

## WHAT SECONDARY AND HIGHER EDUCATION STUDENTS SAYS ABOUT THE TEACHING PRACTICE – A QUALITY EDUCATION STUDY IN ÉVORA AND BEJA (PORTUGAL)

Jorge Bonito<sup>1</sup>, jbonito@uevora.pt  
Hugo Rebelo<sup>2</sup>, hrfr@uevora.pt  
Maria Manuela Oliveira<sup>3</sup>, mmo@uevora.pt  
Vitor Trindade<sup>4</sup>, vitor.manuel.trindade@gmail.com

### Abstract

Quality is, currently, a concern of most systems, despite having multiple meanings. Basically, it reflects an intrinsic property of any entity, which allows it to be compared with any other entity of its kind. Naturally, quality is also assumed to be education main target (eg, MEC, 1999).

In an attempt to answer to these concerns, a three years project was designed (2007/2010), which sought to realize the perspectives of Portuguese secondary and higher education students, about teaching quality, seeking an understanding of all factors involved (Ferreira, 2009). In this article we present results for the variables "students' motivation", "teachers' commitment" and "teaching methodologies", comparing the differences found in the transition from secondary education to higher education.

Analyzed the standardized importance of the variables under study, we found that in the transition to higher education there is a decreased emphasis on teaching methodologies, valuing the motivation level and teachers' commitment, confirming that in the methodologies developed to improve the quality of education, the teacher is the basic element of their development (Montoro, 1999). These results confirm Gonçalves *et al.* (2005) studies, which concluded that the performance of teachers and motivated students are among the factors influencing students' satisfaction levels.

**Key-words:** Quality education; Teaching practice; Students' perceptions.

### Issues about quality education

The University of Évora, participates, through its Centre for Research in Education and Psychology, in a study that pursues, among other objectives (Bonito, 2009), identify the context variables that support the representation of "quality of education", provided by their students: "From Quality Teaching to the Academic Success: a longitudinal study

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<sup>1</sup> University of Évora, CIEP – Research Center on Education and Psychology, Portugal. PhD Professor.

<sup>2</sup> University of Évora, CIEP – Research Center on Education and Psychology, Portugal. Scholarship Researcher, attending master's degree in School Administration.

<sup>3</sup> University of Évora, and CIMA – Center for Research on Mathematics and its Applications, Portugal. PhD Professor.

<sup>4</sup> University of Évora, and CIEP – Research Center on Education and Psychology, Portugal. PhD Professor Emeritus.

about the student's perspectives on the relationships between effective quality teaching and academic success" ref.(PTDC/CED/66574/2006), work funded by the Foundation for Science and Technology of the Ministry of Science, Technology and Higher Education of Portugal's Government.

Quality is, today, a concern inherent to most systems, and it can be studied from different perspectives. OECD and UNESCO use, to define quality of education, the paradigm "input-process-output", whereas all these links in the system must be treated together (UNESCO/OECD, 2003), the results alone are not enough to define quality, is necessary to take into account the resources and processes that determine it (OECD, 1992). Educational system is a function of several variables and, above all, the interaction between these factors (Ethier, 1989; OECD, 1992; Rinehart 1993; Papadopoulos,1994; Hosbsbawn, 1995; Leonard, 1996; Venâncio and Otero, 2003; Chua, 2004; Saraiva, 2004; Oliveira and Araújo, 2005; Amante, 2007; Bonito and Trindade, 2008).

According to Saraiva (2004), all the approaches related to organizational characteristics of schools generally tend to be formed around the following three major areas: the physical structure (size, number of classes, management of space, material resources), the administrative structure (management, decision-making, teaching and non teaching staff) and the social structure (inter-relations, internal democracy, the school culture, climate). The concept of quality in higher education can also be seen, according to Harvey, cited by Amante (2007), in terms of excellence, as something special, which aims to achieve perfect results.

