Going back to our roots: disciplinary approaches to pedagogy and pedagogic research
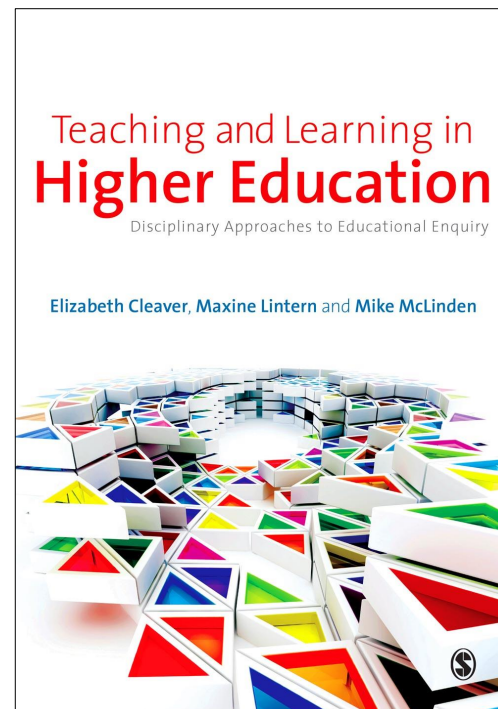
Dr. Elizabeth Cleaver
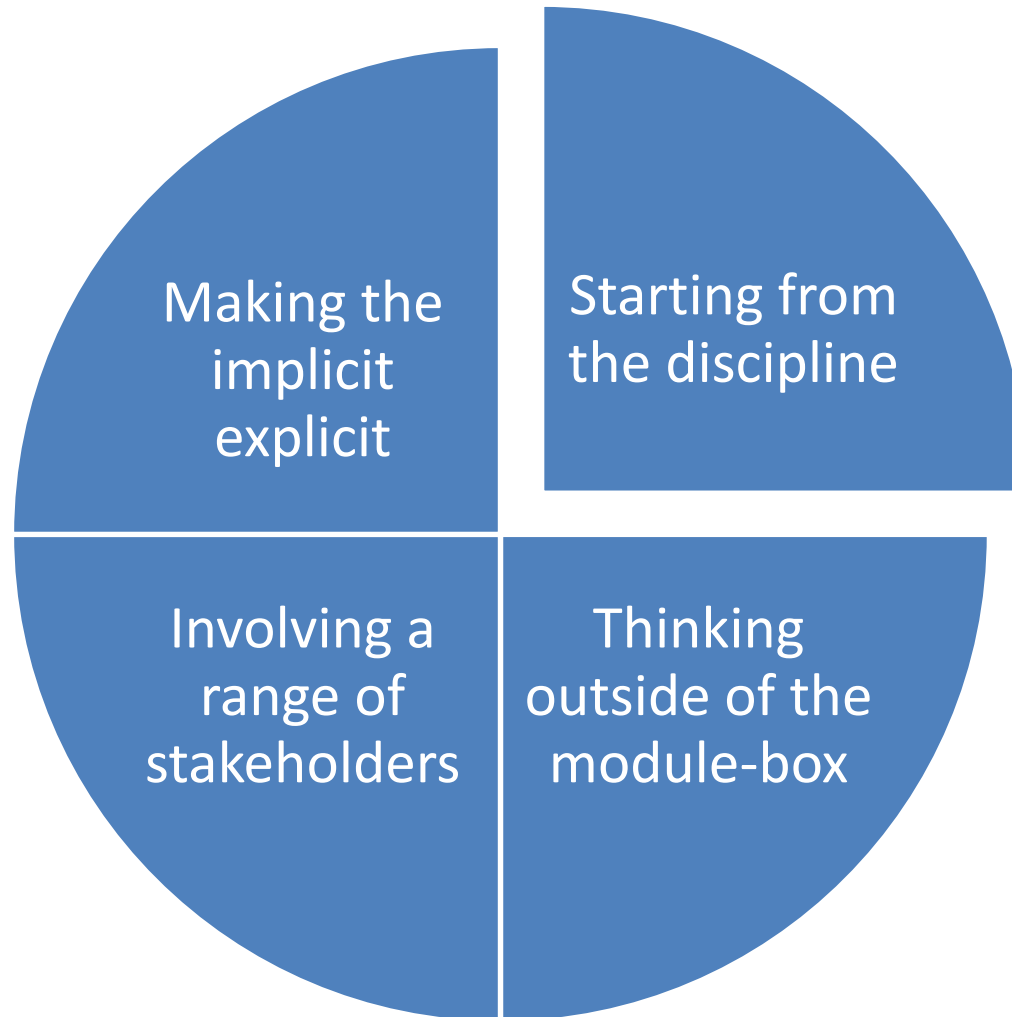
Director of Learning Enhancement and Academic Practice

