

Professional Doctorates in Management: Toward a Practice-Based Approach to Doctoral Education

SUBHABRATA BANERJEE
University of Western Sydney

CLIVE MORLEY
RMIT University

Professional doctorates, particularly in Australia and the UK, have been a significant growth area over the last 20 years. We discuss the emergence of professional doctorates in management education and their contribution to a more practice-based approach to doctoral education, with particular reference to the doctor of business administration degree (DBA). Professional doctorates were developed by some universities in the face of rising criticism about the relevance of PhD research to practice and the changing context and content of knowledge in the new economy. We conclude by discussing implications for doctoral education and directions for future research.

The rapid emergence of the knowledge economy has changed the dynamics between governments, industry, and universities and influenced the educational needs of managers and management researchers. Criticism of the relevance of doctoral education, especially the traditional PhD, has been mounting for some time (Lee, Brennan, & Green, 2009; McWilliam, Taylor, Thomson, Green, Maxwell, Wildy, & Simons, 2002), and in response, universities have sought new ways to deliver research training. In particular, the rapid expansion of professional doctorates appears to reflect an alternate mode of knowledge creation. Proponents of professional doctorates claim that the training they provide is more attuned to the real-world needs of managers because it focuses on practice in the workplace and is flexible enough to respond to the needs of the knowledge economy (Fenge, 2009; Usher, 2002). Here, we discuss the role of professional doctorates in management education and

knowledge creation, with particular reference to the doctor of business administration (DBA) degree. Our main purpose is to discuss the emergence of the professional doctorate as a program designed to address criticisms of the increasing irrelevance of PhD programs to professional practice. We identify the range of professional doctorates on offer in Australia, the United States, and United Kingdom, and, based on our experience of developing and managing a DBA program at a large Australian university, we outline some challenges and opportunities for academics and program developers involved in professional doctorates in business. How does a professional doctorate program address the theory–practice divide that some scholars claim exists in doctoral research? What sort of knowledge was contributed? What kind of research skills do senior managers require to improve their practice? Is the distinction between a professional doctorate and a PhD becoming less important and unsustainable in Australia and the United Kingdom, as some have argued (e.g., Evans, Macauley, Pearson, &

We would like to thank Charmine Härtel and three anonymous reviewers for their constructive comments.

Tregenza, 2005)? There is little research that explains the role of professional doctorates in promoting a more practice-based approach to doctoral education. Our work here attempts to fill this gap.

The paper is organized as follows: We first describe the emergence of professional doctorates in the changing context and content of the knowledge economy. We then discuss the content and structure of the doctor of business administration program developed by an Australian university. Next, we identify a range of professional doctorate programs on offer in Australia, the United States, and United Kingdom, and describe their stated aims and outcomes. We conclude by discussing implications for doctoral education and directions for future research.

KNOWLEDGE AND DOCTORAL EDUCATION

In the modern economy, a great deal of productivity gains result from technologies of knowledge generation and information processing. This reframing of knowledge as a source of productivity has had significant effects in terms of investments in education, research, and development. Universities, as major centers of knowledge creation, have also responded to the needs of a knowledge economy by marketing their knowledge-creating capabilities and positioning themselves competitively in the knowledge market (Jessop, 2008). The Bologna Process in Europe informed significant reform in higher education. The reforms aimed at creating a European Higher Education Area through the provision of adequate resources, creating excellence in research and teaching, and increasing the international effectiveness of European Universities (Dale, 2008). The concerted effort to modernize the knowledge industry meant that universities have come under increasing scrutiny, especially in their role as creators of knowledge through their doctoral programs, which are the most specialized vehicles of knowledge development. With increasing value put on knowledge as a key driver of productivity, universities all over the world face new expectations and pressures from governments, employers, and workers to provide skill sets that can develop knowledge workers. Several universities attempted to respond to the challenges of educating professionals for the knowledge economy by creating new degree programs of doctoral study, such as professional or executive doctorates.

Research produced by nonacademics (mana-

gers, consultants, writers in the business press) has had a greater impact on management practice than research produced in business schools (Forster, 2007; Geuens, 2011). Some management scholars are critical of the kind of research produced by business schools. Pfeffer and Fong (2002) have argued that business school research is more directed toward enhancing the prestige of the business school than at solving management problems per se. Bennis and O'Toole (2005) note that business schools have directed their efforts more toward obtaining academic credibility and focused on demonstrating the rigor and scientific method of their research rather than on its relevance to practitioners. Emphasis on theory rather than problem solving, narrow disciplinary focus, paradigmatic tendencies that favor theory validation rather than usefulness, problems of communication and incommensurability of ideas and concepts were some of the explanations offered for the relatively low impact of business school research (Kelemen & Bansal, 2002; Pfeffer & Fong, 2002). Several scholars have argued that there is a significant "theory-practice" division in management research (Baldrige, Floyd, & Markoczy, 2004; Bartunek & Rynes, 2010; Burke & Rau, 2010; Hay, 2004; Schultz & Hatch, 2005; Shapiro, Kirkman, & Courtney, 2007). In an analysis of papers published in the top-5 management journals, Bartunek and Rynes (2010) found that nearly half the articles in their sample made no mention of implications for practice. If practical implications were discussed, they tended to be "tentative," leaving little room for practitioners to seriously implement any recommendations arising from academic research.

The results of an AACSB study on sustaining scholarship in business schools also point to an industry-academic divide. The AACSB created the Doctoral Faculty Commission in 2002 to respond to the shortage of doctorally qualified faculty in business schools—between 1995 and 2000 there was a decrease of more than 19% in business doctorates awarded (AACSB, 2003). The AACSB report concluded that ensuring an adequate supply of business doctorates is essential for maintaining "the continued rigor of business education and research conducted in academic, business, and public policy institutions" (AACSB, 2003: 6). The report also claimed:

The scholarship role of business faculty is an essential and irreplaceable function because societies and markets turn to business

schools for knowledge advances that reflect academic traditions of theory and method. An active pipeline of rigorous and relevant research output is especially crucial at this moment as business practitioners seek independent, proven methods and ideas to shape their strategies and practices, and to improve the functioning of markets globally. In fact, independent, scholarly research is the essential distinction of business schools versus other entities that produce business writings, and the reason business schools maintain their legitimacy within the research university community (AACSB, 2003: 10).

The report specifically mentions "relevant" research while reinforcing the position of the academy as primary knowledge producers. The assertion that business school research output maintains the legitimacy of the discipline and the school within the wider research community is consistent with Pfeffer and Fong's (2002) position, but the report's claim that practitioners actively seek the knowledge produced by business schools is not substantiated—in fact Pfeffer and Fong (2002) showed that practitioners tend to use knowledge from "other entities that produce business writings," rather than from business school researchers. A later AACSB (2008) report also bemoaned the lack of impact of academic business research on business practice. Professional doctorates, according to some scholars, can and should play a major role in bridging these gaps because professional doctorate research is closely connected with professional practice and the knowledge economy outside the university (Gill & Hoppe, 2009; Neumann, 2005).

Before we discuss the role of doctoral education in knowledge production it will be useful to describe the nature of university-generated knowledge in the context of the knowledge economy and the different ways the term is currently being deployed. Does the valuation of knowledge in a knowledge economy differ from that in the academy? A PhD, which is the highest level of academic qualification, is awarded for research that is deemed to make an original contribution to knowledge. The PhD has come under criticism for being too "inwardly focused," inflexible, excessively narrow and overspecialized, too focused on theory, for inhibiting multidisciplinary research, and for being of little relevance to management practitioners (Evans, 2001; McWilliam et al., 2002; Pfeffer & Fong,

2002). For these critics, the type of knowledge generated by a PhD is not consistent with what is needed by people, organizations, industries, and societies to excel in the knowledge economy. In Australia for example, a government report on graduate studies recommended that universities should develop postgraduate programs to "accommodate the changing needs of students, industry, employers and professional bodies and consider introducing doctoral programs more suited to professional settings" (NBEET, 1989: 28). A government report on higher education in the United Kingdom made a similar observation, citing a lack of attention to research for the professions (NCICHE, 1997). The funding mechanism of the new Research Excellence Framework, currently scheduled to be implemented in 2014 in the United Kingdom, places a much stronger emphasis on the impact of research and will assess not just the academic impact but also the broader social, environmental, and economic benefits of research (Hodgkinson & Starkey, 2011). A report by the AACSB on doctoral programs in the United States also called for more "variability" in doctoral degree products (AACSB, 2003).

These reports seem to indicate that a different type of knowledge is needed to equip managers in the new economy. Researchers have distinguished between Mode 1 and Mode 2 knowledge (Gibbons, Limoges, Nowotny, Schwartzman, Scott, & Trow, 1994; Gibbons, 1998). *Mode 1* refers to the knowledge that is traditionally produced in the academy. It is based on an explanatory paradigm, disciplinary based, theoretical, produced "for its own sake," focused on "knowing that," understanding "what is," and its legitimacy is based on professional activities such as publications in peer-reviewed journals and papers in conferences (Bourner, Bowden, & Laing, 2001; Usher, 2002; Van Aken, 2004, 2005). *Mode 2* knowledge, on the other hand, refers to knowledge developed in the context of practice. It is a design science that focuses on knowledge designed to solve problems, likely to be produced in the workplace through reflection on practice, focuses on "knowing how," is more practical, legitimated through links with industry, and reflects the penetration of the market into the academy (Usher, 2002; Van Aken, 2004, 2005). This distinction has been acknowledged as very influential in the design and development of professional doctorates in the United Kingdom and Australia in the early 1990s (Fenge, 2009; Lee et al., 2009; Maxwell, 2003; Sarros, Willis, & Palmer, 2005).