When the target is to improve the education system, research shows that many variables are involved. Factors such as, human resources, curriculum, planning, and material resources, are appointed by Venâncio and Otero (2003) as those who seem to have more influence on the quality of institutions. These authors argue that it is important to understand quality in terms of the students' development, because it implies cognitive outcomes, expectations, attitude toward school, sociability and ability to work in a team, initiative, ability to make decisions and acquisition of values related with the spirit of citizenship, freedom and respect for difference.

Teaching practices influence the results obtained by students. The methods and means of teaching can be very diverse, because the teacher can emphasize the transmission of knowledge and make of the student a good aide-memoire, but may also have the prospect that the students are building their own knowledge, and if so, organize the teaching based on students' ideas and experiences, create conditions conducive to the formulation of summaries that can be verified through discussion and experimentation (Costa, 2002).

Education can only steps forward with strong commitment of teachers, pupils and parents who form the backbone of the system and have a personal interest in quality and the levels of success and progress at school (MacBeath *et al*, 2000). Teixeira (2000) warns that teacher's commitment is a result from the devotion that he takes with the students, their project and career, their profession, the professional based knowledge and the exact school (or organization) in which he's teaching.

To improve the quality of educational service, basis on everything that was said, the development of these skills cannot be achieved, we believe, without a dedicated and committed work in and to the school (Saragoça *et al.*, 2009), with proper teaching methodologies, with ability to motivate students and generate high levels of satisfaction (Rebelo *et al.*, 2009). This study will analyze particularly these variables, about teaching practice, seeking for differences found in the transition from secondary education to higher education.

## **Methodology**

### Participants

For this study we select 306 students, enrolled in the academic year of 2007/2008, at Alentejo region, Portugal, the 36 students who attended the final year of secondary education, 22 (61.1%) female gender, with an average age of 19 years; and 270 students in the 1st year of graduate courses in Nursing and Management, of which 121 (44.8%) at the University of Évora, 135 (50.0%) in the Polytechnic Institute of Beja and 14 (5.2%) at the Polytechnic Institute of Portalegre, all institutions of higher education. 198 (73.3%) students that responded to the questionnaire were female. The average age of students was 24 years, ranging between 18 and 52 years.

### Procedures

To explore students' representations about "Quality of Education" it has been constructed and implemented a structured questionnaire. The data collection occurred between the months of May and June 2008, and the questionnaire was applied directly by the team of researchers in the classroom, after obtaining the necessary authorizations for it.

The different dimensions of quality in analysis, such as "motivation", "teachers' commitment", "pedagogical" materials", "teaching methodologies", "assessment methodologies", "curricular units", "teaching-learning process organization", "educational Institution infrastructure and "resources adequacy", "profile and course structure adequacy", the "degree of satisfaction" and "academic success"; resulted principally from the literature review and researchers experience, considering the study of OECD (1989) and studies of Ethier (1989), Deming (1990), Bateman and Roberts (1994), Tribus (1995), Turner (1995), Chua (2004), Saraiva (2004), Amante(2007) and Correia (2008), among others. The final version was obtained by consensus among members of the research project, and then subjected to a panel of external experts, who gave information that would clarify the language and improve the construction of items.

The questionnaire consists of 73 items, with a range of response formed by five points (*Lickert* modified type), with the following response options: completely disagree, disagree, agree, agree completely, I do not know/Not applicable/ I am undecided. The instrument also includes some social demography questions, as well as some questions of free answer on the understanding of educational quality, the aspects to improve the institution of education and how to improve school results.

The 73 items of the questionnaire were treated with the software SPSS (version 16.0), by using descriptive and inferential analysis, allowed established associations with some significance between variables, selecting those who had a degree of confidence higher than 95%. To calculate the average there were used the following weighting coefficients: 1 - completely disagree, 2 - disagree, 3 - Agree, 4 - I agree completely, the expected average score is 2.5. The answers "Do not know / Not applicable / I am undecided" were coded with 98 and the non-responses and/void as system missing (99). Furthermore, it

was used the analysis of variance, with the aim of identify the representations of students about quality in education and there was used the method of the Regression Trees (CART algorithm).

