

# Research-based Learning and My Teaching

## Guidance sheet

This guidance sheet consists of two parts. The aim of Part 1 is to offer a number of conceptual tools that may be useful in discussions about research-based learning, as well as in curriculum development/evaluation activities. Part 2 offers for discussion a list of principles that, according to Jenkins (2008), should underlie initiatives to support undergraduate research and enquiry in the UK context. We would like to encourage you to engage with this material critically, reflecting on which models/diagrams and principles would be particularly applicable in your context.

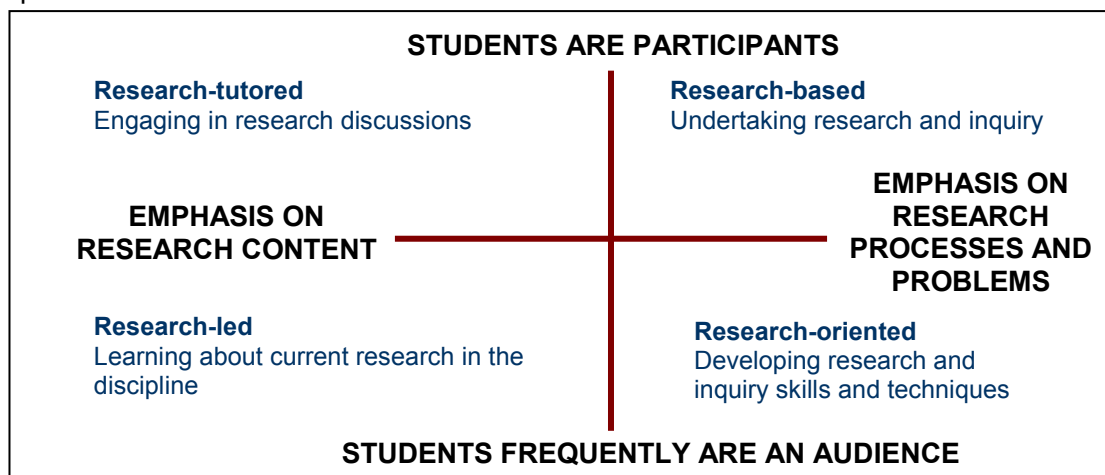
### PART 1

This part invites you to think about the modules / programmes you are involved in in relation to three conceptual models. It is important to remember that there is no one 'right' quadrant or area which would correspond to a 'research-based learning module': most teaching initiatives would integrate at least some of these areas.

#### Guiding questions for discussion:

- What is the main category your module / programme fits into?
- Does it fit into more than one category?
- Are you happy with the current emphasis of your module / programme? How might you change it?

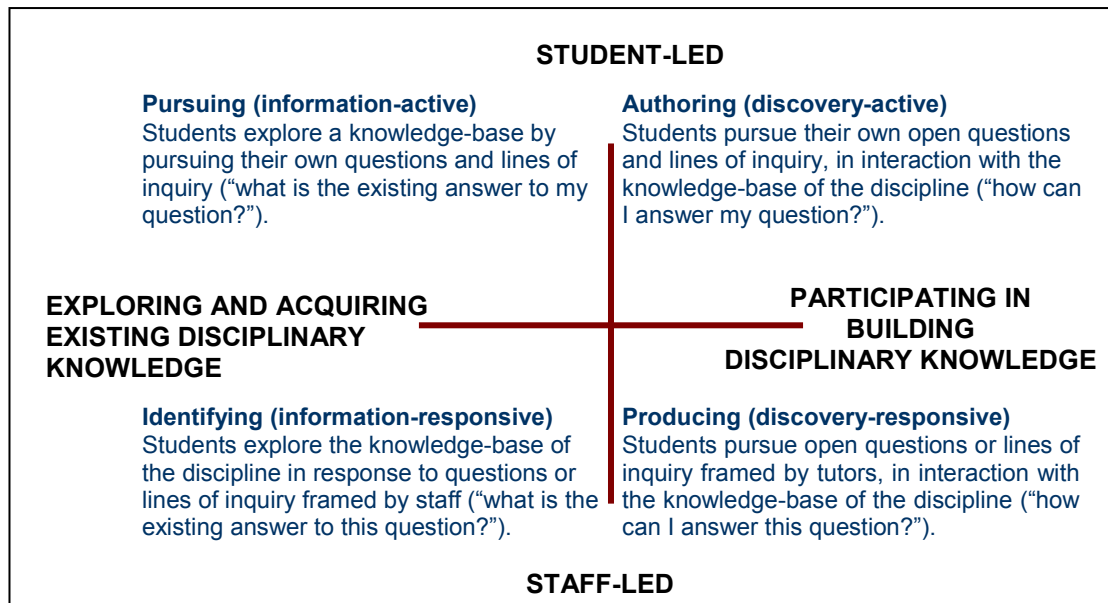
I. The matrix below can be used to think about your teaching in relation to the role students play and the emphasis on either research content or research processes/problems. The authors of this model suggest that, generally, more teaching and learning should be done in the top half of the table than is currently happening in the UK HE sector, but at the same time, a balanced curriculum should cover all four quadrants.