Critics of traditional PhD research argued that

Mode 1 knowledge that is produced in the academy has little or no relevance to practicing managers (Bareham, Bourner, & Stevens, 2000; Evans, 2001; Thomas, 2007). Proponents of professional doctorates claim Mode 2 knowledge is more appropriate for practitioners; however, the binary opposition between Mode 1 and Mode 2 knowledge may not be as clearly defined in practice. The problem with this binary, as in any binary, is that one category tends to dominate the other, and the parameters of assessing the "quality" of Mode 2 knowledge are often based on the terms specified by Mode 1. This is what appears to be happening in professional doctorate programs in Australia and the United Kingdom in relation to the examination of the final product, the doctoral thesis. The assertion that PhDs produce original research that contributes to scholarly knowledge, while the DBA makes an original contribution to professional practice, is not clearly and universally apparent during the thesis examination process (McWilliam et al., 2002). When it comes to evaluating research and contribution to knowledge, examiners tend to use traditional criteria: theoretical strength and methodological rigor. This partly reflects the lack of a common understanding of how a professional doctorate thesis or portfolio should differ from a PhD, given the novelty of professional doctorates. Examiners of professional doctorate theses and portfolios still tend to use the same criteria as they do for PhD theses (Fink, 2006; McWilliam et al., 2002; Walker, 2008), despite concerns about the appropriateness of these criteria (Johnson, 2005). As well as having different epistemological relationships with academic disciplines, knowledge of and in professional practice has a uniquely applied nature, whereas in a PhD the knowledge sought can be purely theoretical. This is not to say that the professional doctorate is somehow less rigorous than a PhD—it is supposed to have a different kind of rigor, but few universities have been able to define different notions of rigor when it came to practice-based research. This remains an unresolved problem with professional doctorates.

In an attempt to overcome the binary of Mode 1 and Mode 2 types of knowledge production Huff (2000) proposed that Mode 1.5 knowledge production could retain the theoretical characteristics of Mode 1 knowledge while integrating the practice assumptions and outcomes of Mode 2 knowledge. In this approach research questions typically arise from practice, which are then framed using theoretical insights from Mode 1 knowledge enabling

researchers to clarify constructs and relationships in a broader context. Professional doctorates such as the DBA may provide an opportunity to develop Mode 1.5 methods of inquiry. In the next section we discuss some key assumptions and learning outcomes of professional doctorate programs, their relationship with PhD programs, and their contribution to professional practice.

PROFESSIONAL DOCTORATES AND PROFESSIONAL PRACTICE

Professional doctorates are typically found in the fields of education, clinical psychology, medicine, business administration, and engineering (Taylor, 2008). Jamieson and Naidoo (2007) argue that many of these areas where professional doctorates are strongest are at the intersection of traditional disciplines, because knowledge contributions in the context of professions are less likely to be developed within the bounds of just one discipline. Doctor of business administration programs in the United Kingdom and Australia were introduced from the early 1990s, largely as a result of recommendations made by government education departments (Bareham et al., 2000; Sarros, Willis, & Hardie, 2004). The number of professional doctorates in general and DBAs in particular grew rapidly in the 1990s in both countries (Fenge, 2009; Maxwell, 2003; Neumann, 2005). For example, the first DBA program was introduced in Australia in 1993, and by 2000 there were 21 Australian universities (about half the total number of universities in the country) offering DBA programs (Bareham et al., 2000; Sarros et al., 2004). More recently, several DBA programs have closed down, mainly because of very low graduation rates, and at the time of this writing there were 16 Australian universities offering DBA programs. One possible reason for the attractiveness of DBA programs in Australia is the coursework component. Unlike US PhD programs that have a significant coursework component with qualifying and core examinations, Australian and UK PhD programs have not had discipline-based courses, apart from one or two research methods courses. But recent reforms of some PhD programs to include advanced coursework make this a less strong distinguisher (Evans et al., 2005; Lee et al., 2009).

Forty-two universities in the United Kingdom offer DBA programs (37% of the total number of universities in the UK). In contrast, less than 10% of AACSB member business schools offered a DBA

program in the United States (AACSB, 2003). In continental European universities there are virtually no DBA programs (or at least their doctoral programs are not named as such); an exception is the Copenhagen Business School whose website mentioned different routes to a PhD including an "industrial PhD fellow" (with no teaching requirement) and a DBA. However, their website has no information about the DBA program. Several PhD programs in European universities emphasize a practice-based approach to research. For example, the PhD program at Tilburg University in the Netherlands is "specifically targeted to professionals" and "offers opportunities for practice-oriented scientific research." The PhD program at Universitat Saint Gallen in Switzerland offers two tracks: a "research-based professional career" or "academic career track."

There has been a proliferation of names for professional doctorates in the United States: Burrell (2006) cites examples such as a doctor of management, doctor of public health, doctor of public administration, doctor of health science, doctor of engineering science, doctor of communications design. Australia and the United Kingdom have matched this proliferation with, for example, a doctor of nursing (Edwards, 2009), doctor of professional practice (Fenge, 2009), doctor of technology (Maxwell, 2003), doctor of creative arts, and doctor of juridical studies (Neumann, 2005). Bourner et al. (2001) give more UK examples. In the United States are more as well: the doctor of professional studies at Pace University's Lubin School of Business and doctoral programs from nonbusiness schools such as the George Washington University Graduate School of Education and Human Development's education doctorate in human and organizational learning. Some professional doctorate programs in business are essentially PhDs (e.g., the programs at Indiana and Boston Universities) aimed at developing management academics; some PhDs, like the Fielding Graduate University's, are aimed at practicing managers. Standardized doctoral training across professional doctorate programs is certainly not the norm, and there is considerable variety in program content. Table 1 provides a representative list of professional doctorates currently offered by Australian, UK, and US universities along with keywords that describe the programs' aims. A caveat is in order here: It is quite possible that there are other practitioner-based doctoral programs offered in departments other than business schools. Moreover, PhD programs in

several universities can have a focus on practice without necessarily calling their program a professional doctorate or DBA. For instance, many European universities offer PhDs that are focused on practice and whose key target populations are senior managers and consultants, not potential academics. However, since we focused only on programs that are named professional doctorates, executive doctorates, or DBAs, other practice-based doctoral programs are not listed in Table 1.

If we look at the keywords that describe the aims of DBA programs, terms like "practice," "professional practice," "applied research," "applied knowledge," appear in all. In terms of target markets, virtually all programs are aimed at practicing managers or management consultants. Of the 72 professional doctorate programs listed in Table 1, only three universities specifically mentioned academia as a career: A DBA would "open the gateway to a life in academia" (University of Southampton, UK); develop "proficient researchers and proficient teachers" (Louisiana Tech University, USA); or "enhance their careers as executives, consultants or university professors" (George Fox University, USA). Other commonly used terms were "professional development," "professional practice," "research skills," and "knowledge" (prefaced with terms like "deep," "applied," "practice-based" or "actionable") and "critical thinking." About 20% of the programs specifically mentioned "reflexivity" or "reflective practitioner" and "leadership" in their aims. Seven programs specifically mentioned that the candidate's organization would be the focus of the research, with one UK university describing its approach to the DBA as treating the "workplace as a laboratory."

Entry criteria of most Australian PhD programs require an honors degree (or equivalent), which means that the candidate has had prior exposure to research. Others specify an "appropriate" master's degree as well, which in business schools tends to be an MBA, a degree that does not really prepare a candidate for conducting doctoral research. Most candidates entering doctoral programs in business have an MBA with very little exposure to research.

In the North American doctoral system, the coursework is designed to equip candidates with both disciplinary knowledge and research skills. For instance, Harvard Business School offers both PhD and DBA programs, and the distinction is based on a candidate's research interests and "the approach one wishes to apply to that research"

TABLE 1
Professional Doctorate Programs in Australia, United Kingdom, and the United States