## Methodology

Mann-Whitney U test is the usual alternative to *t* tests for independent samples (Pereira, 2006). So, we intend to test the null hypothesis, which states that the population average scores are the same for the two groups. This test also allows seeing if one group had higher values than the other. Selected the three variables under study, we define “Educational Level” as grouping variable. The results are shown in Table 1 and Table 2.

Table 1

*Mann-Whitney U test results - Ranks*

Ranks				
	Education Level	N	Mean Rank	Sum of Ranks
Teachers Commitment	Secondary Education	36	192,31	6923,00
	Higher Education	270	148,33	40048,00
	Total	306		
Motivation	Secondary Education	36	143,65	5171,50
	Higher Education	270	154,81	41799,50
	Total	306		
Teaching Methodologies	Secondary Education	36	171,46	6172,50
	Higher Education	270	151,11	40798,50
	Total	306		

Table 2

*Mann-Whitney U test results - Statistics*

Test Statistics <sup>a</sup>			
	Teachers Commitment	Motivation	Teaching Methodologies
Mann-Whitney U	3463,000	4505,500	4213,500
Wilcoxon W	40048,000	5171,500	40798,500
Z	-2,816	-,743	-1,298
Asymp. Sig. (2-tailed)	,005	,457	,194

a. Grouping Variable: Education Level

Regarding the variable “teachers Commitment”, the bilateral significance level observed of 0,005 ( $p < .05$ ) allows us to reject the null hypothesis, to a level of confidence of 95%. These results seem to indicate that in transition from secondary education to higher

education, students experience a decrease in the level of commitment of their teachers. For the variables “motivation” and “teaching methodologies” we cannot assume that these aspects have different average means ( $p > .05$ ) but the mean rank permit to realize that motivation level is slightly superior for the higher education students. The opposite occurs for the variable “teaching methodologies”; however it is worth recalling that the differences are not statistically significant.

In order to realize the importance of these results, within the sphere of quality education representations, there was used the method of Regressions Trees. Growing CRT method can give us a more realistic idea of the relationship between the degree of satisfaction and all the variables studied (Figure 1 and 2).

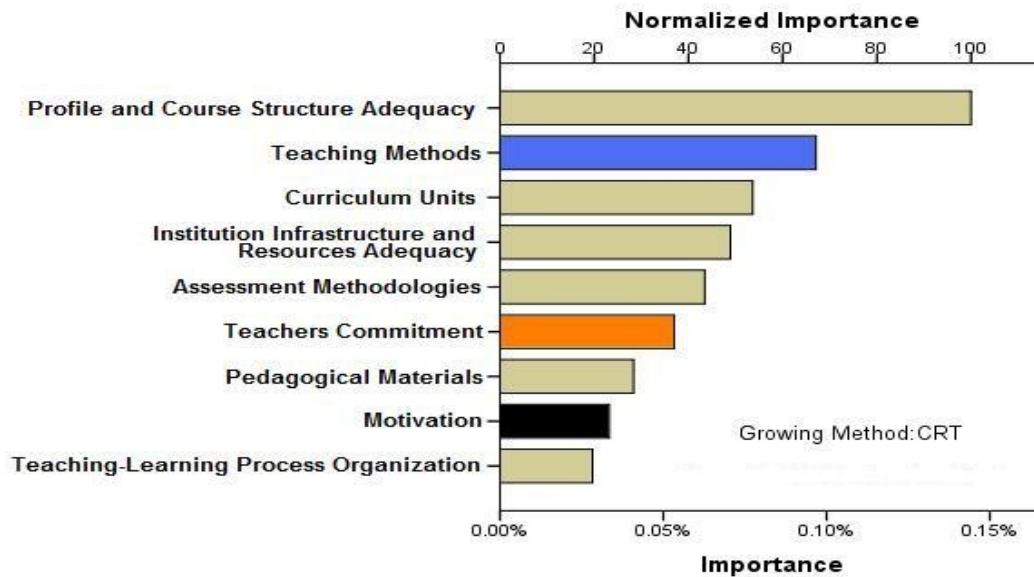


Figure 1 - Importance attributed to each variable to the satisfaction degree for students in secondary school.

