

Engaging the disciplines in internationalising the curriculum

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(Received 22 August 2008; final version received 6 November 2009)

The claim by universities to be ‘international’ has spread world-wide over the last two decades and this has been largely interpreted to mean the recruitment and support of international students. Little attention has been paid to what this means for curriculum development. This study was carried out to explore disciplinary understandings of the concept of internationalisation of the curriculum (IoC) and ways academics might be encouraged to engage with the discourse. Staff at all campuses of an Australian university, including campuses in Malaysia and South Africa, were interviewed about their views on internationalising the curriculum. The interview tapes were transcribed and the scripts analysed using Becher’s categorisation of the disciplines to explore disciplinary differences in the discourses. The learning communities of the ‘hard pure’ disciplines were found to be resistant to engaging in the discourse of internationalisation, while all other discipline areas recognised the effects of the contextualisation of knowledge and the need to consider the future multi-cultural work environments of their students. The possible reasons for the resistance of the hard pure discipline group are explored and ways to facilitate their engagement in the discourse.

La revendication par les universités qu’elles sont devenues « internationales » s’est répandue globalement depuis deux décennies. Ceci a généralement été assimilé au recrutement d’étudiants étrangers et à leur soutien. Les implications de ce phénomène pour le développement des cursus n’ont pas été étudiées en profondeur. Cette recherche a été entreprise en vue d’explorer le sens donné par les disciplines au concept d’internationalisation des cursus, et comment les universitaires peuvent être encouragés à s’approprier le discours. Des entretiens ont été effectués avec les membres du personnel de tous les campus d’une université australienne, y compris les campus situés en Malaisie et en Afrique du Sud, au sujet de leur vision de l’internationalisation des cursus. Les enregistrements transcrits ont été analysés à l’aide de la catégorisation des disciplines de Becher de façon à explorer les différences disciplinaires au niveau du discours. Les communautés apprenantes provenant des disciplines « pures et dures » semblaient être résistantes à s’approprier le discours de l’internationalisation, tandis que les autres domaines disciplinaires semblaient reconnaître les effets de la contextualisation sur le savoir et la nécessité de prendre en considération les environnements professionnels multiculturels futurs de leurs étudiants. Les raisons possibles de la résistance observée au sein du regroupement disciplinaire « pur et dur » sont présentées, ainsi que des façons de faciliter leur appropriation du discours.

Keywords: internationalisation; curriculum; academic disciplines

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Introduction

Claims by universities to be ‘internationalised’ are now widespread. This is often evident in terms of numbers of, and support for, international students, and such facilities as multicultural catering outlets, cultural societies, prayer rooms and arrangements for the offshore delivery of courses. However, attention to the curriculum is frequently minimal (Harman, 2005). Most efforts to internationalise the curriculum refer to inducting international students into the expectations of western teaching methods, classroom behaviour and assessment practices (De Vita, 2007; Doherty & Singh, 2005). Broader conceptions of the internationalised curriculum as being for all students, to prepare them for living and working in an internationalised, multi-cultural world, are less frequently discussed although this is changing as universities begin to embrace the concept of graduate attributes.

Introducing the concept of ‘internationalising the curriculum’ (IoC) into academic debate meets with varied responses. Disciplinary discourses have been seen as the basis of some of these differing responses, epistemological and social reasons being offered as explanations (Martinez Alemán & Salkever, 2004; Mestenhauer & Ellingboe, 1998). To explore the idea of differing disciplinary responses to IoC, Becher’s (1989) classification of the disciplines was used. Becher described academic disciplines as international cultures connecting academics across the globe, not just in research endeavours, but also in teaching. Becher’s work showed that academics are wedded to their disciplines in which they have invested many years in developing knowledge and skills and with which they strongly identify, forming a world-wide learning community. Becher classified the disciplines as hard pure (natural science and maths), hard applied (science-based professions, e.g. engineering), soft pure (humanities and social sciences) and soft applied (social professions, e.g. education, social work and law). The hard disciplines were seen to be built on logical deduction and reasoning, knowledge was considered impersonal and value-free, and mathematical modelling used to breakdown complex ideas and search for universal ‘truths’. In contrast soft disciplines were seen to offer a more discursive engagement with a body of knowledge, where personal experiences and ideas were valued and knowledge seen to be value-laden, and analysis seen as complex and disputed. However, in the later work of Becher and Trowler (2001) the clear categorisation of disciplines was seen as increasingly problematic as changes in higher education have led to the spread of interdisciplinarity. ‘Hard pure’ disciplines such as physics and chemistry have taken on new transdisciplinary forms such as environmental and sports science, while soft disciplines such as economics and geography have moved to the hard end of the soft disciplines with increased attention to quantitative data. Viewing disciplines more fluidly as on a continuum and able to change their juxtapositions is probably more helpful than visualising them as contained within four boxes.

