology in the Audiovisual communication degree

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Abstract

The paper describes the adaptation methods of the active methodologies of the new European higher education area in the new Audiovisual Communication degree under the perspective of subjects related to the area of the interactive communication in Europe. The proposed active methodologies have been experimentally implemented into the new academic curricular development of the subjects, leading to a docent adjustment for the professors who currently teach lectures and who have been evaluated for the first time.

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1. Introduction: Motivation and teaching methods

The Computer Graphics subject: Composed Images in the Audiovisual Communication Degree is an optional subject of the second course which is taught during the first semester. This subject has 6 credits (3 credits correspond to theory and 3 to practice). The subject is relied for an average of 32 students per semester which are distributed into two groups: one group of theory and one group of practice. This subject is taught in the Escuela Politecnica Superior de Gandia at the Departamento de Ingenieria Grafica in the area of Graphic Expression in Enginery.

In general terms, the subject of Computer Graphics in an Audiovisual Communication qualification must achieve a series of matters: transversal instrumentals, how to specify the disciplinary knowledge (to know) and professional (to know to do). Also this subject must strengthen the connection between design and computer, this is, between the image and its transformation to obtain a visually attractive result which will serve our interests. However, sometimes it is impossible to obtain the wished result. It makes the student to concentrate only in the usage of the computer application without using the theoretical knowledge obtained over the image value. Therefore, one of the main objectives of the subject is that the student get knowledge in the computer world as an answer to his necessities and to appreciate the real dimension of the usage of the offered resources as a tool for achieving the correct usage of

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The evaluation is based on the guided practice carried out during the lectures (60%) and the resolution of small problems (40%). It is essential to carry out all guided practice, because the final project is based on these practices. The mark of the practice is 33% of the final mark.

4. Theory

The theoretic lectures should not be seen as pure magisterial lectures because, in almost all the cases, they improve the learning from student side.

When the lectures start, the professor should stimulate the student curiosity through new or surprising information presentation, problem and question approaches. For that purpose, the professor must implement situations which will instruct the content relevance, as a direct indication of the task functionality.

For example, in the composition concept study, models with real environment are illustrated to the student. One of these examples was the analysis which was provided during the elections of the posters presented by each political group. This analysis increased the critical, analytical and reflexive capacity in relation to the visual fact in reference to the esthetical knowledge of the forms, processes and visual communication tendencies from the period.

As a consequence, the interest was maintained during the theoretical lectures. The students make questions and an activation of the previous knowledge is carried out. All these methods combined with a priorities and concise discussion of the professor, lead to a meaningful form of learning.

Brief descriptions of each thematic block constituting this part of the subject follow. The content is distributed in three blocks. The first one is focused on the computer graphic introduction. The second block treats the main aspects of the design. The third block is applied to the computer graphic characteristics.

Introduction to computer graphic. Concepts and historical approximations. The main objective is to provide to the student the computer graphic concept, analysing its evolution up to date.

The most relevant aspects of the design, design basis. This block covers the most part of the subject, being based in the different phases of the creation process, from the conceptual posing, problem understanding and final solution.

Computer graphic characteristics. Utility and visualization. Computer graphic types and development. According to the initial communicative objective, origin, method and application. The typography. The word. The text. The text management as computer graphic elements.

This last block has as a main objective to project in the element the knowledge achieved in previous blocks. Some of them were studied in other subjects of the degree. In that way, the student assimilates better the previous lessons contents and a continue auto evaluation system is maintained, where the student should remember the previous lessons.

As we indicate before, the theoretic lectures should not be seen as pure magisterial lectures. The professor should stimulate the student curiosity through new or surprising information presentation, problem and question approaches. To strengthen this premise, it is convenient to adopt the habit consisting of not teaching in advance the future material. In this way, when the instructor makes a question or asks the students about one concept or subject, they give an honest answer on what they know. This allows to evaluate the real knowledge of the students over that subject: to detect erroneous concepts, to create a debate forum in the lectures where the students learn to argument and defend their reasoning. In that way the participation gets incentives.

The instructor role in that forum is to lead the erroneous approaches. Through reasoned explanations the instructor must reject the possible wrong discussions which can appear, giving the pretended theory content. Thus, a double result is obtained, because the students must take notes during the lectures, they are forced to analyze and synthesize the information with their own words. In that way the students pay attention to the lectures.

5. Practices

The objective of the practice in the subject is based on the next points:

To influence in the Photoshop tools learning, whose characteristics such as its universality, power and versatility at the process of the digital image, make it an ideal tool.

To force the student to develop the ability of solving the problems from the known tools.

To demonstrate the utility and application of these tools through practical lectures which require the usage of the above mentioned tools.

To give an incentive to the student to learn by him/herself.

