

Research and Teaching nexus in post 92 Universities:

Tensions and challenges

Huet Isabel, Kingston University, UK

Abstract

This paper presents early findings of a larger study that looks for an understanding of how the growing research environment in post 92 Universities is effectively connecting research and teaching, as well as the contextual factors that discourage it.

The paper begins to contextualise the study by bringing into the discussion the tensions and challenges that academics are facing in the sector. The data findings shed light on how research active academics and institutional senior managers perceive the R&T nexus, their actual practice and the implications that it brings for students' production of knowledge and academics' motivation.

The findings of this study lead to a further discussion: Is it possible that there might be a negative relationship, such as ever-increasing pressure on academics for research output and teaching quality that might in the end compromise the quality of both?

The scope of the study

How to interconnect the two main pillars of higher education - research and teaching has been one of the main focuses of the sector in the last twenty years. Although the relevance of linking research and teaching is perceived in most European institutions as being of central importance by many university leaders, empirical findings suggest that in practice a research environment does not always influence the teaching quality (Hattie & Marsh, 1996; Gibbs, 2002), and consequently does not contribute to high level/degree of undergraduate students' learning.

There has been significant international research and policy discussion of the factors that promote or inhibit the existence of a positive synergy between R&T. Different countries and institutions reinforce this synergy in multiple ways,- each following their own agenda. These agendas are now clearly linked to a growing pressure to increase the quality of teaching and research but these pressures are differently interpreted by different countries, institutions and programmes (Teichler, 2003) according to their own policies and priorities.

The international requirements of research quality, combined with an increased pressure from looking for research funding in a very competitive environment associated with a growing culture of 'Publish and Perish', may lead many European institutions and individual academics to put more effort into research related activities. This is of particular relevance for those post 92 universities in the UK who, in spite of continuing to invest in the quality of teaching and learning, also want to go up in the university rankings by developing high quality research, and be able to perform well in the next Research Exercise Framework (REF).

In this context several researchers have recently been investigating the impact of the R&T nexus in practice, and the potential conflict that it might bring in the professional identity of academics (see for example the works of Bloch, Mitterle & Würmann, 2013; Esdar, Gorges & Wild, 2013). In the context of the UK, the work of Jenkins & Healey (2012) has been fundamental for institutions in foreseeing this interconnection as one of the central characteristics of a university. The rationale behind this study is supported by the work of Jenkins, Breen, Lindsay & Brew (2003) and Brew (2013) who consider the R&T nexus as a valuable strategy to develop graduate attributes and transferable skills.

Within this possible scenario, this project addresses four research questions:

- What is the current situation in UK post 92 universities in regard to bringing research and teaching more closely together?
- How is the research environment of a Faculty/School engaging students in learning in a research-based environment?
- How are academics managing their research and teaching related activities?
- How are academics bringing their expertise/experience as researchers to motivate students to engage in the learning activities and to develop their transversal skills?

Objectives

The objective of this research is to understand the benefits of a research environment for improving students' learning and the contextual factors that discourage it. The impact of research is analysed in terms of benefiting students and their empowerment, a crucial factor to an institutional policy of Learning at a post 92 university. This study will bring evidence of how post 92 universities are coping with the current national demands for Research and Teaching quality.

Methodology

This project follows a case-study design with an interpretative approach. The case study represents a STEM Faculty of a post 92 University and the units of analysis are academics (n=9), heads of school (n=4) from STEM disciplinary areas and senior managers of the institution (n=3). The study follows a purposive sample to select academics that are research active.

Three initial theoretical propositions:

Proposition 1: A strong research environment culture leads to more motivated academics that can bring their expertise/experience to empower students' learning.

Proposition 2: There is a growing tension between teaching and research motivated by the current culture of 'publish or perish' and the heavy teaching workloads in post 92 universities.

Proposition 3: The R&T nexus is a valuable strategy to develop graduate attributes and transferable skills.

Data collection and analysis

The data-collection methods included three focus-groups with STEM academics, nine interviews with heads of school and senior managers of the institution, and textual analysis of documents. Two scripts were prepared; one directed for the research active academics and the other for heads of school and senior managers.

The transcriptions of the interviews were uploaded in NVIVO 10. The first stage of the coding process followed a structural and initial coding exercise which allowed the first categorisation of the data corpus. The second stage was to code each segment of data in more detail. New codes emerged which formed the basis for an in-depth analysis.

Some preliminary findings

The data analysis is still on-going but the first evidence points towards a strong set of institutional policies that aim to raise the university profile in research and teaching quality, with a clear objective to boost a research-informed teaching culture. Individual academics with a research active profile and heads of department are feeling the pressure to cope with both demands. The participants in the study did not feel a R&T fragmentation as advocated by previous studies (Smith & Rust, 2001) but a tension and a set of concerns that are strongly influenced by the administrative and teaching workloads.

This study presents evidence of how research active academics from STEM disciplines are using their skills and experience as researchers to empower students' learning in a post 92 university. These experiences are gathered in three clusters sustained in the framework developed by Healey (2005). There is a motivational factor that drives individual academics to reinforce the R&T nexus but they admit that the current situation in post 92 universities (high demands for teaching and research) might lead to their exhaustion.

This research will be replicated in two other UK post 92 universities with the purpose of understanding the current situation regarding the R&T nexus, and the institutional context that influences the success or failure of such initiatives. The scope of the study will also include other disciplinary areas in order to reach a broader understanding of the phenomenon being studied.

References

- Bloch, R., Mitterle, A., & Würmann, C. (2013). Time to Teach: Contextualizing teaching time in German higher education. Retrieve from <http://www.srhe.ac.uk/conference2013/abstracts/0202.pdf>
- Brew, A. (2013) Understanding the scope of undergraduate research: a framework for curricular and pedagogical decision-making. *Higher Education*, 66 (3), pp. 603-628.
- Esdar, W., Gorges, J., & Wild, E. (2013). Research and Teaching – nexus or goal conflict? – Junior scientists' perception on multiple demands at work. Retrieved from <http://www.srhe.ac.uk/conference2013/abstracts/0048.pdf>
- Gibbs, G. (2002). Institutional strategies for linking research and teaching, *Exchange*, 3, pp. 8-11.
- Hattie, J., & Marsh, H. (1996). The relationship between research and teaching: a meta-analysis. *Review of Educational Research*, 66, pp. 507-542.
- Healey, M. (2005) Linking research and teaching exploring disciplinary spaces and the role of inquiry-based learning. In: Barnett, R. (ed.) *Reshaping the university: new relationships between research, scholarship and teaching*. Maidenhead: McGraw-Hill/Open University Press, pp. 30–42.
- Jenkins, A., Breen, R., Lindsay, R., & Brew, A. (2003). *Reshaping Teaching in Higher Education. Linking Teaching with Research*, Routledge Taylor Francis.
- Jenkins, A., & Healey, M. (2012) Research-led or research-based undergraduate curricula. In Hunt, L. and Chalmers, D. (Eds.) *University teaching in focus: a learning centred approach*, pp.128-14. Camberwell, Victoria, Australia: Acer.
- Smith, P. & Rust, C. (2011). The potential of research-based learning for the creation of truly inclusive academic communities of practice. *Innovations in Education and Teaching International*, 48(2), pp.115-125.
- Teichler, U. (2003). Research on Higher Education in Europe. *European Journal of Education*, 40(4), pp.447-469.