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Research in Higher Education: the role of teaching and student learning

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Abstract

Over the past 20 years, national processes for research-quality assessment have been introduced or amended across Europe. Whatever the benefits of these systems might have brought to the organisation and quality of research most of them have contributed for a devaluing teaching and to a growing separation between the research worlds of the university and student learning.

This study aims to contribute to a broader understanding of the role of research for the quality of teaching and student learning and, through the collection of good practices and recommendations, argue for the integration of these indicators in research quality assessment tools and evaluation frameworks. The outcomes indicate the need to discuss the role of teaching, staff professional development, assessment criteria and the *impact* of research on graduate/ postgraduate student learning. Research assessment systems should value teaching and student learning through research and, at an institutional level, planning must support this link through the development of strategies based on a broader and context-driven conception of 'scholarship'.

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1. Introduction

Nowadays, Higher Education (HE) faces a wide range of challenges associated with the arrival of new managerialism and its audit cultures. The major topics of discussion include the definition of the nature and purpose of higher education and the status and role of research in the modern university, the processes of globalization and internationalization, the influence of government policy and, particularly, the national systems of funding, research assessment, teaching quality evaluation and the impact of these on the governance and management of HE. At this level, the extent and desirability of associating the roles of teaching and research and the consequences for academics and students are growing areas of research in a debate sustained by accountability standards, ranking impositions and funding constraints. Nevertheless, in this scope, issues are complex and multilayered and may vary over time, be informed by different contexts and the links to be established may be seen quite differently by the multiple subjects and stakeholders.

The present research consists of a case study developed in the UK context and intends to bring some insights about the experiences of researchers from the educational field involved in the UK's *Research Assessment Exercise* (RAE) regarding the influence and impact of such a system on teaching and student learning. We start with a short review of the research evidence on the topic followed by a contextualized description of the UK's research assessment system aiming to build some platforms for a more informed discussion.

1.1. Research on the roles of assessment, teaching and student learning

In recent times, many distinct influences and forces have contributed to significant changes in how research and teaching are conceptualized, theorized and practiced. The development of research based on the engagement between higher education, government and industry together with the new conceptions of knowledge developed in trans-disciplinary, socially, spatially distributed and deeply contextualized approach have confirmed that the research setting is no longer determined and dominated by the closed and traditional scientific and scholarly university communities. Similarly, new paradigms in teaching and learning in higher education have put the student at the centre of the process and the teacher as a facilitator in a new learning and research environment based on a wider demand for specific research skills and capacity. At the specific level of academic research, Brew & Lucas (2009, p.16) have even argued that "the cumulative effect of these changes, conceptual and practical, has been to promote the reintegration of 'academic work' (...) by dissolving the conventional distinctions between research, teaching and the other elements within the missions of universities".

Overall, in the past four decades research on the links between the roles of teaching, learning and research has evolved from a more narrow approach focused on the statistical relationships between teaching and research quality using the individual academic perspective to a more combined quantitative/qualitative methodology based on the study of a wider range of research and settings (institutional and departmental priorities, structures, cultures and policies and the character of disciplines and their conceptions of knowledge and forms of research, research selectivity, funding, among others) (Jenkins 2005).

This debate has come to have significant implications in terms of policy making at all levels: from national systems to departmental levels with a strong dependence on the subject and institutional context. Nevertheless, the analysis of the extent, nature and characteristics of the teaching/learning and research relationship has been approached not only from the perspective of academics (Elton 2001; Deem & Lucas 2007), disciplines (Colbeck 1998) departments (Durning & Jenkins 2005; Coate, Barnett & Williams, 2001), institutions (Zamorski 2002; Hattie & Marsh 2004)) national systems (Boyer1990; Harley 2002) but also from the perspective of the students (Lindsay, Breen & Jenkins 2002).