The practical program of the subject is organized in three big blocks where each session is equal to three laboratory hours. Previously, a small test is proposed to the students, in which the previous knowledge are evaluated.

On the basis of these test, the first block is developed. This block is the revision of the knowledge.

That block expects to fit out the knowledge in order to start the second block.

Knowledge revision.

In that first stage, different easy exercises are proposed and small problems are solved in guided form. In that way, the student gets familiarized with the tools, processes and methods.

The second and third blocks intend that the student acquires autonomy during the problem solution.

Guided works.

In this second stage in the lectures problems and projects are proposed. In that stage the guidelines for the problem correct solution are presented. The project is developed in the class. The student is guided on how must solve the problem and which are the needed tools to solve the question. In order the student to be able to put in practice the raised strategies; before it is required to know them and to know why it is important to use them Buron (3).

Through these practices, the student learns the utility of the computer program (learn how to use the tools) in the concrete problem development and solution and acquires the capacity of how to raise the solutions to the problems which are given in other projects.

The final project.

In that third stage, the students test the methods and processes knowledge acquired during the guided works. The student raise a project, should negotiate the time with the professor, the approach, the content and the project process. The professor supervises the project together with the student, being possible to ask possible doubts.

This work is sensitive to be realized in group. Previous works show that to work in cooperation with other partner has evident advantages over the motivation Huertas (Huertas, 1997).

Finally, the last sessions of the subject are dedicated to the works defence by each student.

6. Evaluation from the student part

Finishing the semester, an open questionnaire was filled in by the students; in that questionnaire, each student expressed their opinion over the course. It was filled in individually. The questionnaire enables to check how the students appreciate the practical application in the theory, how it helps them to understand better its functionality and be able to make himself concepts. Also positively assess that the lectures should be participative, because they dynamize their curiosity. At the same time, making easy the communication between the professor and the student, allowing the students to contribute its notions over the explained concepts.

With respect to the practical lectures, the students enjoy the realization of the exercises, since the difficulty of the usage is increased gradually allowing the students to consolidate the knowledge. The continuous evaluation gives an incentive to work day by day and see rewarded their effort proving that working autonomously achieves the objectives than before were very far.

7. Analysis and conclusions

In the present work the docent experience was presented. The objective is to motivate the learning and to increase the student participation with active methodologies. The results show clearly that it is very important to give an

incentive to the student interest on the task. Also, to develop, to explain its utility and application, to show the strategies to solve it, the relevance to acquire these knowledge's and processes for its integral formation as university graduates (Alonso, 2001; Pozo, 1999; Knight, 2006).

Nowadays, the professor is required to be more aware, reflexive and critic with the situation during the lectures. Moreover, to be able to motivate the students through the autonomous work and critical thought (Biggs, 1999). The reflection over our work is important if we do not want to achieve unmotivated students and absented in participation. These are the conclusions from our docent experience.

The student implication favours that the students work seriously, assume the responsibility and generate a pleasant working atmosphere.

The lesson selection from the student side, favours its implication both in the information searching and in the work presentation, etc.

The usage of the real world examples, related to the subject content gives an incentive of its interest, shoring that a practical application exists.

Some observations which may help other professors that want to apply a similar strategy: they must consider that all groups are different. There are students more reluctant to the participation; in those cases, the professor must do bigger efforts in the student motivation. Planning, adjusting the time on the class's activity for the intense works and implementing the works during periods without exams or other works. The participation and dedication is enhanced, when selecting the group work, by considering a correct group size, based on less than 5 persons. Also, by establishing personal monitoring tutorship's for each group. In the role-playing initiative, approximating the context to the one will be found in the real work to demonstrate the application and utility. In the lectures, to try to create an atmosphere in which the student will incorporate and feel comfortable, in order to express its ideas without feeling inhibited to express or to make a mistake.

References

- Alonso, J. (1995) Motivación y aprendizaje en el aula. *Cómo enseñar a pensar*, Madrid, Santillana.
- Alonso, J. (2001) Motivación y estrategias de aprendizaje: principios para su mejora en alumnos universitarios. *Didáctica Unviersitaria*, La Muralla.
- Biggs, J. (1999). What the student does: teaching for enhanced learning. *Higher Education research and development*, pp 57-75.
- Burón, J. (1995). *Motivación y aprendizaje*, Bilbao, Mensajero.
- Huertas, J.A. (1997) Motivación. *Querer aprender*. Buenos Aires, Aique.
- Knight, P.T. (2006). El profesorado de Educación Superior. *Formación para la excelencia*. Barcelona, Narcea.
- Solé, I. (1999) Disponibilidad para el aprendizaje y sentido del aprendizaje, *El constructivismo en el aula*. Barcelona, Graó.
- Pozo, I. (1999). *Aprender y enseñar ciencia*. Morata