Becher and Trowler draw on the works of others to show that the differences in the disciplines ‘go to the heart of teaching, research and student-faculty relationships’ (2001, p. 194) and this has been further exemplified by Neumann, Parry and Becher (2002) demonstrating connections between the disciplines and particular teaching and assessment methods. Science subjects are seen traditionally to favour the lecture and problem-based seminars using case studies and simulations, while the humanities and social sciences prefer face-to-face tutorials with discussions and debates (Lindblom-Ylänne, Trigwell, Nevgi, & Ashwin, 2006). Two movements are now challenging the content-focused, teacher-centred pedagogies of the hard disciplines: the

recent growth of interest in student-centred, ‘inclusive’ pedagogies and the movement of students and institutions across geographic borders, raising questions of the effect of the local context on what is taught and how it is taught (Lee, 2005; Lindblom-Ylänne et al., 2006).

In this paper the disciplinary responses to internationalising the curriculum are explored using Becher’s categorisation of the disciplines to try to identify and understand resistance to it and ways to move forward. Internationalisation of the curriculum is defined here as curricula, pedagogies and assessments that foster: understanding of global perspectives and how these intersect and interact with the local and the personal; inter cultural capabilities in terms of actively engaging with other cultures; and responsible citizenship in terms of addressing differing value systems and subsequent actions.

The study

The data for this study come from an interview study of staff and students at a large Australian university with eight campuses (including one in Malaysia and one in South Africa), and a myriad of other overseas ‘delivery’ arrangements in Hong Kong, Italy and many other countries. Interviews were held with staff and students at all eight campuses to discover what an internationalised curriculum meant at the university and how staff could be engaged with internationalising the curriculum. As there was no IoC policy at the university and no widespread discussion of the idea, heads of schools were approached to obtain the names of staff who they felt had some involvement with IoC and, therefore, would have some thoughts and ideas to offer on the subject.

Two Masters students were employed as research assistants at the Australian campuses to interview staff in the 10 schools, taking in all campuses. At the offshore campuses, staff known to be interested in issues concerning internationalising the curriculum were approached to carry out the interviews and were asked to select a variety of participants. The interviews were semi-structured, using the same interview protocol with all participants. The interviews lasted between 30–45 minutes and were audio-taped. The resulting transcripts were analysed using a thematic analysis, the

Table 1. Demographic details of staff interviewed.

	Australia	South Africa	Malaysia	Total
Science	2			2
Information Technology	2	1	1	4
Engineering	2		1	3
Medicine	3			3
Pharmacy	2			2
Arts (history, geography, media and communication)	2	1	1	4
Art and Design	2			2
Psychology		1		1
Law	2			2
Business & Economics	3		1	4
Education	3			3
Total	23	3	4	30

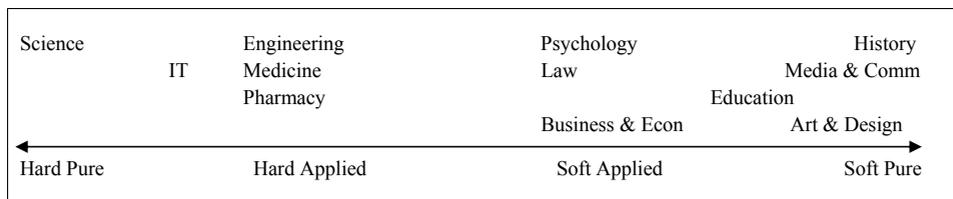


Figure 1. 'Becher-style' continuum of the disciplines.