University	Region	Name of program	Keywords about program aims
Charles Darwin University	AUS	DBA	Professional development; specialized knowledge; managerial competencies; theory and practice; professional managers; management consultants; international, regional, national and organizational environments
Charles Sturt University	AUS	DBA	Management knowledge; research skills; practical and problem solving; industry focused; reflective professional practitioners
Curtin University of Technology	AUS	DBA	Critical thinking; practical managers; practical business situation; sensitive to research questions
Deakin University	AUS	DBA	Advanced understanding; critical thinking; apply theoretical understanding and research results to business problems; advanced research skills; communicate research outcomes; professional practice
Murdoch University	AUS	DBA	Develop solutions; strategic business issues; high level expertise; career advancement; leadership
Queensland University of Technology	AUS	DBA	Researching professional; research-based business decisions; contribution to business practice; solving contemporary and complex business problems; discipline-based knowledge
Southern Cross University	AUS	DBA	Professional practice; solve problems through research; expert knowledge; new insights in your professional area
University of Ballarat	AUS	DBA	Advances knowledge; application of new knowledge; practical situations; professional managerial competence; theoretical, practical and scholarly expertise
University of Canberra	AUS	DBA	Reflection on practice; relevant research skills, professional experience; research, writing and analysis skills; bridging the gap between theory and practice
University of Newcastle	AUS	DBA	Leadership; analytical and critically self-reflective skills; applied research; extend and deepen their knowledge
University of Notre Dame Australia	AUS	DBA	Improve relationship between professional and academic knowledge; research-based approach
University of Southern Queensland	AUS	DBA	Business-oriented doctoral research program; theoretical and empirical understanding; contribute to knowledge generation; identify and resolve business challenges
University of Western Australia	AUS	DBA	Enhances students' research skills; develops their independent and critical thinking; contribute state-of-the-art knowledge
University of Western Sydney	AUS	DBA	Uncover new knowledge; advanced training; applied; professional practice; critical consumers of research
University of Wollongong	AUS	DBA	Business research skills; leadership; expand knowledge; enhanced understanding of contemporary management theories
Victoria University	AUS	DBA	Problems of a particular profession; undertake independent research; original contribution to your profession
Durham University	UK	DBA	Practitioner-researcher; analytical, conceptual, and critical thinking skills; innovators; increased understanding and knowledge; strategic focus; professional practice; applied business research; practitioner-orientated research; analysis and critical appraisal; personal and career development
University of Bath	UK	DBA	Research excellence with professional practice; international; advanced management practice; exercising professional responsibility; leadership roles; test theories; research skills appropriate for senior levels of institutional management; policy improvement; good practice
University of Southampton	UK	DBA	High level strategic business issues; applied; ability to solve business issues; portfolio career; open the gateway to a life in academia
Aston University	UK	DBA	Intellectual, business and research expertise; knowledge leaders; powerful practical knowledge; interface of advanced research and business; develop effective organizations; persona transformation
University of Birmingham	UK	DBA	Academic rigor with practical management relevance; think more deeply and critically about the work that they do; enhance management practice

(table continues)

TABLE 1
(Continued)

University	Region	Name of program	Keywords about program aims
University of Newcastle	UK	DBA	Advanced research and analytical skills; progressing their careers
University of Manchester	UK	DBA	Life-changing experience; improve your understanding . . . yourself and your way of working; deeper understanding of your chosen subject area
University of Liverpool	UK	DBA	Workplace-based research; actionable knowledge; practically oriented; integration of actionable knowledge; critical thinking skills; working environment; practice-based learning; critical action learning; action research; hands-on learning methods; reflect; contemporary management topics; doctoral practitioner and researcher
University of Surrey	UK	DBA	Enhancement of professional practice; relevant to the world of management; addressing real problems; practitioner doctorate
Heriot Watt University	UK	DBA	Apply research-based thinking; needs of the real business; evaluate issues facing your organization; applied research professionals; analyze complex business issues; develop original and reliable solutions
University of Strathclyde	UK	DBA	Little information on DBA
University of Reading	UK	DBA	Executive and professional practice; develop knowledge and theory; application; reflective practitioner; conceptual and theoretical underpinnings; applicable techniques; develop personal, consultancy, and research competencies; contributes to theory and practice
University of Hertfordshire	UK	DBA	Latest management techniques and research methods; improve the effectiveness of your organization
Keele University	UK	DBA	Personal development; deepen expertise; competencies in research skills; knowledge of methodologies; original contribution to the body of knowledge; understanding of the practice of research
Nottingham Trent University	UK	DBA	Study of work-based problems; personal and professional development; transfer of learning into organizational and managerial practice; practical perspective; challenging traditional management understanding; new, innovative, and personal responses
Robert Gordon University	UK	DBA	Academic recognition; blend the latest academic thinking with business knowledge, skills and practice; enhancement of professional practice; research-based view of real-world management issues
Birmingham City University	UK	DBA	Practice-based research; utilize and apply knowledge, action learning, reflective practice, management of change, personal and professional development, lifelong learning
University of Wales Institute	UK	DBA	Change agency; develop new professional practice; integrates taught, experiential, and research elements; address current professional issues
Bradford University	UK	DBA	Extends your significant managerial experiences; research skills for commercial use; business-critical research techniques; globally significant; commercially valuable results
University of Gloucestershire	UK	DBA	Project based; contribution to knowledge; develop your organization; understanding and perception of managerial work
Northumbria University	UK	DBA	Developing and improving professional practice; developing research and enquiry skills ; application and reflection
University of Plymouth	UK	DBA	Synthesize and develop professional practice; theoretical understanding; reflexive capability
University of Huddersfield	UK	DBA	Critical thinking; bridging the gap; academic knowledge and professional practice; contribution to your organization; analytical and research skills
Sheffield Hallam University	UK	DBA	Personal scholarship; management thinking; advanced professional practice; evidence-based research; theory and practice of management; reflective practitioner
University of West England Bristol	UK	DBA	Executive level professional practice; application, creation and evaluation of theoretical frameworks and knowledge; real business issues; professional practice; deepen student knowledge; national and global issues; analytical skills; new knowledge and understanding; self-awareness and personal effectiveness

(table continues)

TABLE 1
(Continued)

University	Region	Name of program	Keywords about program aims
University of Central Lancashire	UK	DBA	Research-orientated program; business and management research; consultancy-based interventions; personal and professional development
Glasgow Caledonian University	UK	DBA	Practical business issues; deeper knowledge; academic knowledge of management; professional practice; real organizational change and development; transdisciplinary; based on problem solving
University of Chester	UK	DBA	Original knowledge within organizations; real expertise in areas of interest; research skills
Kingston University London	UK	DBA	Professional excellence; knowledge of leading-edge business management issues; multidisciplinary perspective; personal and professional development skills; critical self-reflection
Leeds Metropolitan University	UK	DBA	Professional development; capacity to think creatively and innovatively; design and implement advanced level research projects; research skills; academic and professional contexts
University of Glamorgan	UK	DBA	Reflection on practice; current organizational issues; synergy between learning, research and the practice of business and management; real difference in the workplace
Manchester Metropolitan University	UK	DBA	Inform and improve professional practice; consultancy skills; research within a corporate context; evidence-based management
University of Wales, Newport	UK	DBA	Impact on their organization or profession; customized to the needs of their own professions and organizations;
Portsmouth Business School	UK	DBA	Applied, practice-oriented research; directly relevant to their employing organizations
Middlesex University	UK	DBA	Professional capabilities; reflective practice; enhancing knowledge; capabilities in practice-based research
University of Bedfordshire	UK	DBA	Substantial and original theoretically informed contribution to management practice; professional and academic; direct impact on the participant's organization
Liverpool John Moores University	UK	DBA	Extend their own learning; contribution to the body of knowledge of their practice area; researching managerial issues; critical review; systematic application of appropriate theories and research; applying knowledge within the work environment
Anglia Ruskin University	UK	DBA	Professional practice; practitioner-centered research investigation; transferability of research findings to and from the workplace; workplace as laboratory for research; personal development
University of Greenwich	UK	DBA	Leadership, consultancy and innovation; advanced knowledge of research; consultancy interventions, leadership and reflective practice; applied management scholarship
University of Bolton	UK	DBA	Business driven research, analytical, conceptual, and critical thinking skills; greater knowledge and a higher understanding
London South Bank University	UK	DBA	No specific information about the DBA; information provided on general research degrees
London Metropolitan University	UK	DBA	Research skills; critical review; systematic application of appropriate theories and research; maximize performance and decision-making abilities; contribution to both theory and practice; professional practice; contribution to professional knowledge
Cranfield University	UK	DBA	Apply concepts to practice; develop your thinking processes; enhance professional credibility; critical appreciation; rigorous management research; reflect and build on learning skills
Harvard University	US	DBA	Power in practice; combining academic rigor and management relevance; field-based research
Case Western Reserve University	US	Doctor of Management	Develop thought leaders; advancement of business and society; disciplined approach to scholarship; problems of practice; evidence-based management; self-directed lifelong learning
Boston University	US	DBA	Little information on aims of DBA

(table continues)

TABLE 1
(Continued)

University	Region	Name of program	Keywords about program aims
Indiana University-Bloomington	US	DBA	Little Information on DBA
George Fox University	US	DBA	Enhance their careers as executives, consultants, or university professors; integration of faith and ethics into instruction and practice
Cleveland State University	US	DBA	Practitioners; functional expertise; interdisciplinary and global framework; advance business theory and practice
Georgia State University	US	Executive Doctorate in Management	Applied knowledge and research skills; lifelong learning; effective organizational leadership; interdisciplinary, big-picture issues; disseminate knowledge related to their profession
Golden Gate University	US	DBA	Professional development; expansion of knowledge; critical thinking; conceptual and analytical skills; integrating theory and practice; cultural, ethical, and global issues; effective decision making
Louisiana Tech University	US	DBA	Proficient researchers; proficient teachers; developing individual research and teaching skills
Nova Southeastern University	US	DBA	Real-time knowledge; advanced decision-making skills; in-depth knowledge of research; superior communication skills; strong leadership development
Regent University	US	Doctor of Strategic Leadership	Instant solutions for today's organizational challenges; increase organizational efficiency and effectiveness; practical aspects of organizational leadership; deep understanding of theory and practice
Wilmington University	US	DBA	Current business and managerial issues; applied knowledge and skills; practitioner's degree
Benedictine University	US	PhD/DBA in Values-Driven Leadership	Organization consultants and senior business executives; socially and environmentally responsible leaders; executive leadership development

Note. The list of professional doctorate programs was compiled from websites listing all universities in Australia (<http://www.australian-universities.com/list/>); UK (<http://www.thecompleteuniversityguide.co.uk/single.htm?ipg=8726>); and USA (<http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/national-universities>).