Source: Healey and Jenkins (2009)

Your thoughts:

II. The matrix presented in this section can be used to think about your teaching in terms of the questions students pursue. This model is known as an *enquiry-based learning framework* which juxtaposes 'information' and 'discovery' frames (whether students experience research as exploration and acquisition of existing knowledge or as building on and contesting that knowledge), and 'active' and 'responsive' modes (framing of inquiry and directing of the inquiry process by students or by the teacher).

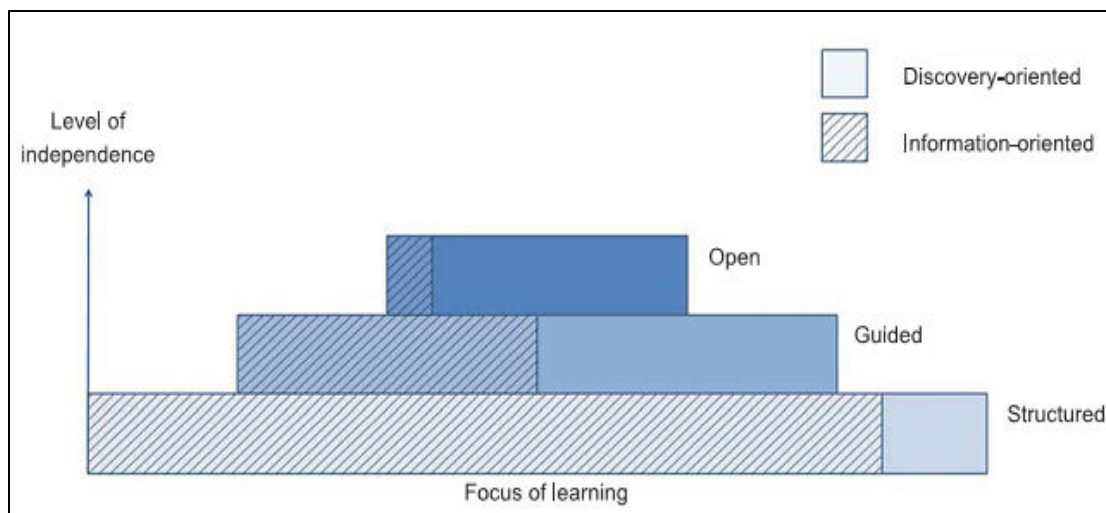


Source: Levy (2009)

Your thoughts:

III. The final diagram presents the relationship between the level of student independence and the focus of their learning through the *scaffolding metaphor* – more teacher support corresponds to the wider base at the bottom, while increased student independence (and hence less support from the teacher) is at the top. The three modes of enquiry referred to in this model are:

- structured* – teacher provides question/problem and explains how to address it;
- guided* – teacher provides question but students explore it themselves;
- open* – students formulate and explore questions themselves.



Source: Spronken-Smith and Walker (2010)

Your thoughts:

A large, empty rectangular box with a dotted border, intended for the student to write their thoughts. The bottom right corner of the box is folded over like a page corner.

## PART 2

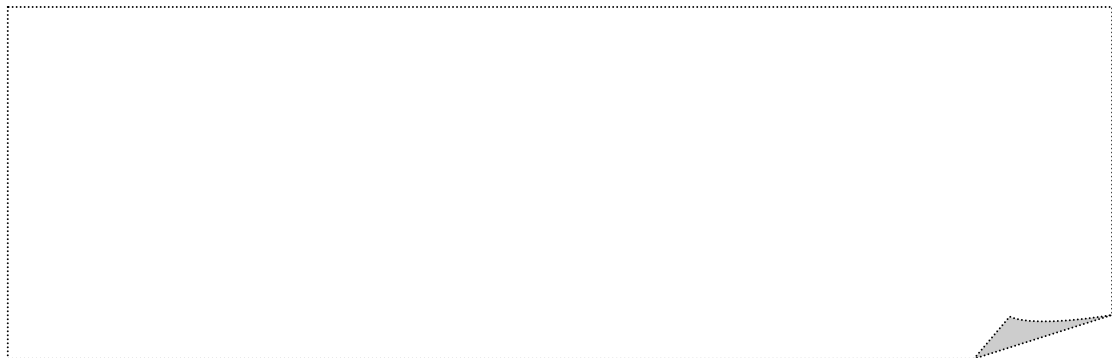
This part offers a list of principles generated by Professor Alan Jenkins (2008), one of the most active proponents of research-based learning in the UK. These principles are based on his comparison of US and UK policy and practice in undergraduate research. Jenkins suggests that programmes supporting undergraduate research should incorporate all/most of the following:

- Expressly engage with 'undergraduate research', 'community based undergraduate research', or some such, and recast their understanding of 'student-centred' or 'inquiry-' or 'problem-based learning' accordingly.
- Adjust the philosophy/values of their programme so as to actively bring undergraduate students (along with others such as librarians and community activists) into the worlds of research.
- Encourage and enable students to learn in ways that parallel or reflect the ways faculty/staff themselves research/learn in their discipline/professional area.
- Build research opportunities into the formative processes and summative outcomes of course assessment for students in ways that retrace and register how faculty/staff develop and disseminate their own research/learning in their own discipline/professional area, e.g. through undergraduate research journals, student research conferences, exhibitions, recordings and broad/narrow casts.
- Ensure that the programme is clearly visible and recognised as 'undergraduate research' by the university communities (in particular students) and parents, the local community, and possible external sponsors and stakeholders (pp. 8-9).

### Guiding questions for discussion:

- How feasible is it to address the above points in your teaching context?
- What would be the first steps you would have to undertake if you wanted to incorporate (some of) these principles in your module/programme?

Your thoughts:



### References

- Healey, M. and Jenkins, A.** (2009). *Developing Undergraduate Research and Inquiry*. HEA Publication. Available at: [http://www.heacademy.ac.uk/assets/documents/resources/publications/DevelopingUndergraduate\\_Final.pdf](http://www.heacademy.ac.uk/assets/documents/resources/publications/DevelopingUndergraduate_Final.pdf) (last accessed 6 October, 2011).
- Jenkins, A.** (2008). Adaptation of US Undergraduate Research Schemes for Mainstream Development in the UK and other International Contexts: Principles and Policies. Available at: [http://www2.warwick.ac.uk/fac/soc/sociology/rsw/undergrad/ceti/resources/adaptation\\_of\\_us\\_ug\\_research\\_schemes.doc](http://www2.warwick.ac.uk/fac/soc/sociology/rsw/undergrad/ceti/resources/adaptation_of_us_ug_research_schemes.doc) (last accessed 6 October, 2011).
- Levy, P.** (2009) *Inquiry-based learning: a conceptual framework*. CILASS, University of Sheffield. Available at: <http://www.shef.ac.uk/cilass/resandeval/ibresources.html> (last accessed 6 October, 2011).
- Spronken-Smith, R. and Walker, R.** (2010). Can inquiry-based learning strengthen the links between teaching and disciplinary research? *Studies in Higher Education*, 35-6, pp. 723-740.

### WHAT NEXT?

If you have any questions and/or would like to take your discussions further, get in touch with the Thinking Writing team at [thinkingwriting@qmul.ac.uk](mailto:thinkingwriting@qmul.ac.uk)