question themes being used to commence the categorisation, new themes being added as they emerged in the data (Strauss & Corbin, 1990, 1995). The emerging analysis was discussed by the author and the interviewers to ensure, not only that the different voices were heard, but that they were also understood in terms of their context. For example when two South African lecturers described their students as 'unable to read', this made no sense in terms of the students having achieved the necessary written entrance requirement for university level education. However, the interviewers at the South African campus were able to explain the comments in terms of the oral cultures of some of the African students whose experience of education was learning through discussion and not through solitary reading and writing. There was nothing in the data to indicate that the use of staff or students as interviewers had influenced the answers given in the interviews.

Details of the staff interviewed, in terms of discipline and geographic location, are shown in Table 1, and their possible placing on a 'Becher-style' continuum at Figure 1. The lecturers interviewed were all local staff to their campuses except for two international staff in Australia. Further identifying factors are not presented as the sample was too small to make any statements about their relevance.

Epistemological orientations and engagement with internationalising the curriculum

The interview scripts from the lecturers in the hard disciplines illustrated clearly a belief that their discipline was already international, based on value-free universal principles. They believed that the theories, principles and concepts of the disciplines were the same the world over. (Quotations from interview scripts for staff are referenced with the discipline of the person followed by their campus location, e.g. BusEco, TSA; Arts, TA. The campuses indicated are TM = Malaysia, TSA = South Africa, TA = Australia.)

Chemistry covers all cultures, there's no way it is culturally differentiating between chemistry here and chemistry in the US, or chemistry in Britain, in China, in Nigeria, in Columbia. (Science, TA)

I don't think for technical and Computer Science subjects there is any IoC involved it is just a matter of updating your field or your discipline ... People are learning the same thing irrespective of their environment irrespective of their country – IT is the same IT all over the world. (IT, TA)

Some staff, in the hard disciplines, found it difficult to imagine their curriculum or pedagogy being different, or the backgrounds of the students making any difference

to the teaching of the subjects. One lecturer explained that he taught exactly the same course in Germany as he did in Australia (science, TA). Another said:

I feel like we are not teaching it in any culturally biased way, other than that perhaps our whole view of science and what it is, may be that is a precept that has come from a particular cultural group. I don't really know enough, but I don't imagine, I can't imagine teaching it differently if I had a different group of students attending the university. (Science, TA)

While the lecturers in the hard applied subjects, such as pharmacy, information technology and medicine, also believed in 'international science', they did recognise that the students would be practising this science within different health systems, with different regulations, belief systems and ethical standards, and that this would affect the outcome. The different backgrounds of the students caused direct clashes of norms and values in some cases:

Trying to breakdown the view of doctors as god-like figures. Sometime this is difficult, sometimes it is not even worth trying, it's not even appropriate to try. (Medicine, TA)

In contrast, in the soft disciplines distinctions were not apparent in the scripts between the pure and applied subjects. Except for two areas (geography and psychology) the disciplines did not claim any privileged knowledge and all saw education as 'about opening up people's ideas and different ways of looking at things, a different way of thinking, of talking about things' (history, TA). One lecturer described 'what I am striving to do is to create materials or create a curriculum where no one perspective is privileged' (education, TA). The lecturers in the soft disciplines saw education as important for its own sake but also recognised that students needed to be able to get jobs. For some staff this meant students having a knowledge base and seeing issues beyond their own cultural boundaries, while for others it meant bringing the local into the imposed Australian curriculum.

Clarifying who their students were, what their needs were and the goals of the courses was the starting point for many of the lecturers. The tension between a universal university curriculum and the 'localisation' of curriculum was a constant theme throughout the interviews for lecturers not in the hard pure category. 'The "science" is about universal principles, taught the same over the world ... but local environments and cultures lead to different curriculum and practises' (medicine, TA). Lecturers in the soft applied disciplines wanted to:

Make sure that students understand what is the theory and who developed it, when did they develop it, what was the thinking at the time, and then think about how can this be applied to different context or not ... (BusEco, TA)

Offshore campuses staff especially wanted to adapt curriculum content to reflect the local environment:

