these two predictors (experimental: X_2, X_6; control: X_8, X_4) explain the 31.9% and 44.1% of criterion variability respectively.

To prove the $R^2=0$ hypothesis, with multiple variables, an analysis of variance test was carried out (**Table 6)**, taking into account that the total variability of the criterion variable is divided between the part which can be attributed to regression and the residual part.

Table 6. ANOVA Test for *Satisfaction* criterion variable (Y), for each step.

Model		Squared sum	gl	Quadratic average	F	Sig.
EXPERIMENTAL						
1	Regression	12.226	1	12.226	39.106	***0.000[a]
	Residual	28.763	92	0.313		
	Total	40.989	93			
2	Regression	13.657	2	6.828	22.735	***0.000[b]
	Residual	27.332	91	0.300		
	Total	40.989	93			
CONTROL						
1	Regression	15.156	1		76.034	***0.000[c]
	Residual	20.930	105			
	Total	36.086	106			
2	Regression	16.291	2		2.796	***0.000[d]
	Residual	19.795				
	Total	36.086				

a. Predictor variables: (constant), methodology (X_2)
b. Predictor variables: (constant), methodology (
c. Predictor variables: (constant), usefulness (
d. Predictor variables: (constant), usefulne
***p<0.001

3.5. Regression equati

The statistical data o .on, as seen in **Table 7**, are: the *regression coefficient (B)*, wh which the criterion increases for every unit the predictor variab ich is the standardized regression coefficient; the result of the *t Stu* hypothesis between two variables; and its *degree of significance (p)* whic s that regression is significant for that variable.

able 7. Coefficient table

Model		on-standardiseed coefficients		Typified coefficients	t	Sig.
		B	Standard Error	Beta		
EXPERIMENTAL						
1	(Constant)	2.069	0.316		6.548	***0.000
	Methodology (X_2)	0.506	0.081	0.546	6.253	***0.000
2	(Constant)	**1.579**	0.382		4.128	***0.000
	Methodology (X_2)	**0.459**	0.082	0.495	5.578	***0.000
	Team (X_6)	**0.162**	0.074	0.194	2.183	*0.032
CONTROL						
1	(Constant)	1.521	0.200		7.602	***0.000
	Usefulness (X_9)	0.504	0.058	0.648	8.720	***0.000
2	(Constant)	**0.868**	0.331		2.618	*0.010
	Usefulness (X_9)	**0.475**	0.058	0.610	8.215	*0.000
	Achievement/ Objectives (X_3)	**0.233**	0.095	0.181	2.442	*0.016

***p<0.001; **p<0.01; *p<0.05

When all calculations have been made, the regression model obtained for each of the groups (experimental and control) follows the equations:

$$Y_{experimental} = 0{,}459\ X_2 + 0{,}162\ X_6 + 1{,}579 \quad \text{(2) Multiple regression model, experimental group}$$
$$Y_{control} = 0{,}475\ X_9 + 0{,}233\ X_4 + 0{,}868 \quad \text{(3) Multiple regression model, control group}$$

That is, the variables which are more intensely related to satisfaction of the students on the course in the *experimental* group are the *methodology employed* (which accounts for the 2.98% variance in *satisfaction*, where *Beta i*s: 0.495; *t*: 5.578; $p<0.001$); secondly, it is related to *teamwork* carried out throughout the course (which accounts for the 3.5% variance in *satisfaction*, where *Beta* is: 0.194; *t*: 2.183; $p<0.05$).

In the case of the students in the control group, their degree of satisfaction is related, first of all, to *usefulness of course content* for future professionals (which accounts for the 42.0% variance in *satisfaction*, where *Beta* is: 0.610; *t*: 8.215; $p<0.001$; and, secondly, because they consider that, with the methodology employed, they have achieved *learning objectives* (which accounts for the 3.1% variance in *satisfaction*, where *Beta* is: 0.181; *t:* 2.442; $p<0.05$).

4. Discussions

Previous studies [18] have shown that when active learning didactic methodology is used: a) student reaction to the course was positive; b) students learned the necessary knowledge of a basic subject at a declarative level; c) students acquired skills related to defined competencies; and d) students demonstrated transfer of knowledge acquired when carrying out practical activities. These results indicated empirical evidence which led us to reflect on different didactic options, in order to choose those which would contribute more effectively and efficiently to improving learning in engineering. In addition, it was also observed that active learning leads to greater student responsibility in the learning process, greater motivation and a more satisfactory final result for all those involved in the process.

It is interesting to analyse the results obtained in this present study because they can help us to understand the variables which, to a greater or lesser degree, explain the variability observed in the student "*satisfaction*" variable, according to the group the students belonged to: the experimental group, subjected to active methodology, or the control group, where traditional methodology was used.

The regression model carried out shows that, in the case of the students in the control group (**Equation 3**), their degree of satisfaction seems to be related, first of all, to u*sefulness* of course content for future professionals, and, secondly, to the fact that they consider that the methodology employed has enabled them to achieve learning *objectives*.

However, in the case of the experimental group (**Equation 2**), the degree of satisfaction is mainly related to the *methodology* employed in the teaching/learning process, because they consider that it has helped them to understand the course content better, and, secondly, to *teamwork* carried out throughout the course.

5. Conclusions

This paper aims to examine in detail factors relating to students' satisfaction in a specific teaching/learning process. Of the nine factors selected initially by the research team (**Table 2**), we might think *a priori* that student satisfaction levels could be related to positive academic results (*Academic evaluation* X_1), to the fact that the subject is easy for them (*the course content for this subject is difficult,* X_2) or to the relationship they have with the teacher of the subject (*the teacher has helped me to understand the course*, X_3). However, the results show that the factors directly related to student satisfaction vary depending on the didactic methodology employed in the teaching/learning process, and that the students who are most satisfied are those who follow a course based on a teaching methodology that involves them more in the learning process, and this is precisely the variable which has a greater relation with student satisfaction.

The use of student-centred didactic methodologies involving constructive learning, teamwork, *bLearning* resources, and evaluation integrated in the learning process help us, therefore, to improve the student learning process, because not only do results improve, but the employment of this type of methodology increases student satisfaction and, therefore, facilitates and motivates learning. To support this kind of methodologies and approaches more open virtual learning environments are needed that make easy to use the most suitable technological tools for the bLearning experiences with a personalization orientation to reinforce the student centred process.

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Final list