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Disciplines, discourse and Orientalism, and the implications for postgraduate certificates in learning and teaching in higher education

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Abstract

Despite national requirements for accredited teaching qualifications to promote understanding of 'how students learn, both generally and in the subject' (HEA, 2006), there is a lack of literature internationally on disciplinary differences in student learning in higher education. Academics at a UK research intensive university were asked to report on the existence of literature or folkloric knowledge concerned with how students learnt in their subject. No relevant literature or folklore were identified but responses did demonstrate a discourse in which the academics constructed their discipline as 'better' than other disciplines: the finding with which the present paper is concerned. The discourse of the distinctiveness and superiority of ones own discipline can be understood as a form of 'Orientalism'. A postcolonial analysis of the discourse of disciplinary relationships offers a partial explanation for challenges made to the validity of cross-university activities, such as postgraduate certificates in learning and teaching.

Disciplines, discourse and Orientalism, and the implications for postgraduate certificates in learning and teaching in higher education

Introduction

The value and integrity of transdisciplinary educational development are frequently challenged by claims to the pedagogic distinctiveness of the disciplines, as by Rowland who writes:

The development of teaching and learning in higher education, then, is best not seen as a generic and practical activity which does not involve disciplinary thinking. If it does, it will inevitably be sucked into the reductive discourse of the culture of compliance.

(Rowland 2002:62)

This paper is concerned with how disciplinary differences are discursively constructed, and the consequences for a cross-university activity such the design and delivery of a postgraduate certificate in learning and teaching.

Different academic areas of study are associated with distinct communities of practice (Wenger 1998). Within these discipline communities, participants share knowledge, skills, social networks, stories of how their subject came to be, who are the leaders in the field, and what counts as a successful career, amongst other systems of information and practices. Epistemologically, different fields place different emphasis on, for example, objectivity and subjectivity (Psychology and Geology compared, say, to Fine Art and Education), on the relative importance of physicality and physical skills (Drama and Physiotherapy compared to Mathematics and History), on knowledge structures which are iterative and where learning occurs by tackling the same kinds of questions over and over again with increasingly sophisticated skills and understanding (as in English Literature and Philosophy), and those in which greater emphasis is placed on the acquisition of knowledge and principles in a linear hierarchical structure (as in Biology and Statistics). For some fields it is necessary to learn specific notation (as in Mathematics and all its related fields, Dance and Music). All these distinctions, and others, are documented elsewhere (for example, Becher and Trowler 2001, Rust 2000). Discipline-based staff working on interdisciplinary and transdisciplinary activities encounter unfamiliar social networks and customs and need to develop new skills and bodies of knowledge before feeling confident and comfortable outside their original discipline. However, experiences of studying and working within a discipline, and of working across or outside disciplines, are mediated by a discourse which distorts the perception and understanding of disciplinary relationships and of transdisciplinary activities. This discourse, it is argued here, has parallels with 'Orientalism':

...The process by which Western writers have since antiquity created an image of the 'Orient' as the binary opposite of the 'Occident' through various discourses that elaborate stereotypical fictions rather than describe any actual person or place. Among such stereotypes are the 'mysterious East', the 'lustful Turk', and 'Asian inscrutability'. 'Oriental' has for centuries been used by writers in a wide variety of fields to designate not merely a geographic location but also supposed moral, cultural and intellectual attributes. For example, Herodotus frequently contrasts the rationality of the Greek with the irrationality of the Asiatic Xerxes. In *Orientalism* (1978), Edward Said has delineated the structures of the discourse of Orientalism. More recently, the term has come to describe generally the activity by which a hegemonic discourse represents the 'other'.

(*The New Fontana Dictionary of Modern Thought* 1999)

This article uses Orientalism, on which postcolonial theory is founded, as a lens through which to

view to the discourse of disciplinary distinctiveness, supported by evidence from a small empirical study and from literature on the nature of disciplines and disciplinary relations.

Disciplinary and generic approaches to pedagogy

National accreditation requirements for teaching in UK higher education, first published in 1999 by the Institute for Learning and Teaching in Higher Education and reformulated in 2006 by its successor organisation, the Higher Education Academy, are situated within with the discourse of discipline-specific pedagogies. The Higher Education Academy's UK Professional Standards Framework for Teaching and Supporting Learning in Higher Education states that staff who teach and support student learning in higher education must demonstrate knowledge and understanding of 'how students learn, both generally and in the subject'. Jenkins and Burkill (2004) also emphasise the importance of a disciplinary focus in learning and teaching courses for new academic staff for, amongst other reasons, political nous: 'university wide courses are often attacked or questioned by Heads of Department etc for not being discipline-based; including a clear disciplinary focus helps to head off that criticism'.