Like climatology, the climate is the same, the concept is the same so you might teach about the climate of South Africa or the climate of Australia or Europe but the principles are basically the same ... we have localised our syllabi, a lot of our syllabi, about 50–60%. (Geography, TSA)

Transnational education highlights the tensions between the universal and the local not only at discipline level but also at the institutional level as not only are students

from other cultures sitting in Australian classrooms but the university is ‘providing its services in a different social and political climate altogether’ (communication, TM). This lecturer, in Malaysia, described the cultural clashes in teaching concepts of social class in a sociology unit, which led to accusations of teaching ‘communism’ and dealing with the concept of pornography in media classes which was offensive to some religious groups and led to complaints. She asked, ‘how are you going to impart those values of liberalism and humanism and still fall in line with Islamic views and perspectives’. She went on to describe:

The paradox of trying to maintain your internal [university] identity and its integrity, and trying to accommodate international differences and cultural differences. Where do you draw the line? When does your burger stop being a burger? (Communication, TM)

Inter-cultural engagement

The issue of culture was not considered to be of consequence in the hard pure disciplines, the scientists seeing their work as ‘culturally neutral’:

The scientific principles are not ones confined to particular parts of the world as such. The principles are international and the principles are such that it is hard for me to see how I can teach differently ... It is culturally neutral. Cultural diversity among students would not make a difference because ‘that is the nature of science’. (Science, TA)

These attitudes were reinforced by the university’s concern with quality assurance, demanding that all units were to be the same wherever they were delivered, whatever the composition of the student body (Schapper & Mayson, 2004). The Science Faculty’s lack of encouragement to students to take up study abroad opportunities as there was ‘nothing to be gained’ (science, TA) reinforced these attitudes.

Staff in the hard applied disciplines showed a high level of awareness of cultural difference among students and of cultural difference in professional practice. They talked about the needs of graduates to be able to problem solve, and who were culturally sensitivity and flexible:

Flexibility I suppose of mind but that is hard to get that ... an ability to be able to interact and get out in the world and move around, interact with people in a way that’s productive, respectful and as I say being prepared to take on board interesting and new ways of dealing with things and not having a view that the way things that are done in Australia is the way things should be done. (Medicine, TA)

Make students more sensitive to cultural differences and values. Don’t have to accept other values but need to open up to other ideas and let them ‘judge for themselves’. (Engineering, TM)

Despite the university’s edict, outside the hard pure disciplines, the staff were aware that some of the things they were teaching students, the students could not practice in their own cultures. Units were often adapted and materials re-authored by local staff to make them relevant to the local environment. In medicine the world-wide move to case-based teaching was recognised and the need to move from a didactic to a facilitative style of teaching. Staff generally were sensitive to the curriculum and pedagogic needs of international students in Australia and also the needs of students in offshore campuses.

The interaction in the classes differs depending on the location and the culture ... in some of the Arabic countries they're very free with their views. They're very open and talkative and in fact, will often argue with each other if there are differences of opinion, you get quite an interesting debate going on in the classroom. It is much more difficult to generate that in some of the Asian countries. (Medicine, TA)

You have to be sensitive to the fact that some people are uncomfortable being here, they're away from home, they're in a different cultural environment, different teachers will have greater or less of a clear sensitivity to them, they'll have English language difficulties, we may or may not be giving them appropriate support ... And many people are scared to speak out in class. And again, Australian culture is not that different, it's not a natural Australian thing to speak out in class ... so I'm encouraging my Australian students to get engaged in the same way. (Law, TA)

Staff in the overseas campuses were particularly sensitive to the backgrounds of their students. They emphasised the political change and instability experienced by many of their students, African students often sitting in class next to students from other tribes whom they had been taught were their enemy. An engineering lecturer in Malaysia emphasised that internationalising the curriculum was about the environment of learning and not the content, that it should reflect local and international scenarios and should open students up to other values. He emphasised how international the Malaysian staff are as they speak three languages and work with students from different cultures all the time. Another Malaysian lecturer described the staff in Malaysia as 'hybrids', working all the time in three major cultures, usually having been overseas for part of their education and the mass media beaming in western culture to their country. They did not need to be taught how to teach IoC but felt that that Australian lecturers could learn from their experience 'but they were not listening'.