At the level of the individual academic research has concentrated on the association between the amount of research production /research outputs and the level of teaching quality/ effectiveness considering the involvement in research and the type of research developed at a professional domain. At the same time, discussion has raised

questions about the types and levels of knowledge necessary for effective teaching in different disciplines, types of institutions and even curriculum issues. Moreover, the motivations, values and conceptions about teaching and research are also referred as essential for understanding this relationships and linkages although data is usually based on reflection on practice-based informed judgments (Jenkins 2005).

The way teaching and research are organized within departments and institutions is also an important factor to study the extend of internal effort to develop policies and strategies to promote the connection. At this level, the focus is set on the organization of disciplines for teaching and for research and its variations in the way relations are conceptualized and delivered. These variations are shaped by the conceptions of the nature of knowledge, the different forms of pedagogy and curricula, the impact of professional organizations and student interests on the content and practices of the disciplines. At an institutional level, however, the questions are raised about the different resources and missions and about the way research in perceived and supported specially in a *institution-wide nexus* and when national policies and funding are based on their separation (Hattie & Marsh 2004; Jenkins 2005).

At a more macro national level, the financial rewards and merit/ prestige resulting from research funding (government or private sources) imply a wider attention to the way teaching is acknowledged and supported and how there is a growing structural separation between teaching and research.

Focusing its attention on the role of students in the whole teaching-research area, the issue has been addressed in what concerns its impact on the student experience and development. Studies in different types of institutions reflect on how students value learning in a research-based environment, their attitudes to staff research according to their academic orientation and on how the different forms of research-based learning influence the students' epistemological and intellectual development (Elton 2001; Lindsay, Breen & Jenkins 2002; Zamorski 2002). In this scope, the methods and approaches are varied and fulfil the most different purposes, and, to a certain extent, Brew & Boud (1995) have tried to focus the debate to a context of specific relationships between research and learning by referring to learning as the "vital link between research and teaching", the "shared process in these two enterprises" (p.268).

1.2. The UK's research assessment system approach

In the last 40 years, higher education in the UK has changed profoundly and its systemic changes include an impressive increase in the number of universities since the 1960s, a growth in student numbers, a change in the balance between public and private funding, and in the mechanisms for funding and, despite a trend decline in public funding, an increase in regulation and accountability requirements.

Since it was first introduced in 1986, the Research Assessment Exercise has gone through many transfigurations in each successive exercises and, from the proposals arising from the results of RAE 2008, the proposals are directed to a move to a *Research Excellence Framework* (REF), a more quantitative bibliometrics - based system to be introduced in 2014. In this context, the changes in central funding policy, performance appraisal, the role of "new universities" and the pressures created by the Research Assessment Exercises have raised many questions about UK's research power and world-class institutions and the emphasis on the idea of research supremacy over teaching.

In the United Kingdom, there is an explicit separation between the quality assessment of teaching and the assessment of research and neither of the processes informs the other. In this context, research/ teaching connections are questioned by funding regimes attempting to separate the two activities although the topic is a wide area for debate at various levels, across disciplines and including variables as departmental cultures and institutional missions. In the assessment process, the starting point is the unit of output (publication, patents...) produced by 'research-active' individuals within 'units of assessment', usually aligned with academic departments, which are organized to deliver teaching and research. In a general way, research is often done in teams that cross those structural boundaries, but very often members interdisciplinary teams disaggregate to their parent discipline and are judged outside the context in which they perform research (Brew & Lucas 2009).

The impact that this system has had on the management and organization of the research cultures and research work within university departments is huge and academic work (research work in particular) is under more pressure than ever before leaving the teaching role in a very specific place and context.

At departmental level, the field of education research experiences a unique socio-historical and socio-cultural environment which makes it different from social and science technology, engineering subjects. These departments struggle with several constraints associated with the managerial need for research evidence and productivity, significance, accountability, impact, all concepts heavily influenced by requirements for the national funding and evaluation. Academics are expected to engage in research which adequately fits with the aspirations and areas of expertise required by the department and research centers, and which are heavily influenced by requirements at the national level. On the other hand, tension arise when balancing institutional and individual priorities and making decisions about research and the different work priorities that involve the demands of research, teaching and administrative roles.

