

**Title:** **From expert to novice: open educational resources (OERs) for unpacking discipline-based ways of thinking, learning and practising**

**Presenters:** **Helen King and Jane Hughes and Colleen McKenna**  
University of Bath and HEDERA LLP

### **Abstract:**

#### **Session Learning Outcomes**

By the end of this session, delegates will be able to:

- Consider the different perspectives of novices (students) and experts (staff);
- Discuss how colleagues from different disciplines view and explain the world around them;
- Analyse their ways of thinking and practising in their own discipline context (including educational development);
- Use and disseminate open access learning materials designed for use in educational development courses and programmes (e.g. PGCerts).

#### **Session Outline**

It has been argued that a discipline-based approach is paramount in educational development so as to situate it within the academics' community of practice (e.g Jenkins, 1996) and the UKPSF identifies the need for knowledge of "Appropriate methods for teaching and learning in the subject" and "How students learn...within their subject" (HEA, 2011). However, it has also been suggested that pedagogy is mostly generic in nature and that there are very few disciplinary differences (e.g. Gibbs, 2000; Wareing, 2009). So if teaching principles are generic and students do not learn differently in different subjects, then how can institutional programmes best tap into the specific academic context that our participants are working in and feel affiliated to?

Recently, interest has grown in higher education in the ways in which experts think and practise (e.g. Threshold Concepts, Meyer & Land, 2003; Decoding the Disciplines, Pace & Middendorf, 2004; and, in Geoscience, the emerging field of Geocognition, Libarkin, 2006). Learning and teaching, then, becomes a journey from novice towards expert. In addition to acquiring factual knowledge, students must understand how this fits within the conceptual framework(s) of their discipline and organise it for retrieval and application (Bransford et al, 2000). This approach thus requires staff (experts) to make explicit, unpack and explain their disciplinary ways of thinking and practising.

In 2011 the lead author received funding from the HEA/JISC to develop open educational resources (OERs), for use by educational developers within generic courses or programmes,

which will help academic staff consider their discipline-based practice. The resources will also help staff to investigate the literature and resources on learning and teaching available in their discipline. This workshop will provide an opportunity for participants to experience, explore and review drafts of these OERs. Once completed, the resources will be made freely available under a Creative Commons license.

### **Session Activities and Approximate Timings**

- 15 minutes: Presentation - Introduction to the project and its rationale
- 5 minutes: Questions
- 30 minutes: Small groups - Participation in an example learning activity from the materials
- 10 minutes: Plenary discussion - Review of the activity
- 15 minutes: Small groups – look through and discuss other materials
- 15 minutes: Plenary – feedback, questions and discussion

### **References**

- Bransford, J.D., Brown, A.L. & Cocking, R.R. (Eds.)(2000) *How People Learn. Brain, Mind, Experience and School*. National Academy Press, Washington D.C.
- Gibbs, G. (2000) Are the pedagogies of the disciplines really different? In *Improving student learning through the disciplines*. Proceedings of 1999 7th Improving Student Learning Conference. Oxford: Oxford Centre for Staff and Learning Development
- HEA (2011) The UK Professional Standards Framework for teaching and supporting learning in higher education. <http://www.heacademy.ac.uk/assets/documents/ukpsf/ukpsf.pdf>
- Jenkins, A. (1996) Discipline-based educational development. *International Journal for Academic Development*, Vol.1 No. 1, pp 50–62
- Libarkin, J.C. (2006) Geoscience Education in the United States. *Planet*, Vol.17 pp 60-63  
<http://www.gees.ac.uk/pubs/planet/index.htm#P17>
- Meyer, J.H.F. & Land, R. (2003) 'Threshold Concepts and Troublesome Knowledge 1 – Linkages to Ways of Thinking and Practising' in *Improving Student Learning – Ten Years On*. C.Rust (Ed), Oxford: Oxford Centre for Staff and Learning Development
- Pace, D. & Middendorf, J. (2004) Decoding the Disciplines: A Model for Helping Students Learn Disciplinary Ways of Thinking. *New Directions for Teaching and Learning*, No. 98, pp 1 - 12
- Wareing, S. (2009) Disciplines, discourse and Orientalism: the implications for postgraduate certificates in learning and teaching in higher education. *Studies in Higher Education*, Vol. 34 No.18, pp 917-928