All the lecturers in the applied disciplines saw the need for students to develop cultural awareness and sensitivity. There was an awareness, not just of international students, but of the difference brought to the classroom (in Australia) by Non-English Speaking Background local students, and also an awareness of the complexity of diversity beyond the cultural, to include ethnicity, gender, sexuality, religion, age, social class and disability. There was a pervading belief in the need for an interactive pedagogy, while recognising that some students would be uncomfortable with this. Gender issues related to speaking in class were particularly recognised as a concern for some groups of students. The staff were aware of their own need for skills in facilitating discussion groups and creating safe environments for all students to participate, while also being aware of their own lack of knowledge about the previous educational and social experiences of the students.

Curriculum development processes

The question of the processes of curriculum development, for content and pedagogy, arose throughout the scripts. One IT lecturer described the complex delivery problem of beaming education into China, Indonesia, Australia and other places, with such diverse students participating in one virtual classroom. He felt that the system really worked on 'pedagogical imperialism' as the university had not yet worked through the issues of diverse pedagogies [IT, TA]. An IT lecturer in South Africa saw the need for curriculum to be jointly developed by staff involved in delivering the units in different cultures so that the curriculum fitted into different educational structures. The lack of

joint curriculum development was interpreted, by an Australian IT lecturer, as an issue of control: the Australian university feeling a need to keep control of curriculum and the maintenance of standards across all campuses was seen as imperative above any consideration of student or local needs.

Moving forward

In this study, initially, Becher's idea of academic tribes was used to attempt to categorise disciplines in the search for possible distinctive discourses of internationalising the curriculum. While the concept of the academic tribe with its associated epistemologies and pedagogies is still relevant, the increasing fluidity of disciplinary boundaries made classification difficult. What did stand out was the strong belief of those in the hard pure disciplines that their disciplines by nature were already international and that they did not need to engage in the debate around IoC. Similarly, Bond, Qian and Huang's (2003) review indicated that resistance to IoC was mostly found among male scientists who had never lived outside the United States. In an American study, dealing with the concept of multiculturalism (Martinez Alemán & Salkever, 2004), no discipline groups claimed multiculturalism to be inappropriate for their discipline, but multiculturalism was seen to fit more naturally into certain disciplines. In the study the hard pure disciplines found it harder to find a place for multicultural issues and did not view it as a priority or a significant educational matter. This latter view also reflects that of the scientists in this study and it is necessary to address this if changes in curricula are to be achieved. It should also be noted, however, that no scientists were interviewed in the offshore campuses and it would be interesting to gather perceptions of scientists in these different cultural environments to ascertain whether the environment influenced their views.

In contrast to the attitudes of the academics in the hard pure disciplines, those in the hard applied and some soft applied disciplines, while believing in universal knowledge, had their views tempered by issues of the background of the students, the context in which the curriculum is delivered and the possible context of students' future lives. Similarly academics in the soft disciplines saw the importance of the students' past and future lives in the construction of the current educational experience of the students.

As views on IoC do appear to be related to discipline allegiances and these allegiances have been shown to be so strong that academics' intellectual and professional identities are centred on their disciplines, especially in the pure, hard disciplines (Beck & Young, 2005; Becher & Trowler, 2001; Mestenhauser & Ellingboe, 1998), bringing changes into these disciplines requires serious engagement with the intellectual and social frameworks of reference of these learning communities (Wenger, 1998).

Creating the conditions for a critique of deeply entrenched intellectual traditions can be difficult (Mestenhauser & Ellingboe, 1998) and Becher & Trowler (2001) illustrated how this resistance is reinforced by the professional identification with the discipline, making it difficult to take a view in opposition to one's colleagues. Academics who do question the discipline are often censored by their colleagues (Becher, 1989; Dobbert, 1998; Gibbs & Coffey, 2001). Yet, the basis of academic thought is critical thinking, which encourages openness, divergence and respect for opposing views, and there is a history of divergent thinking in science and maths. In 1986 Sandra Harding was writing about multicultural science, a science that takes into consideration the influence of culture on what is studied, how it is studied and by

whom, and critical mathematics and ethnomathematics study traditional mathematics through cultural context and perspectives (Kitano, 1997; Rosenthal, 1997). However, generally the hard pure disciplines still see contextualised knowledge as 'troublesome knowledge' (Meyer & Land, 2003).