In this scope the present study aims to contribute to discuss the role of research for the quality of teaching and student learning and, through the collection of good practices and recommendations, argue for the integration of these indicators in the national and international research quality assessment tools and evaluation frameworks.

2. Methodology

The sources of the empirical data for the case study were semi-directed interviews conducted with two members from the UK's last RAE panels (2008) (Cases A and B), two institutional representatives (a world-leading research-intensive and research-led teaching approach institution (education and social sciences) and a teaching-led /research informed institution) (Cases C and D) and two senior researchers (experts in the area of educational research)(Cases E and F). The respondents were invited to present their perceptions in the context of the research assessment experience (RAE/ UK) following a SWOT-style approach: strengths, weaknesses, threats and opportunities of the system.

For the purposes of the present analysis, the focus was on the collection of as much input as possible from a variety of different informers. Therefore, data will concentrate on the content of the information collected rather than on the contexts and different approaches implied by the multiple participant profiles.

3. Data analysis and discussion

Several studies about the *impact* of the RAE assessment system in the quality of research point out its relevant effect on decisions about the types of research to be pursued and methodological approaches to be adopted. In the educational field, many have claimed positive effects for research management, although the impact on teaching and student learning has generally been seen as negative (McNay 2007; Jenkins 2005).

In the scope of this specific study context, the respondents generally agree that the UK's research assessment system reinforce this "negative impact on the concern for teaching" (Case F) emphasizing what is regarded as a "cultural prejudice concerning teaching because doesn't give power and prestige" (Case F) where the "judgement of research is done in isolation and even from teaching" (Case E). It is, therefore, implied that the system itself has impacted significantly on the performance of institutions and academics and on the way they face their financial and reputational success associated with a shared alignment of interests and rewards. Alongside this, it is relevant to see how it may create and reflect a true hierarchy of esteem that privileges research over teaching. In fact, when the emphasis is put on the first of the four Boyer's scholarships (Boyer 1997) (discovery, integration, transmission,

and application) according to the data collected, it leads to a general "lack of recognition/ reward to the scholarship of teaching and pedagogy research" (Case F) also explained by what is considered a "detachment from reality/ teaching caused by integration in research centres" (Case E). This contributes for a general "loss in terms of numbers of active researchers and of research capacity "caused by a policy that aims to concentrate funding on a small number of centres, "removing any expectation of significant research from many universities and individual academics" (McNay 2007, p.211).

These references raise questions about the real 'impact' of research on professional practice, specially when the "focus of academics is set on research writing rather than teaching or service" (Case A). Moreover, when the feedback from panels call for more large-scale, quantitative, longitudinal studies a whole set of setbacks for those working, for example, at the level of teaching-learning interfaces arise, as referred by one of the respondents when mentioning that those who "work related to daily occupations may have an impression of low intensity with no rigour or originality"(Case E). This situation has negative impacts in improving the quality of practice or informing teaching, the major objectives of much work in social science, as argued by McNay (2003), also stressing the way academic autonomy is, therefore, conditioned by the degree of dependency on funding. Simultaneously, the relevance attributed to specific types of publication outputs is referred when referring the "lack of value attributed to some sorts of publication that are relevant in the education research field (eg Textbooks, e-learning materials ...)." (Case F) combined with a "restriction on the open pursuit of 'blue skies' research" (Case C), a "preference for pure research and dismission of applied and 'near market' research" (Case E) and "mitigation against some forms of research to publish quickly and preferably in top journals (Case C).