University of Hull

inspiring. curriculum

Curriculum 2016+

PgCert Academic Practice

Teaching and Learning in
Higher Education
Disciplinary Approaches to Educational Enquiry

Elizabeth Cleaver, Maxine Lintern and Mike McLinden

Curriculum 2016+: our starting point

- Making the implicit explicit
- Starting from the discipline
- Involving a range of stakeholders
- Thinking outside of the module-box

6 Key Principles of Curriculum Design

1. Making explicit the big ideas, concepts and/or skills developed within programmes

2. Making explicit our disciplinary and practice-based approaches to teaching and student learning

3. Making explicit the rationale for assessment choices and approaches

4. Embedding the Hull Graduate Attributes

5. Internationalising the curriculum

6. Developing inclusive curriculum and assessment

The Hull Vision for Learning

At Hull we believe that research, teaching and learning activities are fundamentally interconnected through academic disciplines. Our understanding of this interconnectivity goes beyond simple research-teaching linkages … [to acknowledge] the shared epistemic origins of research, teaching and learning practices in University settings. Just as our research practices are based on fundamental understandings of the nature of knowledge in a discipline (how such knowledge is created and how it is best communicated to facilitate understanding and application) so too our teaching and learning activities reflect these understandings. This approach helps us to recognise why teaching and learning takes different forms and has distinctive characteristics across the institution and allows us actively to foster this difference.