Despite considerable support in higher education for staff development for new and experienced teachers being discipline specific, there is less evidence for disciplinary differences in learning and teaching between disciplines than might be expected. Jenkins and Burkill state in the same (2004) paper that '[m]any, even most, of the teaching and learning issues that confront new staff are generic in nature'.

While there is a substantial literature on how students learn generally in higher education (including the work of Kolb, Bloom, Marton and Säljö, Biggs, Perry, Schön, and Knowles, which are regularly included as key texts on validated, accredited postgraduate certificates in learning and teaching in higher education), there is no comparable literature on how students learn in specific disciplines, nor on other key areas of educational development such as theories of curriculum design or inclusivity. While the number and quality of discipline specific educational development resources is improving, as illustrated by Knights 2008, who explores how the methods of enquiry developed through the study of literature can be applied to learning, or by the resource list for the Mathematics and Statistics version of the Warwick University Postgraduate Certificate in Academic and Professional Practice, nevertheless there is relatively little published on how students learning in specific subjects. A useful bibliography concerned with how students learn in higher education would need to include generic educational development texts ('generic' because they apply across disciplines, although of course these texts originate in a variety of disciplines, such as philosophy, psychology or sociology).

While it is widely recognised that the primary affiliation of academic staff is usually to their subject discipline (Barnett 1988, Jenkins 1996), the idea of discrete subject disciplines with clear boundaries and distinct attributes can be contested on a variety of grounds. Barnett challenges whether disciplines are unified entities: 'Disciplines are not the harmonious enterprises sometimes assumed but are, rather, the territories of warring factions, often leaving a bloody mess in their internecine struggles' (Barnett 1994:61). In a concrete illustration of this, Paul Trowler (2008) cites conflicting beliefs and practices within a newly formed law department which had been created by the merger of two universities. The law department from one university used postgraduate assistants to teach, the law department from the other did not, both citing 'the way it's done in law' as the underpinning reason. One law department conceived of the discipline as a study of history and practice, which was relatively stable and uncontested ('hard-applied' in Biglan's 1973 taxonomy); the other conceived the discipline as a philosophical investigation into the nature of justice, and inherently a site of contestation ('soft-pure', according to Biglan). Brew (2003) has suggested that disciplines are no longer adequate categories for understanding

academic practices and subjects, as have Gibbons (1998) and Rowland (2002) who have both argued that coherent disciplinary groupings are no longer possible for reasons relating to the expansion of research activity. According to Rowland:

As disciplines become increasingly broken down into more highly specialised sub-disciplines, so the very idea of the discipline itself becomes redundant. Indeed, there are those who argue that the very concept of the discipline is no longer meaningful.

Rowland (2002:61)

Gibbons argues that the application of knowledge generated through university research to complex transdisciplinary problems in society is eroding the possibility of fixed discipline groupings for two reasons. The first reason is that research activity 'serves to highlight the provisional character of all knowledge [so that it] becomes increasingly difficult to sustain a coherent undergraduate curriculum' (Gibbons 1988: 15). The second reason he gives is that 'for the most part, universities are organised according to the structures of disciplinary science and that these structures are being altered by social forces' (Gibbons 1988:60). Discipline boundaries have never in any case been very clear in some subjects, particularly those which are inherently multi-disciplinary, such as Geography, Classics, and Theology and Religious Studies. O'Loughlin points out that 'linguists, historians, sociologists, archaeologists, philosophers, and psychologists may all find themselves teaching in ... [Theology and Religious Studies] departments' (2008:79).

In summary, there is evidence of a belief in higher education that preparation for teaching should be at least partially discipline based. This is despite challenges cited above to the concept of disciplines as discrete and internally consistent groupings of philosophy and practices, and despite the extensive literature concerned with issues of learning and teaching which apply across disciplines. Why, in these circumstances, does so much of the literature insist on the importance of discipline based staff development?