This concern is even presented as "threats to those who do not publish orthodox research or outlets" in a context where "researchers may be deterred from entering their work departments ". This idea is shared by other respondent when stating the need to be "established a wider conception of research" (Case F) and by Furlong & Oancea (2005) when discussing the assessment of quality in applied and practice-based educational research and proposing a multi-layered, and multi-dimensional framework based on several dimensions of quality (epistemic, technological, capacity building and value for people and economic). In fact, according to one of the respondents, an idea to be worked out in the educational field is based on the "notion that research work can be done at low cost and closely related to daily occupations" (Case E) in an environment where "research is set in context and link to purpose" (Case E) and where the "research agenda is informed by professional experience and for research findings to feed back in to practice". (Case E). At this level, it is even suggested the "introduction of the validation of courses/ research projects contribution to practice as criterions (specially) if Research-led teaching is claimed." (Case E).

Overall, this set of recommendations could be implemented in a context-based knowledge production environment and in an area situated between academia-led theoretical pursuits and research-informed practice, and consisting of a multitude of models of research explicitly conducted in, with, and/or for practice (Furlong & Oancea 2005, p.9). This discourse clearly tries to discuss some of the issues of assessment criteria highlighted by public criticism of the quality of educational research: the idea that most research production is not real-world relevant and directly transferable into improved pedagogic practice or policy making. It suggests that a change must be done from a discourse of quality assurance and quality assessment to one that 'resists *instrumentalisation*' and that promotes diversity, hybridization and versatility in research. In this scope, Case C emphasizes the dangers and damages of "using the same criteria for very different departments and different types of research". Furthermore, according to one of the respondents a change in paradigm is needed and the research community must "understand how research in Education very often takes 20 years to have an impact and mostly an indirect one and "how quality in Education is about changing people's questions rather than giving them narrow answers" (Case B).

There are further complexities, when the quality assessment system is deeply focused on subjects and aims to link quality of provision to funding, improve quality, and provide public information on quality to users (students and employers). One of these "unintended consequences" is the "damage to teaching and learning" when "the assessment system has no reference to the impact on students, no measurement of the key impact of the graduate/ postgraduate student learning" (Case F). These remarks stress the idea of a "lack of support to graduate and postgraduate students by their teachers" as a "result of the assessment needs and demands" (Case F). This negative

impact was reported by Lindsay, Breen, & Jenkins (2002) distinguishing undergraduate and postgraduate teaching, with a more balanced score sheet in the latter. One opportunity pointed out by one of the respondents is that has RAE system has "brought together more people associated with the *Scholarship of teaching and pedagogy research*" (Case F), a emerging research field, in a common effort to overcome some of the constraints against interdisciplinary and applied work, and trying to reach a shared balance in terms of research autonomy.

At this level, recommendations include the need to "provide active support at departmental level (for example, writing for publication), encourage new researchers to become involved in high quality research, develop a collegial and inclusive culture for the development of high quality research and identify key areas of strength that will support this culture" (Case D).

Some points are also raised about how the research assessment systems can include data about teaching and students learning through research and how this link can be developed at a departmental level with the support institutional leadership, planning and culture by "having assessment procedures and measures to value teaching" (Case F), "to value research on teaching and learning in the disciplines" (Case F) and "articulate the impact of research on learning" (Case E).

4. Conclusion

In this paper, some aspects of the debate about the "impact" that research assessment systems may have on teaching, research and student learning. These were illustrated using data from the UK's experience in a setting where research and teaching quality are assessed separately having the educational field as a reference.

The data helped us explore how, from the academics point of view, such a separation can be damaging and have unintended consequences in the quality of both teaching and learning in higher education. We have noted how the respondents had a very critical approach to the topic mainly stressing its difficulties and threats.

Further analysis based on the data collected could concentrate on the roles of the respondents in their institutions, the different types of institutions involved and their approach to teaching and research and on the contrasts from the points of view between who assesses and who is assessed. We hope, however, that this study will contribute to the consolidation of what we believe is an important field of research and one of the most important phenomena in the higher education research arena.

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