4 Key Reasons for Disciplinary Focus

1. Interdisciplinarity rests on strong disciplinarity;

2. Disciplines lie at the heart of teaching <u>and</u> research (and connect the two);

3. Disciplines are fundamental to many academics' professional identities

4. Concepts and skills that we teach (e.g. 'criticality', 'voice', and 'evidence') are often discipline-specific
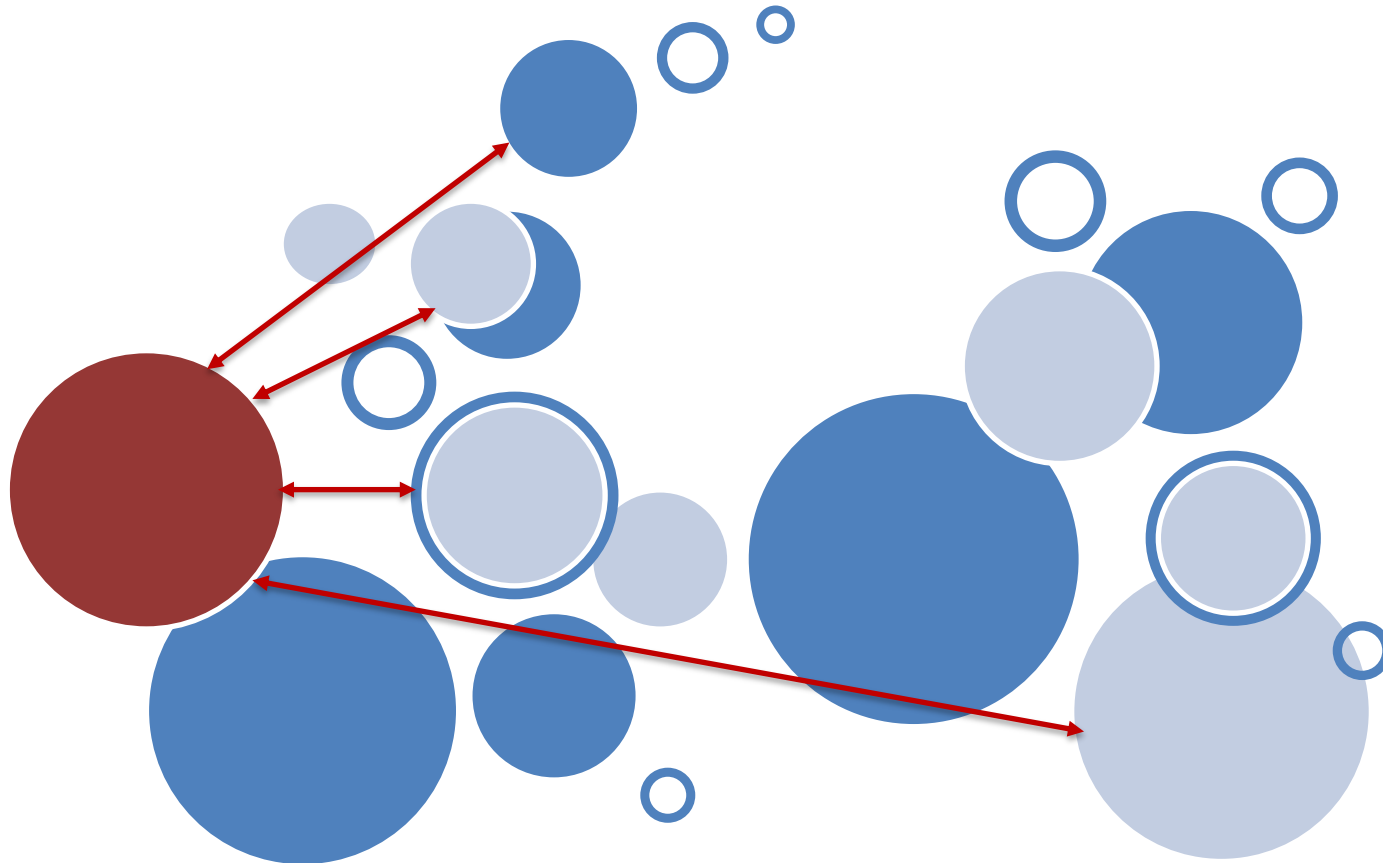
Disciplines are 'nodes in a remarkably vibrant web of scholarship' (Jacobs, 2013 p. 224)

# Curriculum design and the research-teaching nexus (adapted from Healey, 2005).

STUDENT FOCUSED: STUDENTS AS PARTICIPANTS

Research-tutored Curriculum emphasises learning focused on students writing and discussing essays and papers	**Research-based** Curriculum emphasises students undertaking inquiry-based learning
Research-led Curriculum is structured around teaching current subject content	**Research-oriented** Curriculum emphasises teaching processes of knowledge construction in the subject