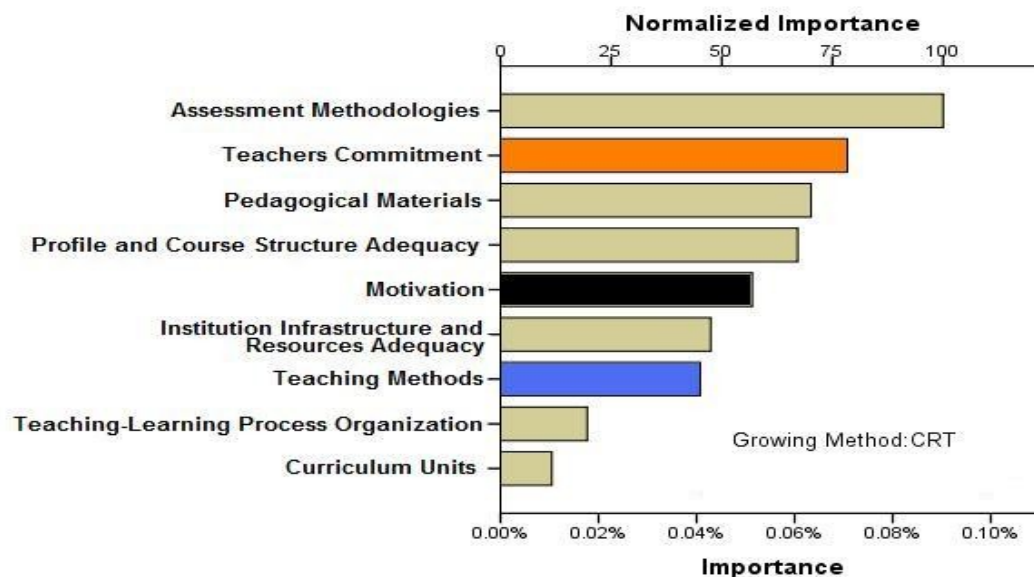


Figure 2 - Importance attributed to each variable to the satisfaction degree for students in higher education.

## Discussion

At this study were in particular analysis the two variables most directly relate to teachers, vital elements in the learning process. The results seem to indicate that in the transition between secondary education and higher education there is a significant decrease ( $p < .05$ ) of the satisfaction levels with the teachers' commitment. The high school students put more emphasis on teaching methods than their older colleagues (171.46 – 151.11), more dissatisfied with the teachers' commitment than with their actual methods. The analysis of the variables standard importance indicates that the variable "teachers' commitment" is the second largest contributor (75%), in higher education, to the of students satisfaction level, reflected in the quality of education they receive confirming that in the methodologies developed to improve the quality of education, the teacher is the basic element of their development (Montoro, 1999).

The fact that these variables have a statistically significant difference emphasizes the importance of developing actions that somehow motivate academics to become more involved, dedicated, with its functions in order to captivate the students. Note that there is an appreciation of the motivational aspect in higher education (25% to 55%), corroborated by the values of the mean rank obtained with the Mann-Whitney U test. These results confirm Gonçalves *et al.* (2005) studies, which concluded that the performance of teachers and motivated students are among the factors influencing students' satisfaction levels.

Since this study focused on students in the course initial year, it is appropriate to see how these representations will evolve as the students progress through the course, and will create more formed opinions about the performance of their teachers. The devaluation of the importance of teaching methods has been one aspect that, in this study in particular has sparked debate since it may be intrinsically linked to the widespread belief that in the lessons of higher education, it should be used, clearly, the lecture method.

This is an idea that can be further enhanced in subsequent stages of research, ie how the concepts can affect the quality of representations made by students, particularly those related with their expectations.

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