The 'stories' we tell about disciplines

Becher and Trowler (2001), interrogating the nature of disciplines, note 'that disciplines can be viewed from a realist or a phenomenological point of view', the former 'adopting a perspective that sees disciplinary knowledge as reflecting a discernable and stable reality', the latter 'seeing it as essentially socially constructed'. They argue for a middle ground between these positions, consisting of empirically discernable 'knowledge structures... mediated by social processes' (2001:37) and acknowledging that that 'we need to take into account narratives, 'stories', about disciplinary epistemology as well as disciplinary epistemology itself' (2001: 38). It is perhaps these 'stories' about disciplinary epistemology which hold the answer to why the academy insists on the importance of discipline based staff development.

Such 'stories' emerged unexpectedly as part of an investigation into the extent to which discipline-specific literature or 'local' academic knowledge (Manathunga 2006) about pedagogy could be identified. The investigation (Wareing 2006) was undertaken at a research-led pre-1992 university, in the UK which has approximately 8,000 undergraduate and postgraduate students in 22 departments across arts, humanities, social sciences and sciences. The intention was to use the findings from the study to support the development of the Postgraduate Certificate in Learning and Teaching which, as described above, was often criticised for being insufficiently informed by discipline-specific literature. Staff participating in, or who had recently completed, the Postgraduate Certificate in Learning and Teaching were asked to provide written answers to four questions:

- 1) What evidence is there that students in your discipline (or in specific specialist areas within

your discipline) learn in a way which is discipline-specific?

- 2) Regardless of whether you were able to find references to published work or not, do you believe there are differences, and if so, could you indicate what these are?
- 3) Are there models or theories about student learning which seem particularly suitable to your discipline?
- 4) Have you any ideas about what a theory or model of student learning should look like/be based on, in order to be useful to academics in your discipline?

Responses were intended to identify discipline specific pedagogic research literature on how students learn where this existed and, particularly if little or none were identified in published scholarly form, whether respondents were aware of accepted folkloric knowledge within disciplines about pedagogy, as Manathunga (2006) claims.

Written responses were received from staff teaching Classics, Drama and Theatre Studies, Economics, French, Linguistics and Physics. The responses revealed little relevant evidence of discipline specific literature on how students learn or accepted folkloric discipline-based knowledge of how students learn, with the exception of language teaching for adults.

... academics in my discipline [Classics] are perhaps more open than others to experiment with as wide a range as possible of teaching and learning techniques. I was therefore not surprised when I couldn't find any discipline-specific publications.
(Respondent A)

...reams where language-learning is concerned, next to nothing where the cultural/critical analysis elements of Modern Language programmes are concerned. (Respondent B)

This is in keeping with Gibbs's claim that 'It seems distinctly possible that there are in fact no non-generic learning principles [although one] exception may be in languages' (Gibbs 2000:49). In cases where citations to discipline-specific literature were identified, these dealt with themes which were relevant to other disciplines. For example, the main finding reported as emerging from the study of adults learning physics is an exact echo of the theory of threshold concepts and troublesome knowledge, developed by Meyer and Land (2005).

Contributions to our understanding of physics learning have been made through studies of the learning of physics by novice adults carried out by cognitive scientists, education specialists, and physicists [...] Although it is difficult to summarize 20 years of work in a few lines, the main point is the following:

Students enter their physics courses with learned mental structures that lead to misunderstandings of both the content and process of the material presented. Many of these are discipline specific and need to be dealt with through carefully designed instruction.

(Redish 1996, cited by Respondent C)

One result of the investigation, which has provided the focus of this paper, was the extent to which responses showed staff to define their discipline through its perceived differences from

other disciplines and through reductive analyses of other disciplines in relation to their own. Respondents argued their disciplines were methodologically, pedagogically and conceptually better than other disciplines.

Economic models are typically cast in terms of mathematical statements. The advantage of this is that researchers are forced to make precise the assumptions underlying a particular behavioural prediction or normative statement derived from the analysis of their model. This approach allows economists to model many situations usually not viewed as part of economics. Not without reason economics is often called the "imperial science" because of its reach into other disciplines such as social sciences, political sciences, biology and psychology. (Respondent D)

Classics/Classical Studies is an unusual academic "discipline" because it is by its very nature inclusive of several "disciplines": language learning, history, literary appreciation, art appreciation, and philosophical debate. I do sincerely believe that students who go through this degree ... experience a wider range of learning styles than those on, say, a traditional History or English degree. (Respondent A)

Language-learning is in some senses the foundational learning experience, obviously, and as such impacts on student learning in all other disciplines. (Respondent B)

These responses suggest that academics construct 'stories' to explain the superiority of their own disciplines over others. Respondent D implies that other disciplines make imprecise assumptions, since he sees the precision of Economics as an advantage, and that other disciplines do not 'reach' beyond their own boundaries, since to him it is notable that Economics does. Respondent A assumes other disciplines are less diverse than Classics, and Respondent B assumes a primacy to language learning which means that her discipline (like Economics) can be singled out for its impact on other disciplines.