EMPHASIS ON RESEARCH CONTENT

EMPHASIS ON RESEARCH PROCESS

TEACHER-FOCUSED: STUDENTS AS AUDIENCE

Connecting Research and Teaching
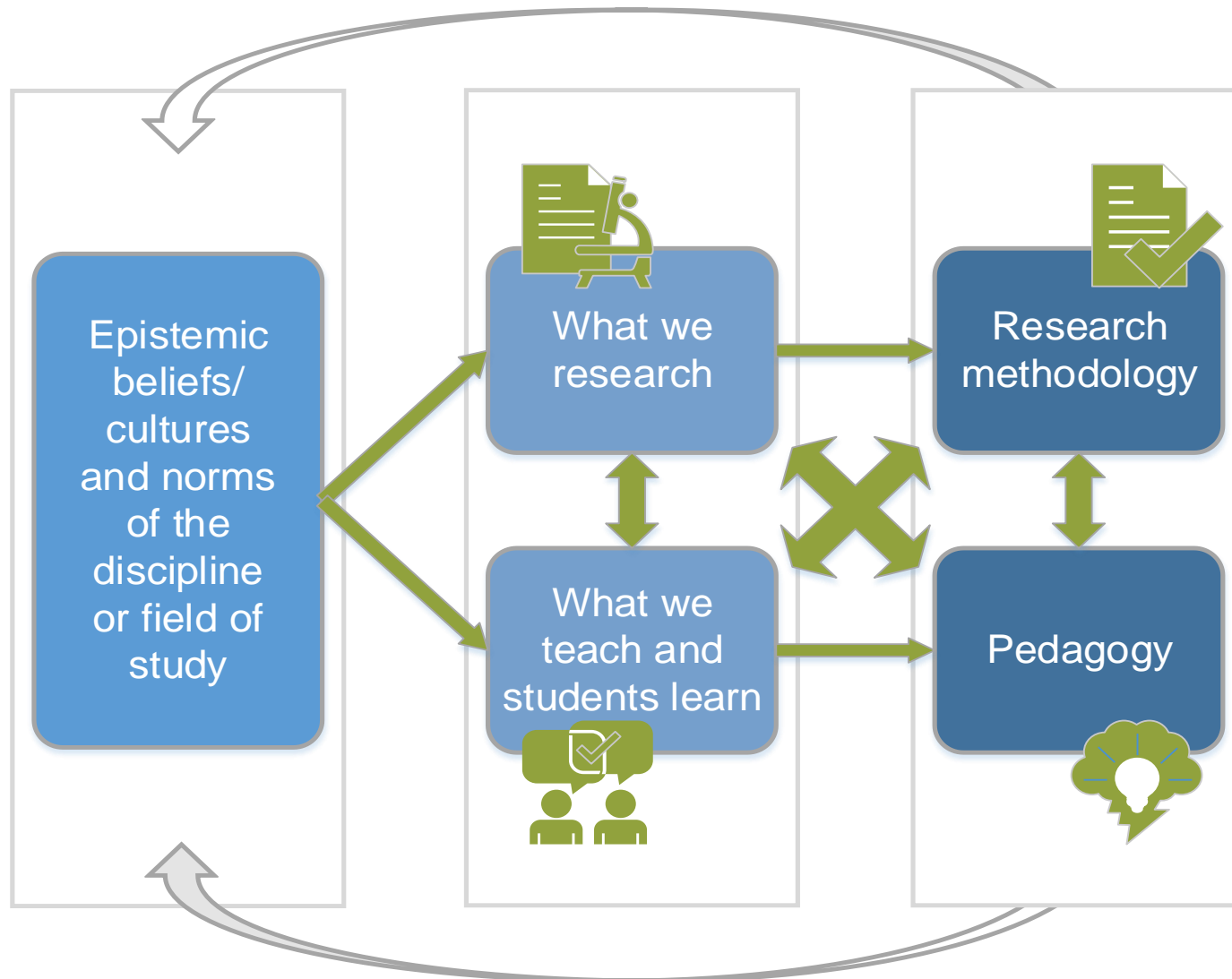
Questions for Programme Teams

- What are the key 'ways of thinking and practising' that students should have opportunities to develop?

- What modes of teaching are best suited to developing the 'ways of thinking and practising' that characterise your subject area?

- What modes of learning should you be supporting students to become skilled in and how do these, in turn, affect your teaching?

- How will you engage students in understanding your disciplinary pedagogies?

History

'Shaking the sanctity of the textbook' *and seeing* ***'history as interpreted residue'*** *–* developing both historical enquiry techniques and contextual and empathetic awareness through first hand opportunities to gather and marshal evidence and the fostering of sensitivities to time and place

How? Through independent and group projects, enquiry, fieldtrips, and critical discussion and debate.

Engineering

'Adaptive and adapting', 'problem finding and solving', 'visualising and constructing' *and* ***'improving' –*** developing approaches to engineering problem solving, improvements and innovation

How? By creating learning spaces where adaptive practice, innovation, design, and evaluation are modelled, encouraged and supported through projects, group work, computer-based and conceptual modelling and visualisation, lab work and design activities.