(Harvard Business School, 2011). The DBA is described as "Power in Practice," a program that combines academic rigor and managerial relevance and "provides students with the flexibility to apply a broad range of disciplines and research methods to their chosen area of study." Research in the DBA is described as "field-based research." The PhD program, on the other hand, is described as one that provides "disciplinary and management expertise," combining the "disciplinary expertise of the social sciences (e.g. economics, psychology) with the management expertise of HBS." The PhD candidate is required to focus on "building a strong foundation in a particular discipline and then apply those methods and approaches to their research on relevant managerial problems" (Harvard Business School, 2010).

Case Western Reserve University offers a professional doctorate called the doctor of management for full-time managers with the aim of creating "practitioner scholars—bold, intellectual boundary spanners who straddle the worlds of practice

and academia." The program claims to develop graduates with the ability to "subject management decisions and organizational phenomena to the insight, methods, and rigor of academia" through combining "strong research intensity and discipline with a focus on compelling problems of practice" (Case Western Reserve University, 2011). Benedictine University offers a PhD/DBA program, "Values Driven Leadership," aimed at organization consultants and senior business executives "to prepare them as socially and environmentally responsible leaders for the 21st century." Candidates can choose from a "research-focused Ph.D. degree that concludes with a scholarly dissertation based on original research," or a "practice-oriented D.B.A. degree that concludes with an applied dissertation based on the design and implementation of a major change initiative" (Benedictine University, 2011).

The emergence of professional doctorates can be attributed to universities' responses to criticisms about the lack of relevance of PhD research, graduate preferences to seek employment outside the

academy, and the demands of the knowledge economy (Fenge, 2009). While the PhD is a degree for an academic career in research and teaching, the professional doctorate is primarily aimed at senior or middle level managers and consultants. A survey of 16 DBA programs in the United Kingdom found that the primary career focus was on practitioners aspiring to senior management positions using the expertise and research skills that a doctoral degree can provide—not a PhD, which is intended to train professional researchers but a DBA, which is designed to train “researching professionals” (Bareham et al., 2000: 397). However, there is some ambiguity about the differing nature of research in the contexts of academia and professional practice. The assumption is that most practice in business and management is not based on research. The professional doctorate can provide research skills that are appropriate for practicing managers, which in turn is expected to improve professional practice. The focus on practice also implies that the professional doctorate is a form of “work-based learning”: Unlike a PhD thesis where research questions are developed by identifying gaps in the theoretical literature, DBA research starts from a particular problem that arises in the workplace (Bareham et al., 2000).

However, the learning outcomes required to develop research-based practice are not clear. What kind of research skills do senior managers require to improve their practice? How do these research skills differ from those required for an academic researcher? Despite the focus on research-based practice, the research methods courses in most DBA programs are very similar to those offered in PhD programs in terms of developing skills in data collection and analysis. A few programs focus specifically on action research or case study methodology as these are seen as more “practical” ways of researching, but the tensions between the appropriateness of research methods required for academic versus practitioner research remain unresolved (Lockhart & Stablein, 2002). Apart from a few specialized functions, such as market research or economic modeling, most middle or senior level managers have little use for sophisticated multivariate analytic techniques like structural equation modeling or conjoint analysis. A majority of DBA candidates in Australia and the United Kingdom study specific problems in their organizations, and the methodological skills required for this type of investigation are limited when compared to the skills required to build and test theo-

ries. There is some variation in DBA programs both in the proportion of research content and the form that the research takes. The research component of DBA programs ranges from 30 to 70% and is assessed through a thesis that can vary in length from 30,000 to 80,000 words, or a research portfolio comprising 3 or 4 papers of about 10,000 words each, or 3 publishable research papers (Neumann & Goldstein, 2002). The research component of the DBA is a contentious issue and has come under criticism for not being as rigorous as that of the PhD, and there are some doubts about whether it constitutes research of doctoral quality (Seddon, 2001).

Lee et al. (2009: 276) have argued that the debate about the future role of DBAs needs to embrace a “logic of practice,” where the links between knowledge and practice are critical and emergent, with practice rationalities and practice-influenced reasoning leading to the generation of new and different knowledge. The professional doctorate is ideally suited to facilitate developments based on such ideas that can challenge the strictures and imperatives of disciplinarity. This way of conceiving professional doctorates means explicit valuing of knowledge beyond the usual bounds of academic knowledge. For example, Beer (2011: 148) identifies two forms of knowledge: “relevant knowledge” and “actionable knowledge” in the context of management practice. The research that produces relevant knowledge must focus on a managerial problem. Relevant knowledge provides managers a general understanding of *what* they should know and do to solve practical problems. Relevant knowledge can be produced in the academy where researchers can study relationships between variables of interest that are relevant to the managerial problem under investigation. The extent to which managers actually use this knowledge depends on how this knowledge is disseminated, whether the findings are expressed in a manner accessible to practitioners, and the managerial capacity and skills required to implement the research. Actionable knowledge, on the other hand, provides insights on *how* managers should address organizational problems (Beer, 2011). The knowledge is produced in the context of a specific organization where researchers work in collaboration with managers to solve a particular problem and develop specific interventions to achieve specified outcomes. According to Beer (2011), actionable knowledge can only be obtained by action research. Thus “relevant knowledge

is not necessarily actionable, but actionable knowledge is always relevant" (Beer, 2011: 149).

In the academy the value of the knowledge produced, regardless of its type, is generally assessed by the status and ranking of journals where research is published. Actionable knowledge can be made theoretically significant if researchers can study the specific problem in a variety of organizations and contexts in an attempt to produce a general explanation. It will be difficult, if not impossible, for a researcher to publish in a leading academic management journal findings from one action research project that focuses on a particular intervention in an organization. There could also be issues about the proprietary nature of the knowledge for the organization. Dissemination and publication of the results of an action research project is of little interest to managers, but for a researcher working in a business school, publications in leading journals are crucial for career development. Thus, knowledge produced in the academy tends to be more valued than knowledge produced in the workplace because the path to promotion in the academy is by publishing in leading journals.

If professional doctorates are to grow in importance, knowledge in professional practice contexts, that is, "knowledge distinguished by practice rationalities" (Lee et al., 2009: 276) and situated in the complex realities of practice rather than abstracted out of it, should be accorded a status equivalent to theory and academic knowledge (while acknowledging it is not the same as academic knowledge). Professional doctorate candidates bring to their research a great deal of knowledge, often tacit or implicit knowledge, of the necessities and realities important in business and management, of how business procedures actually work, and a deep, explicit understanding of the imperatives of business practice, more than is usually found in textbooks or academic journals. This knowledge can be built on to structure and guide the research program and locate practitioner problems in the context of existing literature and theory. We propose that such professional doctorates can accommodate the demands of practitioners and end users of doctoral research for more industry-relevant research.

We argue that this conception of professional doctorates means that a professional doctorate is more than a matter of inviting professional practitioners into the university; it requires the university to be open to accepting the forms of knowledge

these practitioners as doctoral candidates bring to research. However, such an extension is not without controversy, and there are debates about assessing knowledge production from a professional practice perspective. For example, some professional doctorates have thesis supervision involving relevant practitioners as supervisors chosen for their professional knowledge instead of their doctoral qualifications (Johnson, 2005; Maxwell, 2003). Employing nonacademic examiners is another controversial idea and is generally resisted in academia (Johnson, 2005). However, one could argue that academic examiners and thesis supervisors may lack vital understanding of the professional practice context of the research. The debates appear to reflect differences in perceptions of rigor versus relevance of doctoral training. Critics of traditional PhD programs call for more relevant and practice-based research, calls that are resisted by others who claim that a practitioner-focused approach could dilute the quality of research that is expected at the doctoral level (Seddon, 2001).

The development of professional doctorates and their success is more than just a matter of universities meeting some market demand. It provides universities with a challenge and opportunity to look at new ways of working, thinking, and achieving their broad objectives. Taking up these opportunities will change some aspects of the university itself. Universities will have to adapt the underlying assumptions behind doctoral programs "to acknowledge and take advantage of the different contributions and outcomes of all doctoral programs" (McWilliam et al., 2002: 104). In this way doctoral standards can be maintained, universities can make a wider contribution to society, and a distinction between the PhD and professional doctorates can be justified.

The discussion above has described some of the main themes of DBA programs and their relation to the PhD. Dichotomies abound in program descriptions of the DBA and PhD: breadth versus depth; theory versus practice; basic versus applied research; disciplinary knowledge versus practice knowledge, researching professionals versus professional researchers, work-based learning versus academy-based learning are some examples of how the DBA is positioned vis-à-vis the PhD. While these are descriptions offered by DBA program directors and managers, not much is known about the experience of DBA candidates and graduates who have undertaken these programs. What learn-

ing outcomes were produced? What skills did graduates acquire? What did they gain from the program? To explore these questions we discuss the DBA program at an Australian university, which can be considered as "typical" in the sense that it focuses on professional practice, reflection, and professional development—key attributes of most DBA programs.

