Evaluating Teaching and Research Activities Finding the Right Balance

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Since 1990, research and teaching activities of academic staff in Spanish universities have been periodically assessed. There are national, regional and institutional assessments. Each evaluation is organized in a different way and the organisation itself reflects the importance given to each activity. In most cases, positive assessment are linked to a salary increase and other perk benefits.

In this article, we analyse the evaluation system of teaching and research activities and how they could be, in fact, orienting to promote research activities and, as a consequence, to devaluate teaching activities.

Introduction

Relations between teaching and research within higher education institutions have always been difficult (Vidal and Quintanilla, 2000). An adequate balance between both activities has not yet been found. Various factors which affect these relations and which make institutions and individuals orient their activities more towards teaching or research have been pointed out. However, the problem is not devoting one's time to one or the other activity, except if attention to one activity implies a decrease in quality of the other activity. And this is exactly where the problem lies.

In the Spanish case, the structure of the Spanish university system makes it impossible for an individual to do only research activities. Faculty must necessarily combine this activity with teaching (by the way, undergraduate teaching). In other words, academic staff are forced to devote an important part of their time to teaching activities, a time that is, in addition, controlled by the institution. In fact, this is the only time that is controlled by universities. For this reason, the problem of the balance between teaching and research in Spain is especially relevant.

But, on the other hand, one of the most important aspects to take into account in order to introduce changes and improvements in the activities of universities is the individual motivation of each of the faculty, who are the principal agents of these institutions. Individual motivation is affected by various factors, of which promotion opportunities to better positions or wage improvements within the same position are the most remarkable ones. In Spain, the way these two measures of motivating faculty have been implemented have brought about a very clear message: research is more important than teaching. So, this is not only the feeling of academics, but also an explicit policy. This message looks clear in the model for 1) the promotion of teaching staff, 2) teaching assessment and 3) research assessment, as we shall see below.

Finally, there is another important factor that must be analysed. Research is important for the national system of science and technology, and the attraction power of this system, especially as far as resources are concerned, is really high for university faculty. Not only can faculty see their infrastructures increased but also their salaries.

When a university system and a science and technology system grow significantly, as in the Spanish case, the tension between teaching and research

also grows due to the speed at which both systems demand personal resources and dedication. The problem that must be solved at this level is how to reconcile the need, on the one hand, to increase and improve teaching activities and, on the other hand, some science policy goals such as to increase university-industry relations or to improve competitiveness in the various EU Frame Programmes.

So, institutional and educational policies are affected by powerful objectives from the national or European scientific policy (in Spain, also at the regional science policy), which are supported by important and appealing budgetary assignments. Having all this in mind, the questions with very difficult answers are the following:

- Should educational and scientific policies be co-ordinated as far as university is concerned?
- And, in case of disagreement, which should be given priority, that is, which has more impact on the economy and welfare of a country?

After this general introduction to the problem, in what follows we shall analyse the Spanish case in more detail. Firstly, we shall describe the main changes which have occurred in the Spanish university system and the status of academic staff in Spanish universities. Secondly, we shall describe the system of incentives for academic staff. Third, we shall analyse some of the consequences brought about by the incentive system.

The context: some changes in Spanish higher education

Over the last two decades, Spain has experienced a period of profound changes affecting its social and economic systems. Political and economic changes have considerably affected the higher education system. Probably, the most outstanding fact has been the dramatic growth of the whole higher education system. For instance:

- Fifteen out of the sixty current universities were created after 1968.
- The number of students has multiplied by 3 in the last two decades and faculty has grown at similar pace (although this growth stopped suddenly at the end of the nineties due to a dramatic change in the demographic trend).
- In 1978 there were 43 different study programs and now there are more than 122 regulated programs.
- The financial resources for higher education have increased from 0.5% of the GDP in 1985 to 1.2% in 1998.
- Higher Education R&D expenditure has multiplied by four (constant currency) since 1982. In that year, 22% of the total expenditure in R&D was spent at universities, and now it has increased to 32%. Besides, this trend is the opposite of the science policy goals for this period. One those were the increasing of research at industry.

• The number of publications in the ISI databases have multiplied by more than 4 times from 1982 to 1997, and the percentage of the total publications has increased from 0.8% to 2.4% in those years.

In summary, it may be claimed that the system has increased in absolute terms as far as institutions, centres, students and lectures are concerned. It has also increased in global economic resources for higher education. As for research, both the global amount set aside for this purpose and the relative involvement of universities in the total of R&D activities in Spain have risen. In other words, the efficiency of Spanish research, especially academic research, has improved.

The context: the status of academic staff

There are two main categories of academic staff: tenured and nontenured staff. Tenured staff have the legal status of civil servants. With the exception of a few professionals, who have part-time positions in universities as teachers in specific fields, a non-tenured staff position is considered as a provisional situation for people starting out their academic career. Obviously, the objective of the majority of non-tenured academic staff is to eventually obtain a tenured position.