To approach curricula change in the hard pure disciplines it may be necessary to take a group approach, involving whole programme teams in curricula reform. Recent work by the author with a faculty group of 35 scientists lead to an increase in understanding of what internationalising the curriculum means and the realisation that IoC was already part of the programme as a whole. As one lecturer said 'we are, in fact, already doing this, we just do not label it as IoC'. An important part of this was building an understanding of the different facets of an internationalised curriculum and looking at the degree programme holistically.

Challenging academics to rethink their beliefs about knowledge and pedagogy is a long-term challenge (Nilsson, 2003; Mestenhauser & Ellingboe, 1998) and may best be approached, for the hard pure disciplines, through a focus on the students rather than the discipline. We need to ask why students are engaging in higher education, what do they want/need to get out of it? (Jenkins, 1999). The answers to this question will reflect the previous experiences of the students and their perceptions of their future lives. Both of these perspectives need to be taken into account when developing curricula and are now exemplified by some universities in the move to develop graduate attributes. An example from the University of South Australia (2001) reads:

Graduate Attribute No 7 – to develop graduates who demonstrate international perspectives as professionals and as citizens through: broadening the scope of the course to include international content and/or contact, and ... development of cross-cultural communication skills.

A factor discussed by many of the staff was their own level of 'internationalisation' and, therefore, their ability to internationalise the curriculum. This is also seen as problematic in much of the literature (Bond et al., 2003; Teekens, 2003). While some staff, especially overseas staff at the Australian campuses and offshore staff were very aware of their own global knowledge and inter-cultural competence, there was a feeling that there needed to be more provision for other staff to work overseas to widen their own horizons and capabilities and for collecting valuable resources. At this university the presence of the offshore campuses and the willingness of the staff at those campuses to work with the Australian staff offered a unique opportunity for collaborative work and collaborative curriculum development. Staff development opportunities for staff to work with colleagues overseas, to learn about the backgrounds of their students, to see examples of IoC in action, and the availability of international resources are all essential ingredients of a change programme.

Conclusion

Becher's typology has been useful in highlighting resistance to IoC from the hard pure disciplines. The resistance is, perhaps, surprising considering the culturally-based developments in science and maths in the last 30 years, and the central place of critical thought in academic endeavours. However, the history of science does illustrate a resistance to new thought over the centuries. The edicts from the university to standardise curriculum wherever it was delivered reinforced the behaviours and beliefs of the science lecturers and gave them little reason to question their actions. The challenge

is to engage academics from the hard pure disciplines to move away from a focus on 'the science' to a focus on the holistic, personal and academic development of students. Students need to grasp the concepts of theoretical science, but they will also be faced with using their science in the world, and they will need some understanding of global issues and have ways of making ethical judgements about their work. Students will also need to be able to work within a multicultural environment wherever they are geographically located. Approaching programme teams to explore the backgrounds and the needs of their students and to critically evaluate their curricula, in conjunction with staff from offshore campuses, at the same time putting in place appropriate staff development opportunities and international resources, may provide the necessary support to encourage new attitudes to internationalisation within these learning communities and attention to the representation of global perspectives, inter-cultural capabilities and responsible citizenship in their curricula.