Discipline 'stories' as colonial discourse

Our discipline 'stories' do several things. Firstly, they overlook differences within our own disciplines (as described by Trowler, Barnett, Rowlands and Gibbons above). These differences can be epistemologically significant, and greater within some disciplines than across some discipline boundaries. Geography, for example, can incorporate a wide range of specialisms including fields as diverse as fossil mammalian evidence, 'hard' in Biglan's analytic framework and close to Geology on the one hand, and on the other, cultural representations of city dwelling, an area which is 'soft' and close to English Literature. Secondly, despite the work we do to perceive our discipline as a discrete entity, minimising and mitigating the significance of what can be substantial epistemological and practical differences, we simultaneously recognise its rich diversity, as indicated in the comment of Respondent A above about Classics ('by its very nature inclusive of several "disciplines": language learning, history, literary appreciation, art appreciation, and philosophical debate'), and by O'Loughlin about Theology and Religious Studies (which may include 'linguists, historians, sociologists, archaeologists, philosophers, and psychologists'). Thirdly, we underestimate the complexity of other disciplines: 'I do sincerely believe that students who go through this degree ... experience a wider range of learning styles than those on, say, a traditional History or English degree' (Respondent A).

That is, the discourses around disciplinarity do ideological work to enable us to tolerate and hold mutually contradictory beliefs about the coherence of our own discipline while simultaneously recognising its complexity and diversity, and not acknowledging the equivalent diversity and complexity in other disciplines. O'Loughlin demonstrates these three 'stories' at work when she writes of the 'special issues and particular problems unique to the study of [Theology and

Religious Studies]’ compared to ‘the mundane level of such things as history and geography’ (2008: 100), and also notes that ‘the absence of core subject matter in [Theology and Religious Studies] may be causally related to the absence of a universally agreed methodology ...[and] “What should or should not be regarded as belonging to the subject...”’ (O’Loughlin, 2008:103-104, citing the QAA Subject Benchmark statement for Theology and Religious Studies, 2007).

These ideological beliefs in the coherent entity of our own discipline, existing simultaneously with recognition of its complexity and richness, versus the perceived ‘flatness’ of other disciplines, is the same kind of ideological work which postcolonial theory recognises when the discourse of the dominant group identifies both variation and coherence within its group but has a reductive view of the ‘Other’ based on stereotypical characteristics (‘they all look the same’). This is the narrative which makes it possible to project negative characteristics onto the ‘Other’ (e.g. childishness, ignorance, weakness), while associating positive characteristics with the high status community (e.g. maturity, wisdom, strength). Within academic discipline communities, we marshal for ourselves the positive attributes of creativity, rigour, tolerance of ambiguity, originality, complexity, difficultness, predictive capacity, and we project onto a distorted landscape of the rest of the disciplinary world the opposite attributes, such as absence of creativity, lack of rigour, lack of originality, lack of explanatory power, boringness. Part of the emphasis in the higher education sector on disciplinary difference, and the importance of educational development being based in subject disciplines, is therefore perhaps due to the ‘stories’ academics tell about the superiority of their disciplines, akin to Orientalism.

The literature on discipline structures and interdisciplinarity bears out this analysis. Taylor (1976) describes how disciplines make use of ‘heroic myths’ in their social construction, using Geography as an illustration:

...other disciplines are portrayed [by geographers] as involving specialist ‘blinkers’ or not fully appreciating the importance of the spatial dimension. In contrast, there is a myth of the geographer as ‘the great synthesiser’, the ‘foreman’ who combines the individually futile ideas of the blind labouring specialists.

(Taylor 1976: p131)

Taylor adds that these myths are ‘vast generalisations which have the basic role of creating an overall purpose and cohesion’, a summary which fits well with postcolonial theory.

