

E-2. VIRTUAL WORKSHOP AS A TOOL TO PROMOTE AND ASSESS TRANSFERABLE SKILLS. CORRELATION BETWEEN TEACHER AND STUDENT ASSESSMENT

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Abstract. Generic skills are generally defined as a talent or ability desirable feature of a professional profile, these are not included in the curricula of university courses, but nevertheless should be encouraged as they are demanded by business professionals.

This paper presents a practical experience of the use of "Virtual Workshop", based on the teacher computer system Moodle, oriented so that students acquire the generic skills of the subject Building II, university studies for Engineer in Construction (Polytechnic School of Building Construction of Barcelona, ES-BCB) in Spain. Here students are encouraged to work in the areas of technical writing and its extra-class technical training, and to evaluate the work of other students applying rubrics established, with mixed evaluation criteria (of knowledge and cross-curricular). With the information obtained, statistical analysis is performed to validate the results and explain the goodness of this teaching technique in the proper scope of subject knowledge and generic skills for this degree.

The results indicate that the Virtual Workshop is an appropriate teaching tool, and allows application calibrate and correlate the results with the overall evaluation process of the course, providing make proposals for improvement in later courses.

Introduction. The European educational context is being induced by a modification or an adaptation process in teaching, relocating it from the up to now unique educational process, focused on traditional classes with the professor as the origin of the knowledge, to a knowledge acquisition process that is absolutely student-centered. This change in the college educational procedure has been accompanied by the use of new communication technologies, such as the virtual campus, on-line studies,

internet, etc. [1-4]. On the other hand, in the curriculum design processes of a subject; professors should be conscious that students are now spending more time and cognitive capacity in the acquisition, edition and exchange of the knowledge by the use of electronic media [5-6] which presents an increasing versatility, availability, simplicity and becomes easy-to-reach.

Educational Framework and Study Subjects. "Constructions II" is the course studied in the present work; this course is part of the studies to acquire a university technical degree. This is a four-month course in the first year of study (Obligatory in the Curriculum Block). It takes place in the four-month term 2A, and consists of 3 ECTS (European Credits Transfer System credits), subdivided into Theory 0.72 ECTS, Practices 0.3 ECTS, Guided Activities 0.18 ECTS and independent self-learning 1.8 ECTS. The subject is simultaneously given to four groups for all the four-month terms (1Q: autumn; 2Q: spring): two groups of students in the morning (Groups 1M and 2M) and two groups of students in the afternoon (Groups 3T and 4T).

Data analyses. With these criteria and variables to analyze, the data processing program of statistical analysis SPSS V17 for Windows, was used in order to obtain the following parameters: general statistical description for each of the variables in a isolated form, with the purpose of learning and distinguishing the samples in an isolated form; analysis of bi-varied correlation was performed to seek affinity among the values of pairs of samples and to compare them with the aim of verifying the relation among the different variables.

Fig. 1 represents the significance (value of calculation mistake) and the correlation Tau-b of Kendall for the study variables (see Table 1).

Table 1. Variables.

VAR01	Qualification of the Work,
VAR02	Teacher Qualification,
VAR03	Qualification between Students,
VAR04= ((Average VAR03) + VAR02)/2	Qualification as Appraising-,
VAR05=VAR01+VAR02	Qualification of the Virtual Workshop-,
VAR06 = ?	Final Qualification of the Course.

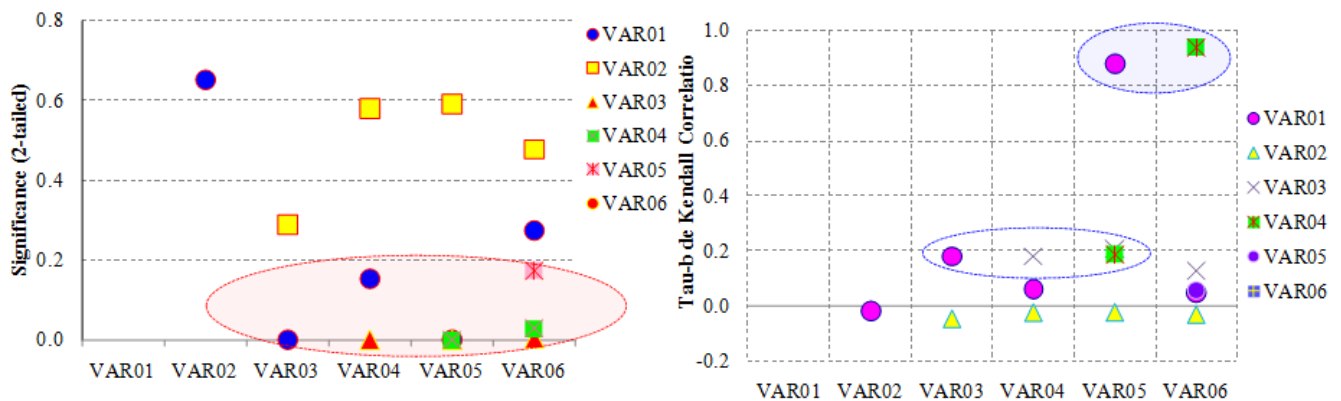


Fig. 1. Significance and correlation of study variables.

The variable VAR05 with VAR01, and VAR06 with VAR04, they are better interrelated (and with smaller significance).

The statistic analysis indicates that the virtual workshop is a tool which helps to assess the students, to improve the acquisition of knowledge and professional abilities.

Finally, it is necessary that more studies are to be carried out by other researches to know the impact of virtual workshops to the learning process.

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