Notes on contributor

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References

- Becher, T. (1989). *Academic tribes and territories: Intellectual enquiry and the cultures of the disciplines*. Milton Keynes, UK: Society for Research into Higher Education and the Open University Press.
- Becher, T., & Trowler, P.R. (2001). *Academic tribes and territories: Intellectual enquiry and the cultures of the disciplines*. (2nd ed.). Buckingham, UK: Society for Research into Higher Education and the Open University Press
- Beck, J., & Young, M.F.D. (2005). The assault on the professions and the restructuring of academic and professional identities: A Bernsteinian analysis. *British Journal of Sociology of Education*, 26(2), 183–197.
- Bond, S.L. Qian, J., & Huang, J. (2003). *Role of faculty in internationalizing the undergraduate curriculum and classroom experience*. Ottawa: Canadian Bureau for International Education.
- De Vita, G. (2007). Taking stock: An appraisal of the literature on internationalising higher education learning. In E. Jones & S. Brown (Eds.), *Internationalising higher education* (pp. 154–167). London: Routledge.
- Dobbert, M. (1998). The impossibility of internationalizing students by adding materials to courses. In J. Mestenhauser & B. Ellingboe (Eds.), *Reforming the higher education curriculum: Internationalizing the campus* (pp. 53–68). Phoenix, AZ: Oryx Press.
- Doherty, C.A., & Singh, P. (2005). How the West is done: Simulating Western pedagogy in a curriculum for Asian international students. In P. Ninnes & M. Hellsten (Eds.), *Internationalizing higher education. Critical explorations of pedagogy and policy* (pp. 53–73). Hong Kong: Springer.
- Gibbs, G., & Coffey, M. (2001, August). *The impact of training on university teachers' approaches to teaching and on the way their students learn*. Paper presented at the EARLI Symposium 2001. Training University Teachers to Improve Student Learning. University of Fribourg, Switzerland.
- Harding, S. (1986). *The science question in feminism*. Ithaca, NY: Cornell University Press.
- Harman, G. (2005). Internationalisation of Australian higher education: Critical review of literature. In P. Ninnes & M. Hellsten (Eds.), *Internationalizing higher education: Critical explorations of pedagogy and policy* (pp. 119–140). Hong Kong: Springer.

- Jenkins, A. (1999). Discipline-based educational development. *International Journal of Academic Development*, 1(1), 50–62.
- Kitano, M.K. (1997). A rationale and framework for course change. In M.K. Kitano and A.I. Morey (Eds.), *Multicultural course transformation in higher education: A broader truth* (pp. 18–30). Needham Heights, MA: Allyn and Bacon.
- Lee, A. (2005). *Knowing our business. The role of education in the university*. Callaghan, NSW: Australian Council of Deans of Education.
- Lindblom-Ylänne, S., Trigwell, K., Nevgi, A., & Ashwin, P. (2006). How approaches to teaching are affected by discipline and teaching context. *Studies in Higher Education*, 31(3), 285–298.
- Martinez Alemán, A.M., & Salkever, K. (2004). Multiculturalism and the American liberal arts college: faculty perceptions of the role of pedagogy. *Studies in Higher Education*, 29(1), 39–58.
- Mestenhauser, J., & Ellingboe, B. (1998). *Reforming higher education curriculum: Internationalizing the campus*. Phoenix, AZ: American Council on Education and Oryx Press.
- Meyer, J., & Land, R. (2003). *Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines*. ETL Project Occasional Report 4. Edinburgh: University of Edinburgh.
- Neumann, R., Parry, S., & Becher, T. (2002). Teaching and learning in their disciplinary contexts: A conceptual analysis. *Studies in Higher Education*, 27(4), 4005–417.
- Nilsson, B. (2003). Internationalisation at home from a Swedish perspective: The case of Malmö. *Journal of Studies of International Education*, 7(1), 27–40.
- Rosenthal, J.M. (1997). Multicultural science: Focus on the biological and environmental sciences. In M.K. Kitano & A.I. Morey (Eds.), *Multicultural course transformation in higher education: A broader truth*. Needham Heights, MA: Allyn and Bacon (pp. 145–60).
- Schapper, J., & Mayson, S.E. (2004). Internationalisation of curricula: An alternative to the Taylorism of academic work. *Journal of Higher Education Policy and Management*, 26(2), 189–205.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. London: Sage.
- Strauss, A., & Corbin, J. (1995). Grounded theory methodology: An overview. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273–285). London: Sage.
- Teekens, H. (2003). the requirement to develop specific skills for teaching in an intercultural setting. *Journal of Studies in International Education*, 7(1), 108–119.
- University of South Australia. (2001). *Strategies for internationalisation of the curriculum. Graduate Qualities*. Adelaide, SA: University of South Australia.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.

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