The working conditions of academic staff in Spanish universities depends on three main actors:

Central Government establishes salaries, status, general duties and rights of academic and non-academic, tenured and non-tenured staff. The central government established in 1990 an assessment system of tenured staff with consequences on salaries and promotion.

Regional governments. Because regional governments finance universities, the staff policy carried out by universities is strongly dependent on financial deals with regional governments that eventually (though indirectly) have to cover the pay roll. On the other hand, as is defined in the new University Act (*Ley de Ordenación Universitaria*, LOU) they could establish salary increases for the staff employed in universities under their patronage. Nevertheless, these increases would have to be paid as bonuses based on some type of individual assessment and not as increases in basic salary, which by law must be homogeneous in all Spanish public universities.

Universities define the number and type of positions in each department, and specific rules for the promotion of staff (limited by general rules established by the central government). They are responsible for the assessment of teaching activities of academic staff.

In summary, although Spanish professors work in autonomous universities, their homogeneous salaries are fixed by the central government. Nevertheless, there is the possibility of receiving salary increases based on performance assessed at central, regional and institutional level. This complex system is important, not for the modest salary increase, but because it is the only regulated incentive for academic staff in a system extremely homogeneous coming from a typical napoleonic model of universities.

In principle, all Spanish universities are research oriented. This means that academics have to work on both types of activities. In fact, academics at Spanish universities spend 46% of their time on teaching activities, 41% on research and 13% on administrative and other activities (INE, 1991). As a consequence, there is a logical tension between efforts devoted to both activities.

Basic salaries of academic staff in Spain are lower that in other European countries (Enders, 2001). To counterbalance these comparatively low salaries, the legal system allows academics (even in full time positions) to obtain additional compensations for related activities. Academic staff can deal with public or private institutions for special services such as: giving special courses (continuing education, for instance), consulting, applied research contracts, and so on. The university itself signs these contracts, retains a small part as overheads and pays the academics involved in the contracts as agreed beforehand. These extra earnings mainly affect academics working in marketoriented fields, where more dynamic individuals can double their earnings. Nevertheless, there are no data for evaluating the average incidence in the earnings of academics.

Academic staff assessment

In Spanish universities, individual activity of academic staff is evaluated through several mechanisms (Mora, 2001). On one hand, there are national assessment procedures, regional ones and some organized by the institutions themselves. On the other hand, there are procedures for assessing teaching, research and services. The following are the assessment system currently in use.

National assessment system

At the beginning of the 1990s, the Central Government established a system for rewarding productivity in order to promote the commitment of tenured academic staff to teaching and research. Since 1990, the research and teaching of tenured professors have been periodically assessed. Each evaluation is organised in a different way and the organisation itself reflects the importance given to each activity. *Evaluation* is not only a method for making statements or compare situations. *Evaluation* is also a way of shaping the system. It is one of the ways for public policies to make goals explicit in some way.

There are two types of individual assessment:

Teaching assessment. Teaching activity of tenured academic staff is assessed each five years. For each positive evaluation professors receive a

permanent increase in their salaries. Almost everybody, with rare exceptions in some universities, is positively assessed (Maltras *et al.*, 1998). There is an easy explanation for this "high performance". This type of evaluation is mandatory by law, but universities are responsible for carrying out this assessment. Arguing that there is a lack of reliable standards in the assessment of teaching, universities (self-governed by staff) are reluctant to "punish colleagues". But, apart from this, what seems to be the key factor for this behaviour is that, from the very beginning, there was a non-explicit political decision to use this evaluation system as a way for a general salary increment for faculty. This system has become a formality, and an additional method for rewarding seniority. The number of positive evaluations is limited to five, in such a way that after 25 years of teaching no additional increases are awarded. The value of each bonus depends on rank and run from \notin 1 200 to \notin 1 500 per year.

Research assessment. Individual research activities are evaluated through a two-fold system. On one hand, proposals for research projects requesting public funds are evaluated *ex ante* and *ex post*, and only those reaching certain standards of quality are financed. The second type of research evaluation only affects professors (non-tenured academic staff are evaluated, formally and informally, in the process of promotion). National Committees composed of experts for each group of disciplines are in charge of the assessment of individual research activity. For each period of six years, professors can present their most relevant publications to the corresponding committee in the hope of receiving a positive assessment. Nevertheless, this evaluation is relatively strict, and "research periods" are frequently evaluated negatively.

Professors receive a permanent bonus after a positive evaluation of each six years of research activity. This is also limited to six positive evaluations. The economic value of these bonuses is the same as in the case of teaching activities. Nevertheless, because assessment criteria are more rigorous, positive assessment has become a symbol of prestige, and a pre-requisite for promotion to higher positions. Using data from a group of universities, we have estimated that, on average, the Spanish equivalent to full professors have less than two research bonuses, the second level of professors have less than one in average, and very few third level professors have one bonus (Mora, 2001).