Sociology

'Critical reflexivity' –the ability to maintain an awareness of alternative frameworks of interpretation and different subjective and contextualised understandings of individuals, society and artefacts.

How? Viewing the acquisition of knowledge itself as a social process which is developed and understood by interaction with and critique of others' interpretations – through guided reading and student-led discussions and debate.

Sports Rehabilitation

'Professional command and presence' - through the development of autonomy, interdisciplinary working, competency and clinical specialism.

How? Experiential learning and problem-based approaches (both individual and group-based) in clinical and non-clinical settings

Geography

'The dynamics of difference, interconnection and flow' – the interconnections of physical and human processes and systems at a variety of geographical scales, from local to global and crossing a number of disciplinary boundaries.

How? a focus on real-world understanding, problems and issues both in the classroom and particularly in the field.

Youth Work and Community Development

'resolving conflicts between professional and personal identities and values' - the ability to understand how and when personal identities and values can and should be separated from professional identities, values and activities.

How? Dialogic and dialectic approaches in the classroom and in professional settings to develop students' critical reflexivity and praxis (the process by which theory and learning becomes enacted, embodied, or realised)

Why Disciplinary Pedagogic Research?

'a stranger in a strange land' Stierer (2008: 35)

'The vocabulary and grammar of the PCAP course is largely interpretivist and constructivist… and was, initially, as incomprehensible to me as any unknown foreign language. However, these are theories and methods that with time and exposure I am slowly coming to understand, appreciate and learn, even though I still find many of the concepts difficult to accept because of my positivist nature'.

Dr. Stephen Maher, Senior Lecturer in Biomedical Science

As a social scientist I often find myself defending our methods and methodologies when I am in the company of 'exact' scientists—often perceived by many key stakeholders (students, society, industry) as 'real' scientists. Our methods and approaches are often perceived as 'fluffy', 'easy' and 'soft'. It was great that on the PCAP such things were discussed and named (for once). More importantly, and the main message I have taken away from this module, is that academics should not just 'borrow' a 'social science method' to 'quickly' evaluate/research their teaching and learning in their discipline. They can and should use their discipline-specific methods. We train our social science students for many years to master these methods and it was, in the PCAP 3 Module, that (for the first time) somebody clearly articulated the frustrations I have often felt.

Dr. Lisa Dikomitis, Lecturer in Social Research

Researching Learning and Teaching in the Disciplines

- Encouraged to use familiar research methods to undertake enquiry and generate evidence for the improvement and development of curriculum and pedagogy.

- The assessment – an article in the style of a journal of their choice

- Supported and encouraged to submit for publication (although this doesn't count towards their marks).

The final [PCAP] module gave me the opportunity to explore an aspect of learning and teaching practice from the perspective of discipline-specific pedagogy. It was of value, and indeed interest, to develop the research theme from experiences within my own discipline (chemistry) but also to combine this with research practices more generally used in educational research. I learnt some new approaches and, on occasions, had to think in different ways. Starting from the disciplinary viewpoint eased me into the project, which I was then able to develop to give a more comprehensive analysis and conclusion.

Professor David Evans, Chemistry.

Thank you.

Any questions?

References and other resources:

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- Jacobs, J (2013) *In Defence of Disciplines*: *Interdisciplinarity and Specialism in the Research University* Chicago: University of Chicago Press.

- Savin-Baden, M (2008) 'Liquid learning and troublesome spaces: journeys from the threshold? In R. Land, J. Meyer and J. Smith (Eds) *Threshold Concepts within Disciplines.* Rotterdam: Sense Publishers.

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- Shulman, L (1993) Teaching as community property: putting an end to pedagogical solitude. *Change* 25 (Nov/Dec), 6.
- Stierer, B (2008) 'Learning to write about teaching' in R. Murray (Ed) *The Scholarship of Learning and Teaching in Higher Education.* Maidenhead: SRHE/OUP, 34-45.

- *Enhancing Teaching-Learning Environments in Undergraduate Courses* website and resources: http://www.etl.tla.ed.ac.uk/index.html