Bauer (1990) also perceives complex tensions between disciplines, even when supposedly collaborating, and employs metaphors of xenophobia to underscore the contempt between discipline communities which he has observed, an analytical framework which can readily be aligned to a postcolonial analysis of disciplinary relationships:

...in the main, these [disciplinary] cultural differences are recognized only within academic folklore, usually in a jocular fashion. But those differences do underlie some events that would be difficult to explain on another basis and that are not necessarily humorous or without significant consequence – that a mathematician characterizes as pseudoscience the work in political science ... or that sociologists snicker and roll their eyes when, in a purposefully multidisciplinary setting, a philosopher confesses to a modicum of philosophical realism [at the closing plenary session of the Conference on History, Philosophy, and Social Studies of Biology, Blacksburg Virginia, June 16-20, 1987]. *Thus in the realm of the intellect and its variety of cultures, we are still at the primitive level of tribalism, complete with xenophobia, much more likely to wage war on the other tribes than to regard them as equals worthy of meaningful collaboration.*

(Bauer 1990: 111, my italics)

Rifts in the academic community along disciplinary lines have been long and prominently observed, along with the negative impact they have on transdisciplinary working. C.P. Snow famously established as common currency the phrase 'the Two Cultures', when he called for better understanding and communication between the humanities and the sciences in his 1959 Rede lecture. The phrase has survived although the detail of his argument has not held up to peer scrutiny very well, as indicated in Kimball's critique:

The phrase [two cultures] has lived on as a vague popular shorthand for the rift—a matter of incomprehension tinged with hostility—that has grown up between scientists and literary intellectuals in the modern world. Lack of precision has been part of its appeal: to speak of "the two cultures" is to convey regret, censure, and—since one is bold enough to name and appreciate a presumably unfortunate circumstance—superiority all at once.
(Kimball, 2004)

Another example of terms which indicate binary oppositions in disciplinary territory are 'creatives' and 'non-creatives', to describe those from (primarily) visual arts backgrounds and others. These terms are used in academia and continue as currency in the post-university world of work, as illustrated in this forum contribution on CreativePro.com, a social networking site for creative professionals:

How the heck do creatives work with non-creatives?

I might be presumptuous [sic] in my subject header already there that these two types of people even exist (and god who am I to even box people like that but you get my drift..). I'm struggling...I am the only 'creative' in the organisation. ... The thing is whenever I have an idea or put anything forward, the Exec Officer pans me. Its getting embarrassing. She said in the past that my role is "to make things look pretty" ... she likes to roll her eyes alot when I open my mouth... Soo... my question is, how do you work with people who think creatives are a total waste of space? ...

MS, 06/05/08

Lack of respect by the majority group (the 'non-creatives') for the minority group (the 'creatives') is evidenced through what is said and done, and through body language: 'she likes to roll her eyes alot when I open my mouth', the same manifestation of contempt as identified by Bauer (1990, previously cited), observing sociologists and philosophers interacting. Some of the ideological work involved is made explicit in this exchange. MS perceives herself to be stereotyping, and expresses reservations about it: 'I might be presumptuous...and god who am I to even box people like that...'. The terms 'creative' and 'non-creative' cement disciplinary 'Othering' into the lexicon, where stereotyped characteristics stand in for individuality. An associated belief is that only in art and design education do learning outcomes need to be concerned with originality and creativity, as made explicit by Davies (2003):

Many examples now exist of text-based subjects working with learning outcomes. One of the major challenges for them is to take the term 'understanding' and redefine it in terms of more specific measurable cognitive (thinking) outcomes. In art and design our challenge is greater because we work with rather more ambiguous terms such as 'creativity', 'imagination', 'originality' etc as well as 'understanding'.

Davies (2003:1)

Although it is in keeping with the 'story' about the complexity of one's own discipline ('we work with rather more ambiguous terms') in contrast to the perceived flatness and relative simplicity of 'Other' disciplines, the assumption that the learning outcomes of text-based disciplines primarily require 'understanding', and not creativity, imagination or originality is not entirely correct. For example, the UK Quality Assurance Agency History Benchmark Statement lists 'imaginative insight and creativity' as amongst the generic skills which undergraduate historians acquire (2007:5). The Classics Benchmark Statement (2007:12) also has 'to work creatively' as one of the attributes which Classics graduates can be expected to demonstrate.

Implications of disciplinary 'stories'

An obvious implication of colonial discourse in discipline construction and maintenance is it makes planning and conducting interdisciplinary and transdisciplinary activity in universities much more difficult. O'Loughlin (2008) reports that only limited discipline-based pedagogical research in theology and religious studies exists, and amongst the possible causal factors considered, she lists several which are to do with the difficulty of crossing a perceived discipline boundary, including a specific example of how the style of referencing adopted in pedagogical research is alienating to staff in Theology and Religious Studies:

It is reasonably safe to assume that theologians at least would prefer footnotes to the social science model of referencing in the text, which they may regard as disruptive and difficult to follow up. The quantity of references, and the length of bibliographies, in pedagogical articles as compared with theology ones, could also be regarded as problematic.