The relevance of the research assessment has been even enhanced by the new law promulgated at the end of 2001. For instance, to be a member of committees for selection of new staff it is required to hold research bonus (the number depending on the level of the position). A new project for regulating doctoral studies includes these research bonus as a condition for both delivering courses and being member of the thesis committees.

Regional assessments

The old law established that the universities' Social Councils might establish a system of individual incentives. Only at the end of the 1990s did some Social Councils agree with the regional authorities to the establishment of a new system of bonuses based on individual performance. Regional governments of The Basque Country, Navarra and the Canary Islands initiated this process (incidentally, these are regions with special financial status where governments have more capacity for taking initiatives). The models were different in each region, but basically they established three types of bonuses for compensating research, teaching and services. Assessment of research was the less conflictual, but again, assessment of teaching generated more conflicts. Generally speaking, the model used for teaching evaluation was based on the assessment of a memoir presented by teachers explaining their teaching activities. Using previously agreed criteria, each activity received a number of points, and depending on the total number of points, teachers obtained one, or more, "teaching bonuses". Obtaining a first (perhaps, even a second) bonus was relatively easy, but the system started to distinguish teacher with a higher commitment to their teaching duties. At regional level, bonuses to compensate service were also established but they were merely an extra compensation to academics in governing positions and were not based on any assessment.

The new law allows regional governments (instead of Social Councils of each universities) to establish performance bonus based on individual assessment. At this moment, all the autonomous regions are developing such systems. They are still proposals with a wider variety of mechanisms but with a general common approach: bonuses based on assessment of research, teaching and services. As an example, we can mention the case of the Canary Islands (a region with previous experience in these processes). The new system considers the three aspects of the university activity and in each one establish three levels. Levels are based on a scoring system where every university activity is rated. For the teaching assessment the "basket" include the self-evaluation of activities, the evaluation made by the own department and results of the students evaluation. The system allows a maximum salary increase of \notin 9 000 per year for academics obtaining the three levels in the trees aspects.

Institutional assessments

As we have mentioned before, institutions are responsible for assessing teaching of tenured academic staff following the national scheme. However, this cannot be considered a real process of evaluation. Apart of this failed mechanism, most universities have established a system for students surveying teachers. Students carry out a yearly survey on each teacher and each course. Overall results of the survey are published, but only the assessed teacher and the university itself have access to individual data. The use of these surveys is still a controversial issue, because these surveys present many methodological problems in being interpreted. Nevertheless, they have two positive effects: 1) universities detect problematic cases due to teachers' lack of pedagogical abilities or to some type of conflict between students and teachers; 2) this survey affects teachers' attitudes, and at least stimulate the fulfilment of basic teaching duties, and in many cases, how teachers handle these duties. Nevertheless, the lack of visible effects provokes in most actors (students and teachers) the feeling that the process is completely ineffective. This scepticism has a negative effect on the process because students increasingly do not take the survey seriously and results are less reliable than they could be.

Assessment for promotion

Along with these specific systems for evaluating academic staff, there is another important moment in which faculty are evaluated: when they are recruited. The structure of academic staff at the Spanish universities is designed to fit the university's teaching needs. A good indicator of this is a constant rate of 17-19 students per teacher in the last 15 years. So, it is possible to say that a new position is created to teach one or some specific courses. But in this selection, research merits are more valued than teaching qualifications as is explicit now in the regulation of those exams. This seems to point to a mismatch between what is needed and what is evaluated.

Conclusions

It is not easy to answer the questions that we have pointed out: should educational and scientific policies be co-ordinated as far as universities are concerned? How could we make universality compatible with a necessary commitment to the socio-economic needs of the local environment? But these questions arise from a very dynamic university system, the Spanish one. The growth of this system in the last two decades has given rise to inbalances. One of them occurs between teaching and research.

Over these two decades, there have been two great demands for universities in Spain: a social demand of higher education studies and a science policy demand to increase research at universities. 1) We have evidence that both demands have been attended to. 2) We also have some evidence of an increase in the quality of research. But, 3) what we do not have is any evidence of an improvement in the quality of teaching.

Although the systematic evaluation of professors both in teaching and research could be regarded as positive, the fact that it is discriminating only for research activities introduces the bias of considering research as more important than teaching in the academic career, which is quite frequent in many higher education systems. There is not an easy solution to assure quality of teaching and research at the same time. But, some conditions for that balance in the Spanish system may be:

- Giving some kind of recognition to good teaching activities.
- Defining the role of universities within the science, technology and industry system in a country like Spain, which is characterised by its small and medium-size industry. For instance, if university research is a requirement of the science policy of a country, there should be a possibility for universities to hire specific staff for research activities only.
- Reconciling the autonomy of universities and regions and the need to co-ordinate the system as a whole.

Summing up, the individual evaluation system of teaching and research activities is oriented, in fact, to promote research activities and, as an unwanted consequence, to devaluate teaching activities. But this happens within a higher education system which is growing dramatically, as we have seen, especially as regards the demands for teaching.

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