

Case Studies of Growing Research-Rich Higher Education at the University Of Hertfordshire

Claiming or disputing the existence of a 'research-teaching nexus' in higher education (e.g. Healey and Jenkins 2009) is something that has consumed considerable research energy and time over the last few decades (e.g. Tight 2016). What can be agreed is that establishing strong, mutually beneficial links between students' learning, academics' teaching and universities' research takes hard work, deep thought and concerted planning. Any 'research teaching nexus' that does exist is not natural, or easy: rather it takes consistent care, hard graft and concerted design.

We know this at the University of Hertfordshire not just from our practice, but from our research. To change the emphasis of our students' learning from acquiring content to active research takes concerted cultural change, curriculum and staff development and preferably, student involvement (Bage 2019a). This can result in sophisticated learning and genuine contributions to knowledge, as in this example involving level 6 history undergraduates:

Dr Adam Crymble (School of Humanities – History Group) has explained how students in the level 6 module Migrants & Minorities c. 1688-1850 use his monograph, *'at the cutting edge of research in migration and community history. They work with 300-year-old records from the Archbishop of Canterbury's collection (Lambeth Palace Archives), which include the 'Returns of Papists': documents from 1767 that show house-by-house Catholic occupation in a West-London parish. Working with these tables of numbers, students are taught how to map the entries and conduct exploratory data analysis, seeking spatial patterns that are otherwise invisible. They then learn how to take their initial findings, formulate a research question and interrogate it with additional research. They present their results as part of a 2,000-word essay and accompanying map.'* As Adam describes it the best essays provide *'genuinely new knowledge about street politics and patterns of minority community building in urban centres. Their findings are not only situated within the existing scholarly literature, but demonstrably extend it. Not only is the assignment research-led, but the students have in turn informed my thinking of the records, resulting in what might be described as teaching-led-research.'*

But it is also difficult to introduce the practice of 'undergraduate research and inquiry' (Healey and Jenkins 2009) in a single module or year of an undergraduate degree. Rather, we need to nurture it across the whole degree, preferably starting at level 4 and by building on prior learning that new students may bring with them (see Bage 2019b). Such skilled and careful design can be seen clearly in this example:

Dr Angela Madden (School of Life and Medical Sciences) has worked *'with students on our BSc (Hons) Nutrition and BSc (Hons) Dietetics programmes to help them progress from being consumers of research published by others, to co-producers of robust research evidence that contribute to their discipline. This starts at level 4 with students being orientated towards reliable information, where to find it and why they need to search it.'* At level 5 students *'also think about the methods used to generate data and the pros and cons associated.'* Planning for level 6 research projects involves selecting *'research topics and methods that might suit their learning preferences: quantitative vs qualitative; obtaining ethical permission and recruiting participants vs analysing existing nutrient-related data that can be completed off site ... We recognise the project management skills students gain from running their own investigation – an employability asset for all even if they don't plan a research career. Assessment is based on a 4,000-word manuscript prepared for journal submission. At the end of the module, we focus on research dissemination and the opportunity to submit abstracts*

to external meetings ... Most years, between 3-10 abstracts are accepted by national conferences and one or two manuscripts are accepted as full peer reviewed papers from about 45 students.'

How can we contextualise such individual examples of rich practice? Drawing from empirical data offered by 51 experienced academic colleagues across ten different Schools and other university departments, together representing scores of disciplines, two University of Hertfordshire academics analysed responses to develop a descriptive model. The model's purpose is to help us to see more clearly, what we often practise in isolation; and so more easily to contextualise and enrich it. It offers four different starting points or ways of thinking about what it means to try to develop 'research rich and informed teaching':

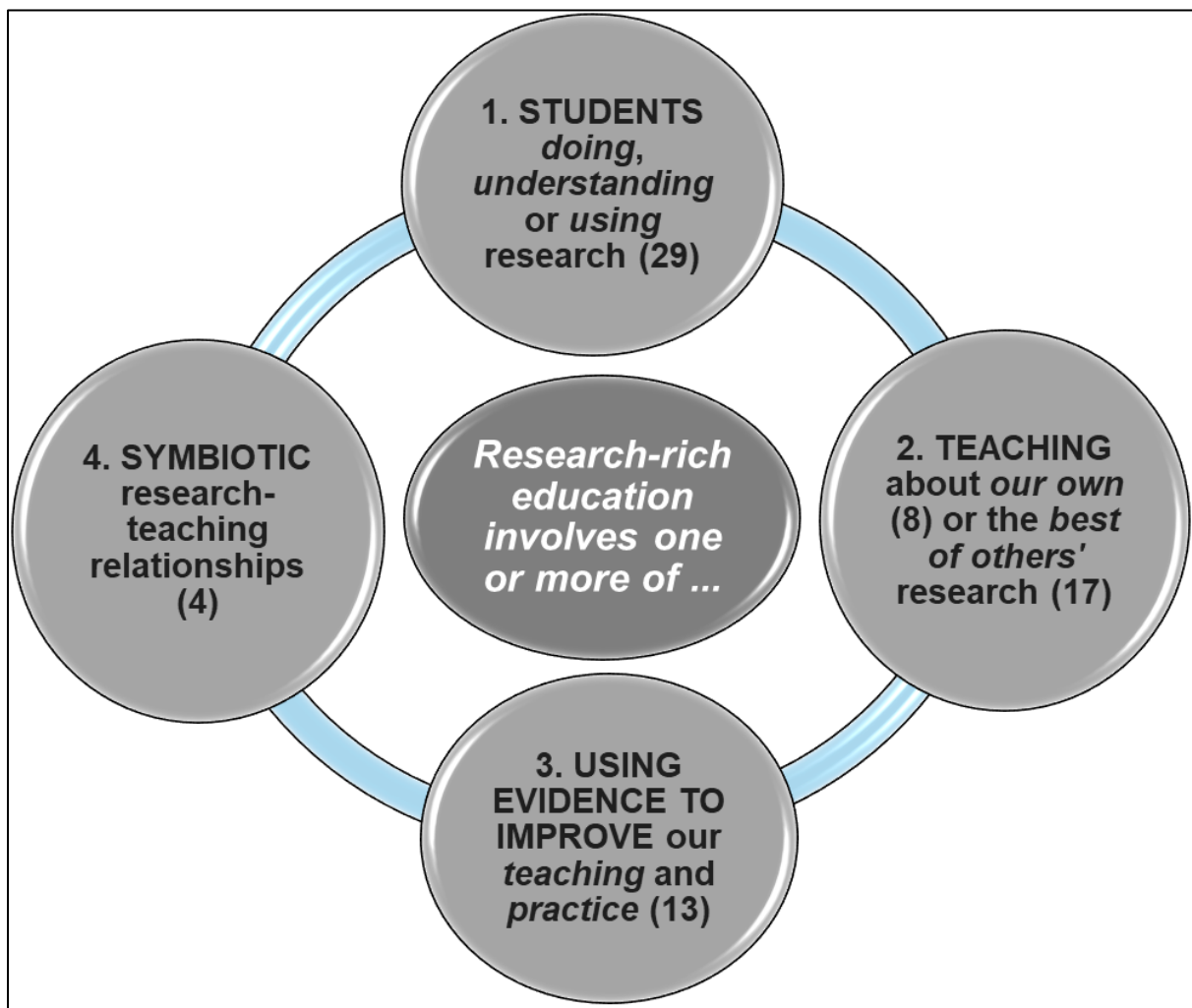


Figure 1 Practising research-rich education (Bage and D'Sena 2019 as yet unpublished)

In examples from their own words, what colleagues thought of as **students doing, using or understanding research** (Bubble 1 above) were things like:

- *'Where learners are more active in discovering information through their own research, as opposed to passively receiving it'*
- *'That students are learning research processes.'*

- *'To allow individuals and groups to use the critical inquiry skills which research, when properly engaged, can offer.'*

In describing **teaching about our own or the best of others' research** (Bubble 2) colleagues made these sorts of statement:

- *'It means sharing your research papers/findings with students as part of your teaching, and learning from student research.'*
- *'Knowing and using current thinking in teaching.'*

Using evidence to improve our teaching and practice (Bubble 3) was illustrated by examples such as:

- *'Evidence based teaching helps to professionalise what we do and keeps us abreast of developments especially from neuro science.'*
- *'Evidence-based practice in informed contexts rather than maintaining outdated traditional modes.'*

Finally, a few statements from highly experienced educators described **symbiotic research-teaching relationships** (as in Bubble 4):

- *'Coherent, cyclical and dynamic processes of learning, with staff learning from students as well as students learning from staff.'*
- *'A mutually beneficial and rewarding relationship, co-dependent.'*

Although none of these four categories are mutually exclusive, because *symbiotic views of research-teaching relationships* explicitly combine elements in the others, it might be thought of as harder to practise. What matters though, for us as higher educators, is less that we personally have the mental agility or professional experience to think about all these different elements simultaneously; and more that we collectively are clearly and progressively planning for each element, as part of our students' overall learning experience.

Dr Grant Bage July 2019

REFERENCES

- Bage, G. (2019a). Lessons and lacunae? Practitioners' suggestions for developing research-rich teaching and learning: Angles on innovation and change. *Innovations in Education and Teaching International* (56) 2, 150-161 <https://doi.org/10.1080/14703297.2018.1462226>
- Bage, G. (2019b). Putting research first? Perspectives from academics and students, on first-year undergraduates learning research. *Student Success* (10) 1, 73-85 <https://doi.org/10.1080/14703297.2018.1462226>
- Healey, M. & Jenkins, A. (2009). *Developing undergraduate research and inquiry* York, England: Higher Education Academy <https://www.heacademy.ac.uk/knowledge-hub/developing-undergraduate-research-and-inquiry> (accessed 27 November 2018)
- Tight, M. (2016). Examining the research/teaching nexus. *European Journal of Higher Education* (4), 1-18. <https://doi.org/10.1080/21568235.2016.1224674>