

INFLUENCE OF THE FACTORS INVOLVED IN THE EVALUATION OF TECHNICAL SUBJECTS

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1. Introduction

The new Higher Education Area has changed the way of understanding teaching. The study of factors influencing the teaching-learning process is necessary to improve student learning [1]. Another important aspect is the assessment process. Studies related to evaluation show that, with the use of objective evaluation instruments and the involvement of students in the evaluation process, it is facilitated the gradual acquisition of competences, both generic and those of the specific field of the project, hence the Importance of acceptance of the evaluation system by the student [2-4]. Taking into account the previous premises, the objective of this work is to analyze the influence of the different factors that affect the evaluation in the technical subjects and their influence on the students' learning.

2. Method

The influence of the factors influencing the evaluation has been studied through the subject "Resistance of Materials and Elasticity", mandatory subject of second course (fourth semester) of 6 ECT credits and type I. The continuous evaluation in the Groups 1,2 and 3 of the subject, divided into three parts: two partial tests, class practices and a global test. The data were obtained by means of a survey made by the students, structured in various aspects: The convocation in which the basic and fundamental subjects for understanding and learning from each subject were approved as a determining factor in their ability to understand, valuation by students of the subject in different aspects: adaptation to the ECTS, specific objectives achieved in the subject, etc. and valuation of the assessments made as to whether it is appropriate or not to the subject, if it's any feedback, etc.

3. Results and analysis

The number of students under study is 172. Of these, 151 passed the subject and 21 failing grade, reaching a percentage of approved about 75%.

Figure 1 shows that the grades obtained by the students are

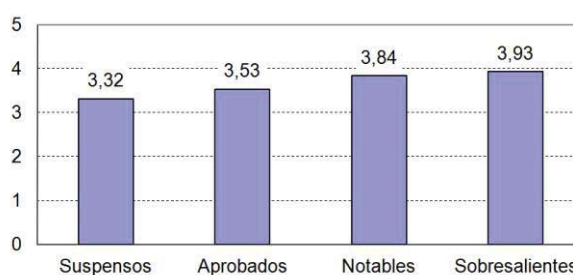


Fig. 1: Relationship between grades and perception of assessment

proportional to their perception on the evaluation, obtaining worse grades those students who are less in agreement with the type of evaluation. All students agree on the level of learning objectives achieved, while achieving higher grades, those students who consider that the evaluation helped them to learn.

In Figure 2, it can be observed that from the same learning of the students, the

type of evaluation influences the grades. While an evaluation based on partial tests and course work, without global test, would reduce the number of failing grade and increase the grade B, an evaluation without the class work, would influence very negatively the results. If the evaluation was done using a single global test, the results would be worse, improving grades if the overall test is added to the class work.

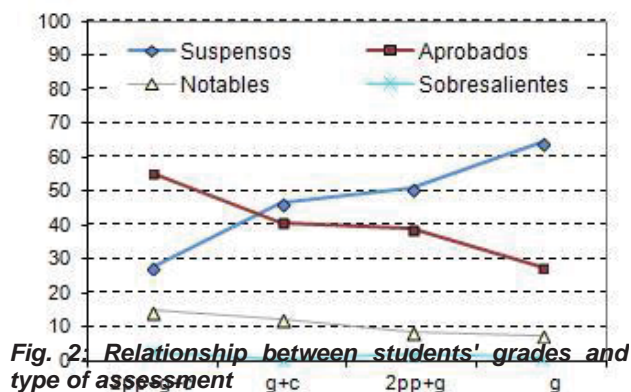


Fig. 2. Relationship between students' grades and type of assessment

4. Conclusions

In response to the objective of the work, the conclusions drawn are detailed:

- The student's perception of the subject and its evaluation system is a determining factor in its motivation, obtaining better grades the students who have a more favorable view of the subject.
- The type of evaluation performed has a decisive influence on the grades and on the way to deal with the learning of the subject, with continuous evaluation being the best way to boost the student's work and the easiest to acquire the competences.

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