



What does research-informed teaching look like?

Foreword

Maddalaine Ansell
Chief Executive
University Alliance



The positive interplay between research and teaching is one of the defining aspects of higher education. It enhances the student experience, improves student employability and enriches the research culture. It also enables universities to address skills and knowledge gaps in the local and national economy. Since diversity is a strength of our higher education sector, “research-informed teaching” can take many different forms. The new Teaching Excellence Framework should recognise the value of each of these and reward those that are done well and have impact. Equally, the Office for Students should work with Research England to ensure both bodies are offering the right incentives for further development of this aspect of teaching excellence.

Professor Stephanie Marshall
Chief Executive
The Higher Education Academy



The concept of a ‘divide’ between research-intensive and teaching-focused institutions is less than helpful to all those that provide students with environments within which their learning can flourish. The reality is that students appreciate great teachers however they encounter them. If your practice engages, inspires, encourages and motivates students then it is excellent teaching whatever its root. The HEA champions and promotes excellent teaching whatever its form and research-informed teaching is increasingly becoming a key concern, globally, as such approaches serve both students and society well. Supporting evidence around different teaching approaches and their efficacy within TEF submissions will be so important in spotlighting examples of excellent practice that can’t be captured in headline metrics alone. Diversity within our sector is its strength. Let’s continue to learn from each other.

The context of research-informed teaching

The expansion of higher education and competition for funding (through the RAE/REF) has contributed towards some separation of research and teaching, with institutional divisions of labour such as ‘teaching-only’ and ‘research-only’ contracts putting at risk the valuable interaction between the two activities.

In recent years, many universities have argued the importance of enhancing the relationship between research and teaching; piloting projects to encourage closer links between the two, and working together to identify and present case studies of best practice – indicating a commitment to excellent teaching across the sector. However, it remains to be seen what role research-informed teaching has to play in the assessment of teaching excellence, and whether the TEF will help to bridge or reinforce an unproductive division between research and teaching.

What does research-informed teaching (RIT) look like?

Research-informed teaching (RIT) can take different forms. Examples include:

- research-led – where students are taught research findings in their field of study;
- research-oriented – where students learn research processes and methodologies;
- research-tutored – where students learn through critique and discussion between themselves and staff; and
- research-based learning – where students learn as researchers.

As the following case studies indicate, RIT offers many benefits to students, staff and higher education institutions as a whole. The case studies from the University of Portsmouth and Nottingham Trent University show that treating students as co-researchers supports student engagement within and beyond the formal curriculum, furthering knowledge and understanding, and in some cases contributing to the broader discipline. Such an approach can also increase student satisfaction, creating a sense of belonging to an institutional and/or disciplinary research culture and developing intellectual curiosity as well as research and communication skills. The Nottingham Trent University case study also suggests that the experience has directly impacted on student performance.

RIT has also been found to support student employability, with the rise of work-based learning giving students the opportunity to participate and contribute through experiential learning, working as researchers on real world projects. The case study from Kingston University shows that this can then have wider benefits when students share their workplace experiences with peers.

Successful approaches to RIT, as the University of Lincoln case study demonstrates, focus on curriculum design, where students learn together with staff through joint activities and projects and are supported by structured interventions throughout their course, from year-one to the final-year project. However, challenges in implementing such an approach include a lack of support from the department or institution; the number and diversity of students requiring flexibility and adaptability; staff perceptions of their role and the feasibility of RIT; as well as difficulties faced by teaching-only practitioners in developing their own research.

To identify and recognise excellence in teaching many have argued for a Scholarship of Teaching and Learning (SoTL) - a model used in higher education to reflect on, and transform, teaching and learning practices (see University of Salford case study). SoTL focuses on the teaching and learning strategies that underpin the curriculum, and promotes research-informed teaching. However, this approach has proved controversial and not everyone is convinced that it is the best way to promote excellent teaching. On the one hand, it has been championed for developing undergraduate research, providing a safe environment for early career academics to build their research experience and increasing student engagement. On the other, it has been criticised for a lack of definition and rigour, ethical issues around the power dynamic in staff-student collaborations, and having limitations for teaching-only practitioners who cover teaching for research-focused colleagues at the expense of their own scholarly development.

The case studies presented here seek to highlight the many different manifestations of research-informed teaching and to provoke discussion on how RIT can be used to support teaching excellence today.



Learning as a researcher

The University of Portsmouth wanted to use a specific unit to develop transferable skills in students (teamwork, problem solving, communication skills). However, this was not proving effective. For example, in the team work exercises students tended to work alone and pull their efforts together at the end rather than working together as a team throughout.

Following work by Professor Sherria Hoskins on complex learning, the University introduced a 20-credit, optional, Level 5 Research Based Learning (RBL) module to sit alongside their study where students apply for research jobs advertised by staff. Roles included delivering and evaluating randomised controls in schools and exploring elderly adults' spatial visualisation in relation to their ability to use a prototype automated phone service.

On average about 50 students a year now take this module and staff are incentivised via a small research bursary for every post they offer and fill. Assessment is through a learning portfolio in which students provide evidence that they have achieved learning outcomes.

The University evaluated the RBL module after its first year by collecting qualitative feedback from staff and students. This revealed the development of respectful and mutually beneficial relationships between staff and students, which contributed to continued research partnerships and transformational learning beyond the life of the module. Shared staff and student peer reviewed journal articles have resulted from some projects too, demonstrating this to be an authentic research exercise, one that has now been expanded into Level 6. The RBL unit has also been adopted as a whole university unit – as an elective – and has been broadened out to include more than just research experiences.

Chris Thomas, like many students, embraced this research opportunity. He said: "It was probably the best experience I could have received for my career. . . it's about creativity, persistence, and patience. These are traits which you cannot express in any other way except through working with your peers."

NOTTINGHAM TRENT UNIVERSITY



Promoting staff-student collaboration

Scholarship Projects for Undergraduate Researchers (SPUR) is a Nottingham Trent University initiative which provides bursaries for undergraduates to collaborate with staff on cutting-edge research projects. Since 2007 SPUR has involved 166 students working on 122 projects in 46 subject areas including Biosciences, Architecture, Linguistics, Social Work, Photography and Education. Several subject areas now run their own schemes using the SPUR model, involving 57 additional students to date.

SPUR is associated with high attainment: 90.1% of SPUR students who have graduated since 2008 with a first degree attain at least a 2.1 compared to 73.0% of first degree students graduating from the general NTU population (2015/16).

As well as benefiting the individuals involved, SPUR projects are required to feed back into the curriculum to ensure learning and teaching continue to be informed by research.

One former SPUR student gained a prestigious job with the Office for National Statistics and was told by the panel that they had secured the post in competition with Oxbridge graduates and individuals with postgraduate degrees in large part due to the experience they had gained from their SPUR project.

Kingston
University
London



RIT and employability

A Kingston University course module is connecting teaching and research by bringing students in to the heart of industry. Associate Professor Dr Deborah Anderson devised *Employer Insights* which stimulates new undergraduate research through students interviewing leading figures in the world of marketing.

As part of their course, second-year undergraduate marketing students interview senior marketers in their work environment. The interviews are filmed and then shown to the rest of the class to stimulate debate and discussion. Interviewees during the past year have included: Magnus Willis – Founding Partner at award-winning brand strategy consultancy, Sparkler; Kate Howe – Managing Director of Gyro creative agency; Anthony Hopper – Chief Executive of direct marketing agency, Lowe Open and Steve Bell – Chief Executive of top advertising agency Iris. The employer-based teaching approach enables students to link classroom theory with the practical realities of the sector. It provides them with industry skills to add to their armoury when approaching future employers.

Dr Anderson – who lectures in marketing and is a National Teaching Fellow of the Higher Education Academy – created this module because she saw that marketing was such a fast-paced discipline that students could no longer rely solely on textbooks. “If we want our teaching to be as fresh and relevant as possible, we need the voice of the industry at the core of our courses,” she explained.

During the interviews, students touch on such topics as current trends in marketing communications and the attributes employers are looking for in graduates. “This gives them a first-hand understanding of how top marketers operate and what their priorities are,” Dr Anderson said: “My students have an edge in the workplace because they are put in front of some of the most important players before they even graduate.”



UNIVERSITY OF
LINCOLN



Integrating research-based learning across the university

The University of Lincoln's Student as Producer initiative aims to reconnect universities' core activities of teaching and research by encouraging students at all levels to view themselves as active producers of knowledge. Originally a HEA-funded project, this principle of research-engaged teaching, as a development of research-informed teaching, has become the organising principle for teaching and learning across the University of Lincoln. In 2013 the QAA awarded a commendation to the University for its enhancement of student learning opportunities, citing Student as Producer alongside other novel approaches to student engagement.

Student as Producer provides students at all levels with opportunities to work on real academic research projects. For example, Lincoln's School of Psychology engages undergraduate and postgraduate students alongside experienced academic staff in an annual week-long public research

event: Summer Scientist. Now in its sixth year, the programme attracts families from across the Lincolnshire region to the University's Brayford Campus where they can take part in games and activities which inform real research projects on child cognitive development. This summer around 30 psychology students were involved in delivering the activities, including overseeing experiments and collecting data, supported by seasoned research staff. More than 250 children aged three to ten and their families took part over the five days.

Findings from previous Summer Scientist research activities have been presented at national conferences and published in academic journals with undergraduates listed among the authors.

University of **Salford** MANCHESTER



Utilising self-reflective learning to promote excellent teaching – Scholarships of teaching and learning (SoTL)

Two mental health nursing lecturers and three mental health student nurses at the University of Salford have been working as co-researchers on a project to investigate the extent to which a teaching session about age and discrimination contributes to changing attitudes to working with people of different ages.

The teaching session is designed to promote enhanced learning by asking students to reflect on their perceptions of a young, mid-age or older person, and to revisit these perceptions following the activity. Student co-researchers have all undertaken the session themselves, drawing on this experience to conduct qualitative interviews with participants. The resulting participant narratives enhance the research base of student education and can be used as a tool for all students to reflect on their attitudes and perceptions and how those might affect their future practice.

Student co-researchers also gain practical experience of planning, conducting and disseminating research, and benefit from the learning that comes from research supervision and training. There is evidence that is has also positively affected self-esteem, critical thinking and analysis skills because “...trying to understand people is complex and many layered, just like nursing” (comment from student co-researcher).

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An extended bibliography including references relevant to the case studies can be found online at www.unialliance.ac.uk



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The Higher Education Academy (HEA) is the national body which champions teaching quality. We provide value to the HE sector by focusing on the contribution of teaching as part of the wider student learning experience.

Higher Education Academy
Innovation Way
York Science Park
Heslington
York
YO10 5BR
Tel: 01904 717 500

General and media enquiries:
Enquiries@heacademy.ac.uk

www.heacademy.ac.uk
Follow us on Twitter: @HEAcademy

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University Alliance
49 Whitehall
London
SW1A 2BX
Tel: 0207 839 2757

General enquiries
info@unialliance.ac.uk

Press enquiries
press@unialliance.ac.uk
www.unialliance.ac.uk

Follow us on Twitter: @unialliance