A DBA: CREATING THE REFLECTIVE PRACTITIONER

The DBA program that the authors were involved with was developed in 1996 in an attempt to address educational needs of Australian senior managers. Developed as a professional degree of doctoral standing, it was aimed at developing the capabilities of a *reflective practitioner* or a *practitioner-scholar*, with strong emphasis on establishing a knowledge base, providing the competencies for reflection on professional practice, and conducting research in a professional practice context. Tenkasi (2011: 212) defines *practitioner-scholars* as "actors who have received traditional academic training and who apply their knowledge of theory and research to an organization's particular challenges to resolve business problems." The DBA was developed as an alternate pathway to doctoral research for practicing managers who were interested in expanding their knowledge base but were usually not qualified to enter a PhD program because of lack of prior research experience. Fundamental to the program was an understanding that the basis of research in professional doctorates is the professional experience of candidates: The research to be conducted for a thesis is necessarily based on and informed by professional practice.

This university offered both DBA and PhD programs; however, the two programs operated independently, with different directors leading their respective program. The target market for the DBA program was also different: All candidates held full-time senior positions in organizations and were generally older than their PhD counterparts. Program structure also differed considerably: There was no mandatory coursework for PhD students, while DBA candidates had to undertake a 2-year coursework program. All Australian universities that offered DBA programs also had PhD programs in place, and the DBA was seen not as a substitute to the PhD but as an alternate pathway to doctoral research.

The DBA was aimed at working professionals with at least 10 years of relevant work experience. It was also a requirement that a proportion of work experience should be post-MBA graduation. In order to provide a contextual setting for their research, candidates were required to have the ability and opportunity to carry out their research in one or more organizations. Access to and support from relevant organizations were essential criteria for selection of candidates. An analysis of candidate profiles since 1996 indicated considerable diversity in the range of positions and industries. Forty-six percent of students were senior managers in industry, employed in functions such as strategy, finance, quality control, project management, human resources, or marketing. Twenty percent were managing directors, CEOs or partners; 15% were directors or executive directors. Another 15% were self-employed consultants. The DBA graduates (with very few exceptions) continued their careers in industry; whereas many PhD graduates pursue an academic career. An analysis of candidates' reasons for pursuing a DBA found their stated reasons included enhancing chances of promotion, prestige of a doctoral qualification, intellectual growth, professional and personal development, contribution to professional practice, expanding knowledge base, obtaining post-MBA qualification or the next level of academic ability, and preparing for a career in consulting.

The DBA was focused around three major themes: knowledge, professional development, and research. The coursework component was developed to address all three areas with courses in strategy and organization theory aimed at building an intensive knowledge base, professional development workshops designed to promote critical thinking and build reflective practice, and research methods courses to prepare candidates for their supervised thesis work. The emphasis on reflective practice is consistent with received wisdom in management, particularly in the context of organizational learning (Argyris & Schon, 1987; Schon, 1987; Senge, 1990), where the role of the reflective practitioner was found to be a crucial factor influencing how an organization learns. In practice, however, reflection as a conscious exercise is not easy given the daily pressures of managerial work. The DBA was built on the idea that reflective practice and learning about what it means to be a manager, negotiating this managerial identity in the workplace, and understanding the dynamics of interpersonal interactions in the

workplace as a result of this identity are crucial for effective professional practice (Morley & Priest, 2001). As can be seen from Table 1 there are several professional doctorate programs with a similar focus on critical reflection.

Apart from reflection, DBA candidates were also supposed to develop more "scholarly" attributes, as in PhD programs. These attributes included establishing an intensive knowledge base, developing analytic thinking skills, learning to critically evaluate and apply academic research, formulating researchable propositions, learning how to critically review relevant literature, and developing data analysis skills and techniques. The coursework introduced candidates to the world of academic writing and helped prepare them for their thesis work. Figure 1 describes the range of practice capabilities for DBA graduates at this particular Australian university. The capabilities listed in the boxes around the edge of Figure 1 are assessed (summatively or formatively) in the coursework components of the program. Capabilities listed in the central box in Figure 1 are seen as essential to a successful thesis.

The DBA is not an extended master's or an advanced MBA. The MBA typically provides managerial training in a basic sense and is a program designed to introduce candidates to a knowledge base and a range of analytic tools that a manager needs. There is little, if any, room for critical thinking or reflective practice, and most MBA programs focus entirely on problem-solving techniques with no inputs on the epistemological and ontological assumptions that underlie knowledge production, which are key theoretical insights that the DBA provides. If the MBA teaches managers what to think, the DBA is designed to teach them how to think. The DBA focuses on the experience of managers after their MBA experience and uses this as the basis for professional practice reflection and research, which is why the entry requirement specifies a proportion of time worked after MBA graduation.

In this program group interactions were a crucial part of the learning process. This generated sustainable cohorts whose progress through the program could be tracked and evaluated and appropriate feedback given. This is an area where coursework-plus-thesis doctorates like the DBA have an advantage over traditional thesis-only PhDs, which are the norm in Australia and the United Kingdom, and which can be a lonely experience for candidates.

For most DBA candidates the program was their first experience with actual research. As in other doctorates, the research process, developing the thesis, and new knowledge discovery, require advanced thought. The coursework challenged students to critique academic papers, defend positions, consider difficult and unstructured issues, reflect, prepare, and respond to criticisms in an attempt to foster the analytic, rhetorical, and critical thinking abilities needed.

A significant learning outcome was an appreciation of the difficulty in making "valid" prescriptions about how to deal with a particular managerial problem, let alone offering generalizable and universal prescriptions. Thus, the program appeared to offer a managerial sense-making framework that was more reflective than "expedient sense-making" that is characteristic of most managerial cognitive processes (Schwandt, 2005). Critical examination of existing sense-making frameworks enabled transformational learning, whereby candidates were able to recognize both the limitations of quick fix approaches to management problems as well as the managerial sense-making frameworks that framed these problems in a particular way.

Most of the candidates, after 10 years in the workplace, were accustomed to a particular working and writing style. Now they had to learn to make a more sophisticated argument than simply listing a number of "bullet points." Of particular significance was the choice of research methods: Of the 21 completed theses (to date), only one used quantitative methods in the form of multivariate data analysis. A handful relied on surveys of a limited population (such as managers) for much of their data. In-depth interviews, focus groups, Delphi analysis, and case studies were the techniques used in the other theses. This probably reflects the practitioner focus of DBA thesis topics, where the aim is to generate understanding about a particular kind of professional practice that generally does not involve the use of a large representative sample or sophisticated quantitative data analytic techniques. The scope of the research problem of most candidates' thesis topics was restricted to either their own company or their industry, and as a result, the research questions that emerged from the problem statement did not warrant the types of methods one would expect from an empirical study that develops and tests hypotheses using large samples. In a study of an executive doctoral program in the United States, Hay (2004) found similar

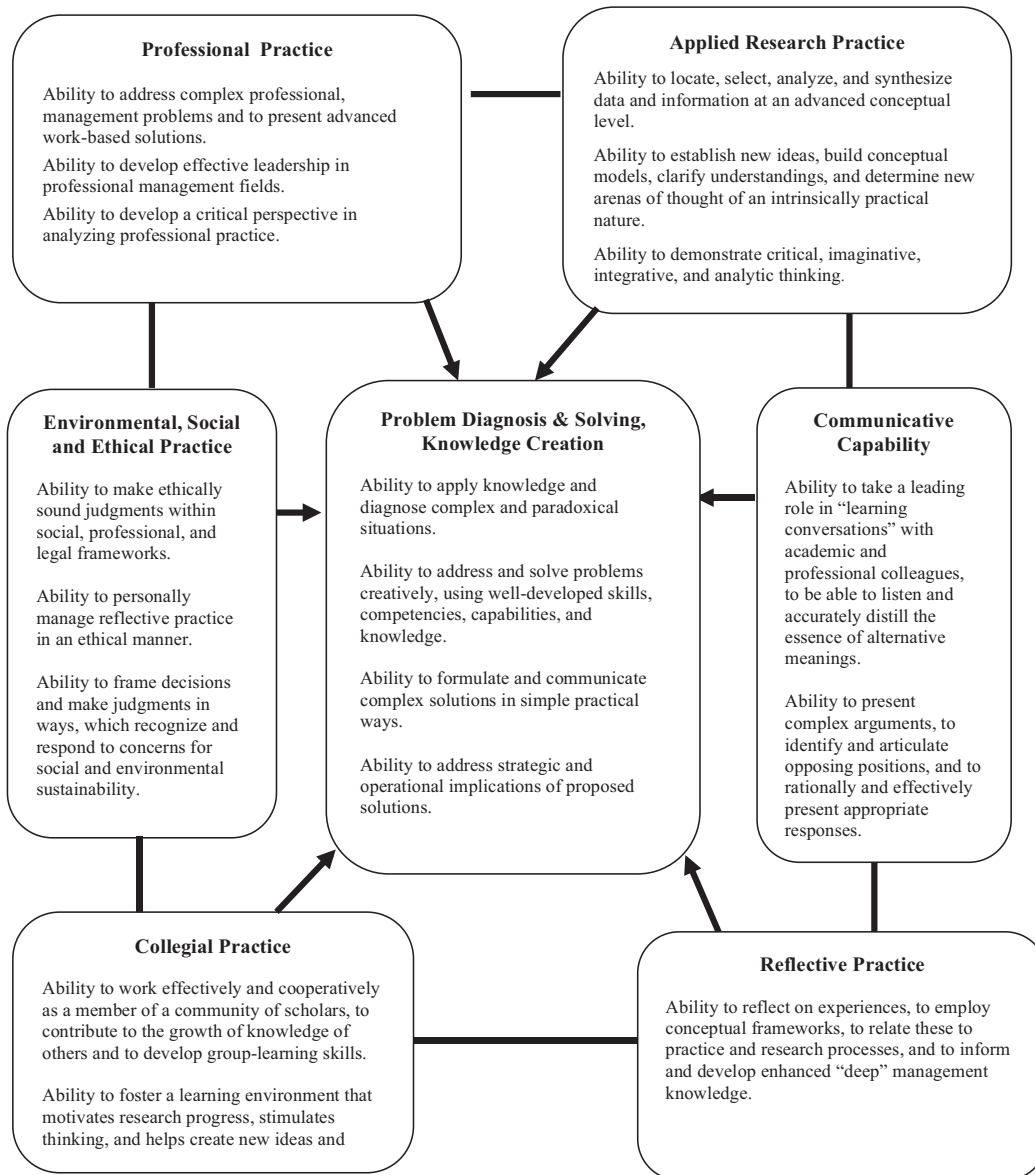


FIGURE 1
Practice Capabilities for Professional DBA at an Australian University
Adapted from Kimber, 2001, Unpublished manuscript.

patterns with our experience, whereby dissertation topics typically emerged from the workplace and were then subsequently located in an appropriate theoretical framework.

IMPLICATIONS AND DIRECTIONS FOR FUTURE RESEARCH

So what insights can be gained from the DBA experience? First, we must emphasize that the DBA

market is not large in terms of numbers but is small and fairly specialized. Students are generally required to pay fees that cover direct costs so the program breaks even and may make a small profit (Neumann, 2005). However, unlike the MBA, the DBA is not and will probably never be a cash cow for universities, but is a degree that can enhance their research profile and interactions with industry and practitioners. MBA alumni can also become a potential market for DBA programs after

graduates gain relevant industry experience. Professional doctorates may reverse the declining trend in PhD numbers faced by many US universities by establishing links between alumni and industry while generating doctorally qualified faculty that can contribute to both industry and academia (Bisoux, 2002). The fee paying DBA may also offer an alternate to the high cost PhD programs that many universities are struggling to maintain.

Second, the distinctions between a PhD and DBA that the literature describes were not readily apparent. While it is true that the "practical" approach advocated by the DBA program was an attraction for practicing managers, distinctions between theory and practice were less clear-cut, and there were areas of overlap (Neumann, 2005). In terms of the DBA experience for candidates, discipline-driven versus practice-driven research was less of a dichotomy: The DBA offered candidates a discipline-based approach to reflect on their professional practice, and candidates seemed comfortable with this approach.

The DBA is more prevalent in Australia and the United Kingdom than in the United States. North American doctoral programs like the PhD already contain a substantial coursework component, unlike their UK and Australian counterparts. Thus, while the presence of coursework is an important factor that distinguishes the DBA from the PhD in Australia and the United Kingdom, it is the content and structure of the coursework that could differentiate the DBA from the PhD in North American markets. For the research undertaken by many DBA candidates, quantitative skills (beyond their MBA level) are often not very important. Also, much of what PhD candidates learn in their discipline-based courses focuses primarily on the theories that inform the discipline, arguably with less emphasis on the application of those theories. PhD theses are assessed by their contribution to theory. Most DBA thesis topics focus on micro-organizational processes whereby candidates investigate particular problems in their own organizations. Coursework in the DBA tends to focus on the application of theory to practice and the DBA theses reflect this approach. One of the outcomes of the early growth in DBA programs in Australia and the United Kingdom was the recognition of the importance of formal doctoral training in the form of coursework. Over the last few years several PhD programs in Australia and the United Kingdom

have introduced mandatory coursework, which is a reflection on the value of a DBA.

Some directions for future research that can shed some light on currently unresolved issues emerge from the above discussion. There is a lack of understanding of the context, content, and outcomes of research arising from professional doctorates. We discuss below six directions for future research.

Industry and Practice Focus

The first area for future research is the much-touted focus on practice- and industry-based research of professional doctorates. In order to maintain and reinforce its unique doctoral status, the DBA should be substantively different from other postgraduate programs in management: It should not be an "extended MBA" starting from where the MBA left off, but should focus on the experience of managers, especially their middle and senior management experience. For this reason, the DBA does not consider fresh MBA candidates. If practice is indeed the *raison d'être* of professional practice, then there is a need to understand in what ways research produced by professional doctorates actually contribute to enhancing practice. While it is true that all DBA candidates in the program we described used their companies or industries as research sites, there were no institutional links as such between the university and industry or professional bodies that informed or shaped the program in any significant way. Other studies of professional doctorates in Australia also found little evidence of dialogue between universities and industry (McWilliam et al., 2002; Neumann, 2005). What links there were tended to be initiated, facilitated, and maintained by individual student interest rather than institutional forces. Gill and Hoppe (2009) argue that academics' preferred channels for disseminating their research findings—refereed academic journals and conferences—are ineffectual in communicating research results to business. They advocate that professional doctorates not only can have a role in helping to build informing relationships between academia and practice, but that this should be their main rationale. For business schools this would mean moving from a near total focus on pure research and knowledge creation (informing internal clients) to research that has an impact on business practice (informing external clients), as prioritized by the AACSB (2008). Gill

and Hoppe (2009) see this as being effective because the graduates themselves will provide the necessary linkages between professions, business, and academia.

In a study of academic-practitioner engagement, Hughes, Bence, Grisoni, O'Regan, and Wornham (2011) found attitudinal differences in both actors: There were some academics that were "willing and able" to engage with practitioners, others that were "willing but underexposed," and the rest were classified as "theoreticians" with no desire to engage with practitioners. Similarly, there were practitioners that were "enthusiasts" when it came to engaging with academics and research, some who were "uncommitted," and others that were "cynical." Professional doctorates have the potential to form bridges between academics that are "willing and able" or "willing but underexposed" with practitioners that are "enthusiasts" and "uncommitted" (Hughes et al., 2011). We suggest that the next step would be to use the findings from Hughes et al. (2011) to identify ways to bridge the industry-academy divide in an attempt to "understand the generative mechanisms that promote effective interaction between the worlds of the management researcher and of the manager (and the managed)" (Hodgkinson & Starkey, 2011: 366). Future research can investigate how these bridges can be built, how attitudinal differences can be overcome, identify barriers that arise, and describe ways to overcome these barriers. These elements constitute the "knowledge translation value chain" that attempts to integrate theory development, reporting of basic research, practitioner-oriented research outputs, and engagement with end users of research (Thorpe, Eden, Bessant, & Ellwood, 2011).

Viability of Partnerships

If universities are to produce research that is relevant and beneficial to the wider society, then there is a need to assess the viability of partnerships between practitioner-scholars and academics. Such partnerships have the potential to enhance the research capability of practitioner-scholars from "appliers of theory" to co-producers of knowledge while enhancing the practice capabilities of academics (Tenkasi, 2011). More research is needed to understand the process of partnership building, the differing interests that may arise, the driving forces of successful engagement between industry and academia, and the outcomes of en-

gaged research. Given the current low levels of interaction between practitioner-scholars and academics, it is doubtful whether individual motivations to conduct practice-based research will lead to any shift in the research agenda of business schools. There is a need to understand the role that "bridging institutions" can play in fostering engaged research (Bartunek & Schein, 2011: 244). Research centers, institutes, and professional associations where scholars and practitioners can interact and collaborate are examples of bridging institutions that can enhance the relevance of academic research. While most universities have research centers and institutes, the extent of participation and involvement of industry, government, and community partners in these centers is not clear.

Career Enhancement Outcomes

Traditionally, doctoral graduates in business and management tend to embark on academic careers in research and teaching. The career-enhancing value of doctoral study for practicing managers needs more investigation. While industry sources acknowledge the value of developing research capabilities in managers, very little debate occurs between industry and academia as to the purpose and role of doctoral education and its ability to meet industry needs (Kemp, 2004). Hay's (2004) study of an executive doctoral program in the United States found a similar divide: While some doctorally qualified researchers pursuing an academic career engaged in consultancy projects in the realm of practice, their published research in academic journals rarely discussed implications for practice. Executive doctorates, on the other hand, tended to produce actionable knowledge using enacted theories. However, not much is known about how this actionable knowledge is disseminated or whether it remains in-house at the research site. Future research can investigate the process of diffusion of practitioner-based knowledge produced by professional doctorates and the implications for career development.

The Nature of Practice-Based Research

Expectations of what constitutes "research" in professional practice needs to be better understood. Despite the espoused focus on practice, DBA theses still tended to be assessed by their theoretical and empirical attributes, mainly because no clear guidelines exist on alternate ways to assess re-

search. While there are DBA programs that are marketed as coursework doctorates with a smaller research component than PhDs, current studies show that a majority of DBAs are indeed research degrees. Some candidates and supervisors believe that DBA research could be readily transferred into a PhD (Neumann, 2005), although this view is not universal in the academy. A radically different conception of a practice-based research thesis does not exist at the present time. Most universities use the same examination criteria to assess PhD and DBA dissertations (even if there are stated differences), which compounds the confusion: If the output of both programs are considered to be equivalent and examined the same way, then the differentiation between products becomes less clear (Perry & Cavaye, 2004).

There is a need to educate academics, supervisors, and examiners on the nature of professional doctorates and how DBA candidates need to be supervised and taught research skills to make a contribution to professional practice. The DBA is a program that can address concerns about the relevance of doctoral management education. The conventional process of developing a PhD thesis is to read the literature on a particular topic, identify the theoretical gaps, and attempt to fill those gaps by collecting empirical data. The thesis generally concludes with a discussion of managerial implications and directions for future research. A DBA thesis would start from a managerial problem, locate it in the theoretical literature, and investigate what theoretical insights can address the problem. It would consider, evaluate, and apply these in the practice context. Tenkasi (2011) sees this as one of the dominant ways of linking theory and practice in research. Such an approach may enable a process of building theory from practice and creating actionable knowledge that goes beyond finding a balance between rigor and relevance but maximizes both simultaneously (Schultz & Hatch, 2005). Research on pedagogies of practiced-based learning have focused on curriculum development and learning processes in professions like medicine and nursing (Bhoyrub, Hurley, Neilson, Ramsay, & Smith, 2010; Norman & Schmidt, 2000); however, not much is known about a practice-based approach to research. Professional doctorates could broaden the role of research-based knowledge in business education, creating a form of hybrid curriculum that goes beyond conventional practitioner-oriented approaches to management education such as the case study-based MBA (as Reed &

March, 2000, point out, simply writing endless case studies does not constitute research).

Quality Control

The route to achieving doctoral status, defined as making an original and significant contribution to knowledge, is different in a professional doctorate. However, given the diversity of professional doctorates, it is not clear whether there is consistency in the teaching and application of rigorous research methods and the wider relevance of research to society (Taylor, 2008). In Australia some anecdotal evidence suggests that some faculty members consider professional doctorates to be of lesser status and quality (Neumann & Goldstein, 2002; Taylor, 2008). While more research is needed to substantiate this claim (possibly arising from the rigor vs. relevance debate that we discussed earlier), such perceptions can be problematic for the doctoral standing of the DBA. There is considerable diversity in the structure and content of DBA programs currently on offer in Australia, Asia, and the United Kingdom. If the DBA is supposed to be "differentially rigorous," there is a need to develop new criteria to assess the parameters that constitute the difference. Further, while universities have focused on developing, accrediting, and marketing DBA programs, ensuring progression and timely completion is central to the sustainability of professional doctorates, and hence, it is important to understand the impact of supervision, coursework, and other resources on successful completion.

Program Content and Delivery

The quantitative research methods courses, in PhD programs for example, focus on methods and techniques required to analyze large samples and test generalizable propositions. Given the managerial focus and case study orientation of DBA thesis topics, the kind of research methods required for managers to enhance their professional practice needs to be investigated. Perspectives from evidence-based practice (Rousseau, 2006) can be particularly useful in designing professional doctorates, and more research is needed to investigate how insights from evidence-based approaches can be used to inform both program content and delivery of professional doctorates. Practitioners and consultants as end users of research are key members of the evidence-based management community, along with researchers and educators (Rous-

seau & McCarthy, 2007). Professional doctorates offer an opportunity to develop a co-production approach to knowledge involving practitioners, educators, and researchers. As a paradigm for decision making based on the best available research, evidence-based practice can provide a more integrative approach that goes beyond identifying practical implications for inductive theories, by enabling practitioners to participate in the research process. Such an approach may overcome the dichotomy between Mode 1 and Mode 2 types of knowledge and enable a more relevant assessment of Mode 2 knowledge using insights from practice-based research.

For example, there is a need to understand how research in professional doctorates can produce "sticky findings"—research findings that "grab attention, gain credibility and are readily shared" (Rousseau & Boudreau, 2011: 269). Rousseau and Boudreau (2011) describe what academics should do to make their research more relevant—for example, present findings in a more practice-related manner, write accessibly, and frame research according to end users' interests. It will be useful to learn how these practices can be integrated into the program content of doctoral programs, perhaps as an action-research project in a doctoral program where interventions can be designed and evaluated over a period of time to assess the impact of research findings on practice. If, as Burke and Rau (2010) argue, a stronger nexus between research and teaching can enhance the practical implications of research, then a practice-based research agenda can in turn make research more relevant to teaching. An integrative mix of science, practice, and teaching can provide a more useful research agenda for the future. Professional doctorate programs can make a significant contribution to this agenda by providing practitioners with research capabilities they need to enhance their professional practice while enabling academics to relate their research findings to both teaching and practice.

Some academics are hostile to industry-driven, quick fix, problem-solving doctoral degrees because they can tarnish the image of research degrees. The practice focus of professional doctorates may lead to the generation of mainly functional knowledge because of an assumption that knowledge arises primarily from experience. Serving the profession of management is not the sole purpose of business schools, and academic freedom can be compromised if research con-

ducted by business schools is dictated by corporate interests (Hughes et al., 2011; Starkey & Tempest, 2008). For example, a 2009 AACSB report on the impact of management research cited the work of Fisher Black and Myron Scholes on options pricing as an example of research produced in the academy that had a major impact on financial practices, particularly in the area of derivatives. However, several scholars have blamed such a narrow focus on the pricing of derivatives for causing the subprime crisis in the United States that led to the global financial crisis in 2007 (Hodgkinson & Starkey, 2011; Stewart, 2012).

The technical-functionalist approach and the "enthusiasm for immediate relevance" can ignore the "big questions" about management—an approach which remains restricted to identifying factors that affect organizational performance (where performance is defined using narrow criteria) while ignoring the "basic ideas that shape the discourse of management, such as conflict of interest, problems with information and incentives, bounded rationality, diffusion of legitimate forms, loose coupling, liability of newness, dynamic traps of adaptation, absorptive capacity and the like" (Reed & March, 2000: 55). Given recent corporate scandals, to the role of corporations in triggering the global financial crisis and growing concerns about environmental issues and climate change we can add sustainability, ethics, and corporate social responsibility as other "big questions" that a technical-functional approach cannot address (Banerjee, 2011).

Bartunek and Rynes (2010) offer a series of strategies whereby scholars can enhance the practical implications of their research. These include relating findings of individual studies to more general principles, providing more information about context, and linking results to practice. Even if practitioners are unwilling or unable to implement research findings, some level of engagement with academic research that is accessible to practitioners may lead to more reflective practice. Research conducted in professional doctorates starts from the assumption of reflective practice, and its contribution is assessed based on how practice can be enhanced. Such an approach may also help address the teaching–research gap that currently exists in management. Perhaps the DBA can make "managers become philosophers" through creating a process of reflective practice that integrates learning with sense-making (Schwandt, 2005). There is potential for imaginative curriculum de-

velopment in the DBA, given that DBA graduates do not generally follow an academic career of teaching and publishing with the constraints of what Ghoshal (2005: 77) calls the "pretense of knowledge." Bringing a practice perspective into doctoral education combined with a critical and reflective approach to learning may allow managers to question dominant management theories, perhaps even provide a framework to understand how "bad management theories are destroying good management practices" (Ghoshal, 2005: 75). Professional doctorates have the potential to bridge this industry-academia divide.

REFERENCES

- AACSB. 2003. *Sustaining scholarship in business schools: Report of the faculty commission to AACSB International's board of directors*. St Louis, MO: AACSB International.
- AACSB. 2008. *Final report of the AACSB International impact of research task force*. St. Louis, MO: AACSB International. www.aacsb.edu/publications/researchreports/currentreports/impact-of-research.pdf. Retrieved September 25, 2012.
- Argyris, C., & Schon, D. 1987. *Organizational learning: A theory of action perspective*. Cambridge: Addison-Wesley.
- Baldrige, D. C., Floyd, S. W., & Markoczy, L. 2004. Are managers from Mars and academicians from Venus: Toward an understanding of the relationship between academic quality and practical relevance. *Strategic Management Journal*, 25: 1063-1074.
- Banerjee, S. B. 2011. Embedding sustainability across the organization: A critical perspective. *Academy of Management Learning and Education*, 10: 719-731.
- Bareham, J., Bourner, T., & Stevens, G. R. 2000. The DBA: What is it for? *Career Development International*, 5: 394-403.
- Bartunek, J. M., & Rynes, S. L. 2010. The construction and contribution of "implications for practice": What's in them and what they might offer. *Academy of Management Learning and Education*, 9: 100-117.
- Bartunek, J. M., & Schein, E. H. 2011. Organization development scholar-practitioners: Between scholarship and practice. In S. A. Mohrman, Lawler, E. E. (Eds.), *Useful research: Advancing theory and practice*: 233-250. San Francisco: Berrett Koehler.
- Beer, M. 2011. Making a difference and contributing useful knowledge: Principles derived from life as a scholar practitioner. In S. A. Mohrman, E. E. Lawler (Eds.), *Useful research: Advancing theory and practice*: 147-168. San Francisco: Berrett Koehler.
- Benedictine University. 2011. New doctoral program designed to equip ethical leaders for success. http://www1.ben.edu/programs/business/news_article.asp?id=2918. Retrieved September 25, 2012.
- Bennis, W. G., & O'Toole, J. 2005. How business schools lost their way. *Harvard Business Review*, 96-104.
- Bhojrub, J., Hurley, J., Neilson, G. R., Ramsay, M., & Smith, M. 2010. Heutagogy: An alternative practice based learning approach. *Nurse Education in Practice*, 10: 322-326.
- Bisoux, T. 2002. Is there a doctorate in the house? *BizEd*. March/April: 21-24.
- Bourner, T., Bowden, R., & Laing, S. 2001. Professional doctorates in England. *Studies in Higher Education*, 26: 65-83.
- Burke, L. A., & Rau, B. 2010. The research-teaching gap in management. *Academy of Management Learning and Education*, 9: 132-143.
- Burrell, D. N. 2006. Emerging options in doctoral study in management for international executives. *Vikalpa*, 31: 13-17.
- Case Western Reserve University. 2011. *Doctor of management*. <http://weatherhead.case.edu/academics/doctorate/management/doctor-of-management.cfm>. Retrieved September 25, 2012.
- Conger, J. A., & Xin, K. 2000. Executive education in the 21st century. *Journal of Management Education*, 24: 73-101.
- Dale, R. 2008. Shifting discourses and mediating structures in the co-construction of Europe, knowledge and universities. In B. Jessop, N. Fairclough, R. Wodak (Eds.), *Education and the knowledge based economy in Europe*: 13-40. Rotterdam: Sense Publishers.
- Edwards, S. 2009. A professional practice-based doctorate: Developing advanced nursing practice. *Nurse Education Today*, 23: 1-4.
- Evans, T. 2001. Tensions and pretensions in doctoral education. In B. Green, T. W. Maxwell, P. Shannon (Eds.), *Doctoral education and professional practice: The next generation?* Armidale: Kardoocair Press.
- Evans, T., Macauley, P., Pearson, M., & Tregenza, K. 2005. Why do a "prof doc" when you can do a PhD? In T Maxwell, C. Hickey, T.D. Evans (Eds), *Professional doctorates: Working towards impact. Proceedings of the 5th International Professional Doctorates Conference, 24-34, Research Institute for Professional and Vocational Education and Training*. Geelong, Australia: Deakin University.
- Fenge, L. A. 2009. Professional doctorates—A better route for researching professionals? *Social Work in Education*, 28: 165-176.
- Fink, D. 2006. The professional doctorate: Its relativity to the PhD and relevance for the knowledge economy. *International Journal of Doctoral Studies*, 1: 35-44.
- Forster, N. 2007. CESs' readership of business and academic journals: Implications for the future of research and teaching in Australian Business Schools. *Journal of Management and Organisation*, 13: 24-40.
- Geuens, M. 2011. Where does business research go from here? Food-for-thought on academic papers in business research. *Journal of Business Research*, 64: 1104-1107.
- Ghoshal, S. 2005. Bad management theories are destroying good management practice. *Academy of Management Learning and Education*, 4: 75-91.
- Gibbons, M. 1998. *Higher education relevance in the 21st century*. Washington, DC: World Bank.

- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. 1994. *The new production of knowledge: The dynamics of science and research in contemporary societies*. London: Sage.
- Gill, T. G., & Hoppe, U. 2009. The business professional doctorate as an informing channel: A survey and analysis. *International Journal of Doctoral Studies*, 4: 27–57.
- Harvard Business School. 2011. *Doctoral programs*. <http://www.hbs.edu/doctoral/programs/index.html>. Retrieved September 25, 2012.
- Hay, G. W. 2004. Executive PhDs as a solution to the perceived relevance gap between theory and practice: A framework of theory-practice linkages for the study of the executive doctoral scholar-practitioner. *International Journal of Organizational Behaviour*, 7: 375–393.
- Hodgkinson, G. P., & Starkey, K. 2011. Not returning to the same answer over and over again: Reframing relevance. *British Journal of Management*, 22: 355–369.
- Huff, A. 2000, 1999. Presidential address: Changes in organizational knowledge production. *Academy of Management Review*, 25: 288–293.
- Hughes, T., Bence, D., Grisoni, L., O'Regan, N., & Wornham, D. 2011. Scholarship that matters: Academic-practitioner engagement in business and management. *Academy of Management Learning and Education*, 10: 40–57.
- Jamieson, I., & Naidoo, R. 2007. University positioning and changing patterns of doctoral study: The case of the University of Bath. *European Journal of Education*, 42: 363–373.
- Jessop, B. 2008. A cultural political economy of competitiveness and its implications for higher education. In B. Jessop, N. Fairclough, R. Wodak (Eds.), *Education and the knowledge based economy in Europe*: 13–40. Rotterdam: Sense Publishers.
- Johnson, D. 2005. Assessment matters: Some issues concerning the supervision and assessment of work-based doctorates. *Innovations in Education and Teaching International*, 42: 87–92.
- Kelemen, M., & Bansal, R. 2002. The conventions of management research and their relevance to management practice. *British Journal of Management*, 13: 97–108.
- Kemp, S. 2004. Professional doctorates and doctoral education. *International Journal of Organisational Behaviour*, 7: 401–410.
- Kimber, D. 2001. Practice capabilities for the professional DBA. Unpublished manuscript.
- Lee, A., Brennan, M., & Green, B. 2009. Re-imagining the doctoral education: Professional doctorates and beyond. *Higher Education Research and Development*, 28: 275–287.
- Leonard, D., Becker, R., & Coate, K. 2005. To prove myself at the highest level. *Higher Education Research and Development*, 24: 135–149.
- Lockhart, J. C., & Stablein, R. E. 2002. Spanning the academy-practice divide with doctoral education in business. *Higher Education Research and Development*, 21: 191–202.
- Maxwell, T. 2003. From first to second generation professional doctorate. *Studies in Higher Education*, 28: 279–291.
- McWilliam, E., Taylor, P. G., Thomson, P., Green, B., Maxwell, T., Wildy, H., & Simons, D. 2002. *Research training in doctoral programs: What can be learned from professional doctorates*. Canberra: DEST, Commonwealth of Australia.
- Morley, C. L., & Priest, J. 2001. Developing a professional doctorate in Business Administration: Reflection and the executive scholar. In B. Green, T. W. Maxwell, & P. Shannon (Eds.), *Doctoral education and professional practice: The next generation?* Armidale: Kardoorair Press.
- NBEET. 1989. *National Board of Employment, Education and Training. Higher education courses and graduate studies report*. Canberra: Australian Government Printing Press.
- NCICHE. 1997. *National Committee of Inquiry into Higher Education. Higher education in the learning society*. London: HMSO.
- Neumann, R. 2005. Doctoral differences: Professional doctorates and PhDs compared. *Journal of Higher Education Policy and Management*, 27: 173–188.
- Neumann, R., & Goldstein, M. 2002. Issues in the ongoing development of professional doctorates: The DBA example. *Journal of International Research*, 11: 23–37.
- Norman, G. R., & Schmidt, H. G. 2000. Effectiveness of problem-based learning curricula: Theory, practice and paper darts. *Medical Education*, 34: 721–728.
- Perry, C., & Cavaye, A. 2004. Australian universities' examination criteria for DBA dissertations. *International Journal of Organisational Behaviour*, 7: 411–421.
- Pfeffer, J., & Fong, C. T. 2002. The end of business schools? Less success than meets the eye. *Academy of Management Learning and Education*, 1: 78–95.
- Reed, J., & March, J. 2000. Citigroup's John Reed and Stanford's James March on management research and practice. *Academy of Management Executive*, 14: 52–64.
- Rousseau, D. M. 2006. Is there any such thing as "evidence-based management"? *Academy of Management Review*, 31: 256–269.
- Rousseau, D. M., & Boudreau, J. W. 2011. Sticky findings: Research evidence that practitioners find useful. In S. A. Mohrman, E. E. Lawler (Eds.), *Useful research: Advancing theory and practice*: 269–287. San Francisco: Berrett Koehler.
- Rousseau, D. M., & McCarthy, S. 2007. Educating managers from an evidence-based perspective. *Academy of Management Learning and Education*, 6: 84–101.
- Sarros, J. C., Willis, R. J., & Hardie, T. T. 2004. The DBA in Australia and the Asia Pacific. Opportunities and challenges. *International Journal of Organizational Behavior*, 7: 440–455.
- Sarros, J. C., Willis, R. J., & Palmer, G. 2005. The nature and purpose of the DBA: A case for clarity and quality control. *Education Training*, 47(1): 40–52.
- Schon, K. 1987. *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- Schultz, M., & Hatch, M. J. 2005. Building theory from practice. *Strategic Organization*, 3: 337–348.

- Schwandt, D. R. 2005. When managers become philosophers: Integrating learning with sensemaking. *Academy of Management Learning and Education*, 4: 176–192.
- Seddon, T. 2001. What is “doctoral” in doctoral education? In T. W. Maxwell, & P. Shanahan (Eds.), *Professional doctorates: Innovations in teaching and research*. Armidale: University of New England.
- Senge, P. 1990. *The fifth discipline: The art and practice of the learning organization*. Sydney: Random House.
- Shapiro, D. L., Kirkman, B. L., & Courtney, H. G. 2007. Perceived causes and solutions of the translation problem in management research. *Academy of Management Journal*, 50: 249–266.
- Starkey, K., & Tempest, S. 2008. A clear sense of purpose? The evolving role of business schools. *Journal of Management Development*, 27: 329–390.
- Stewart, I. 2012. *The mathematical equation that caused the banks to crash*. <http://www.guardian.co.uk/science/2012/feb/12/black-scholes-equation-credit-crunch>. Retrieved September 25, 2012.
- Taylor, J. 2008. Quality and standards: The challenge of the professional doctorate. *Higher Education in Europe*, 33: 65–87.
- Tenkasi, R. 2011. Integrating theory to inform practice: Insights from the practitioner-scholar. In S. A. