Engaging students in research and inquiry

Please mute your microphone but leave your video on if you are willing.

To share comments and queries verbally please 'raise your hand'
and wait to be invited to turn of your microphone.

Zoom chat is open the whole time for you to add your comments and questions.

Handout: SEE LINK IN CHAT ROOM

Enjoy the session

Engaging students in research and inquiry: Promoting the research teaching nexus

> Mick Healey www.mickhealey.co.uk

"... universities should treat learning as not yet wholly solved problems and hence always in research mode"

(Humboldt 1810, translated 1970, quoted by Elton 2005, 110)

"... the research/teaching nexus ... definitely qualifies as one of the most talked about terms in contemporary higher education policy and research." (Tight, 2016: 305)



Brief biography

- HE Consultant and Researcher; Emeritus Professor University of Gloucestershire (UoG), UK; The Humboldt Distinguished Scholar in Research-Based Learning McMaster University, Canada; International Teaching Fellow, University College Cork, Ireland
- National Teaching Fellow; Principal Fellow HE Academy; SEDA@20 Legacy Award for Disciplinary Development; International Society for Scholarship of Teaching and Learning (ISSoTL) Distinguished Service Award
- Economic geographer and previously Director Centre for Active Learning UoG
- Advisor to Canadian Federal Government 'Roundtable on Research, Teaching and Learning in post-Secondary Education' (2006)
- Advisor to Australian Learning and Teaching Council / Office of Learning and Teaching Projects / Fellowships on the 'Teaching-research nexus' (2006-08), 'Undergraduate research' (2009-10); 'Teaching research' (2011-13); and 'Capstone curriculum across disciplines' (2013-15); Students as Partners (2015-18)
- Advisor to League of European Research Universities (2009)
- Senior Editor International Journal for Students as Partners (2016-)
- Research interests: linking research and teaching; scholarship of teaching and learning; active learning; students as change agents and as partners

Participants previous experience

- Which of the following statements most applies to you:
- 1. I have little or no experience of engaging students in research and inquiry
- 2. I have experienced several examples of engaging students in research and inquiry
- 3. I have extensive experience of engaging students in research and inquiry

Engaging students in research and inquiry

- 1. The research-teaching nexus
- **2. Different ways of engaging students**
- 3. Strategies for engaging students at the beginning of their course
- 4. Strategies for engaging students in the remainder of their course
- 5. Conclusions and action planning

Linking teaching and research: Line-up

It is essential that students are aware of the research which goes on in their departments

StronglyStronglyagreedisagree12345Where do you stand from position 1 to

position 5?

Linking teaching and research: Line-up

I believe that my teaching and my research are strongly linked

Strongly ------ Strongly agree disagree 2 3 4 5

Where do you stand from position 1 to position 5?

Developing the teaching-research nexus

The impact of research on teaching "Overall we have consistently found that there is a zero relationship between teaching and research at the individual academic level and at the department level."

Hattie and Marsh (2004, 7)

Developing the teaching-research nexus

The impact of teaching on research

"Students who both taught and conducted research demonstrate significantly greater improvement in their abilities to generate testable hypotheses and design valid experiments."

Feldon (2011)

Our argument: a 'research active curriculum'

"All undergraduate students in all higher education institutions should experience learning through, and about, research and inquiry. ... We argue, as does much recent US experience, that such curricular experience should and can be mainstreamed for all or many students through a research-active curriculum. We argue that this can be achieved through structured interventions at course team, departmental, institutional and national levels" (Healey and Jenkins, 2009, 3).

Engaging students in research and inquiry

"For the students who are the professionals of the future, developing the ability to investigate problems, make judgments on the basis of sound evidence, take decisions on a rational basis, and understand what they are doing and why is vital. Research and inquiry is not just for those who choose to pursue an academic career. It is central to professional life in the twenty-first century."

Brew (2007, 7)

	Research-tutored	Research-based	
EMPHASIS ON RESEARCH CONTENT	Engaging in research discussions	Undertaking research and inquiry	EMPHASIS ON RESEARCH PROCESSES AND PROBLEMS
	Learning about current research in the discipline	Developing research and inquiry skills and techniques	
	Research-led	Research-oriented	
	STUDENTS FREQUENT	TLY ARE AN AUDIENCE	
Curricul	um design and the	research-teaching (based on l	, nexus Healey, 2005, 70)

STUDENTS ARE PARTICIPANTS

Any questions or comments so far?

Pause to address one or two queries or comments either verbally (raise your hand) or via Zoom Chat



Strategies for engaging students at the beginning of their courses

You should have skim read at least TWO of the mini case studies in Section 1.1-1.12 of the handout (pp2-7)

Tell us what you liked about ONE example you read; OR share a positive experience of engaging first year students in research and inquiry that you have had.

If you would like to share this verbally then please 'raise your hand'
. Alternatively, please share what you liked in Zoom Chat area.

Please remember to tell us, if appropriate, the number of the case study (1.1-1.12).

STUDENT-LED

Pursuing (information-active)

EXPLORING AND ACQUIRING EXISTING KNOWLEDGE

Authoring (discovery-active)

PARTICIPATING IN BUILDING KNOWLEDGE

Identifying (information-responsive)

Producing (discovery-responsive)

STAFF-LED

Inquiry-based learning: a conceptual framework (after Levy, 2011)

High Impact Activities

- **★** First-Year Seminars and Experiences
- Common Intellectual Experiences
- ★ Learning Communities
- ☆ Writing-Intensive Courses
- **★** Collaborative Assignments and Projects
- * "Science as Science Is Done"; Undergraduate Research
- Diversity/Global Learning
- * Service Learning, Community-Based Learning
- 🖈 Internships
- * Capstone Courses and Projects

Source: Kuh, 2008

Strategies for engaging students beyond the first year of their courses

You should have skim read at least TWO of the mini case studies in Section A2 of the handout (pp7-11)

Tell us what you or your group liked about ONE example you read; OR share a positive experience of engaging students beyond the first year in research and inquiry that you have had.

If you would like to share this verbally then please 'raise your hand'
. Alternatively, please share what you liked in Zoom Chat area.

Please remember to tell us, if appropriate, the number of the case study (2.1-2.12).

Developing and enhancing undergraduate final-year projects and dissertations



A National Teaching Fellowship Scheme project publication

Mick Healey, Laura Lannin, Arran Stibbe and James Derounian July 2013



"Our argument is that a more flexible but equally robust approach is required to the design and assessment of FYPD [final year projects and dissertations] to meet the needs of students from diverse subject areas and types of institution." (Healey et al., 2013: 10)



"I cannot think of anything more unfair than ... to treat all students as if they are the same, when they so manifestly are not" (Elton 2000: 1).

Engaging students in research and inquirybased learning: Your reflections

Take a few moments to write on the padlet: (link in chat room)

a) Your take home message from this session – the most important thing that you have learnt

b) One action point – something you plan to do as a result of today's session



Students as partners in learning and teaching in higher education

Source: Based on Healey, Flint and Harrington (2014, 25)

Engaging students in research and inquiry: Conclusions

- Getting students to produce knowledge rather than just consume knowledge is a way to re-link teaching and research
- The challenge is to mainstream undergraduate research so that all students may potentially benefit
- Adopting a broader definition of undergraduate research than is currently common is a way forward (Boyer *et al.*), which should benefit the learning of students in institutions with a range of different missions

Engaging students in research and inquiry: Conclusions

If students are to be truly integrated into HE then the nature of higher education will need to be reconceptualised.

"universities need to move towards creating inclusive scholarly knowledge-building communities. ... The notion of inclusive scholarly knowledge-building communities invites us to consider new ideas about who the scholars are in universities and how they might work in partnership." (Brew, 2007, 4)

There is a need to do more thinking 'outside the box'