(O'Loughlin, 2008: 69-70)

As argued at the beginning of this paper, there are real differences between fields of study, and to operate in another field of study successfully we have to learn its practices and become familiar with its knowledge base. However, these real differences are overlaid with a discourse which accentuates differences and problematises adjusting to them. Hence the perception that a different referencing style would be disruptive, and Rowland's concern, cited at the beginning of this paper, that professional development which is not based in the disciplines 'will inevitably be sucked into the reductive discourse of the culture of compliance'.

Manathunga has also used postcolonial theory in the context of higher education discourses, but to a quite different purpose. She identifies the imperial power as educational development and academic subject disciplines as the minority cultures. Educational development, she argues, uses a colonial discourse, whose 'epistemologies ...portray pedagogical knowledge as homogeneous and generalisable across and between disciplinary cultures' (2006:20). She claims, based on McWilliam (2002), that some educational development programmes 'privilege "generalisable economic, technological, and management knowledge" over disciplinary "local" academic knowledge and pedagogy' (2006:20). Whether one considers disciplines to be the minority cultures excluded by the dominant discourse or educational development is discursively the excluded minority will depend on one's perspective; however there are measurable indicators of where power is located in higher education. Financially and in terms of staffing and estate, academic departments have almost always significantly more substantial budgets and resources than educational development units (for data on educational development units in the UK, see Gosling 2001, 2008). In terms of governance, academics are represented in greater numbers, and in more senior positions, on university senior management teams, academic boards and boards of governors. A discourse which asserts the right of discipline communities to continue to construct themselves as coherent and discrete and privileges the idea of disciplinary pedagogy

over generic principles despite the apparent absence of literature supporting discipline specific pedagogic principles, will see generic principles of learning and teaching as a threat, representing as they do a challenge to disciplinary 'nation states'.

Conclusions

A discourse operates within higher education which is similar in many respects to Orientalism. Its role is to: (1) establish a shared identity amongst those within the parameters of a specific discipline, despite in some cases strong empirical evidence of internal differences; (2) reinforce the boundary between a specific discipline and all others; (3) mythologise the superiority of ones own discipline over others; (4) blur the characteristics of other disciplines so that they become relatively undifferentiated, assisting the perception of their relative inferiority. Within disciplines, we tell 'stories' that perpetuate this discourse and represent our discipline as better (more difficult, truer, and with more impact on the world) than other disciplines.

Said wrote of nations and cultures that he sees: 'every domain linked to every other one [...] nothing that goes on in our world has ever been isolated and pure...' (Said, 2003: xvii). Arguably, every disciplinary domain is also linked to every other one. Mary Taylor Huber conceives of the challenge facing academia as being: 'to reconceptualize relationships between the disciplines, so that the lessons flow in all directions rather than demanding the diffusion of one privileged way of knowing' (Huber 2000: 27).

Postgraduate Certificates in Learning and Teaching are examples of cross-university activities which are by and large concerned with principles and practices which apply across disciplines. Some academics do not accept that the principles are valid within, and the practices relevant to, their own disciplines. At present, our understanding of pedagogic principles is that they seem to apply across all disciplines. Furthermore, while differences in teaching and learning practices (rather than principles) do certainly occur, the evidence suggests that these do not map onto disciplines.

Therefore, although discipline-based courses for initial and continuing professional development may appeal to participants and their heads of department because of the comfortable fit with the discourse of disciplinary coherence and distinctiveness, this is not supported by the nature of pedagogy.

This is not to deny the need for relevance and particularity in postgraduate certificates in learning and teaching, but it can be questioned whether a discipline-specific context can provide that relevance and particularity best. For example, within a cross university course, participants can work in peer groups to explore common issues, which can be discipline based or across disciplines, depending on circumstances and what is to be achieved. Physics lecturers may work together to consider what are threshold concepts in physics, and how to design learning activities which enable students to learn troublesome knowledge effectively. Computer Scientists and Fine Artists may both have to manage large groups of students undertaking practical tasks with specialist equipment; lecturers in Theatre Studies and Geography may share an interest in exploring with students how individuals understand and occupy spaces. The underlying pedagogic issues are mostly transdisciplinary, although this can be obscured by the discourse of disciplinary relationships.

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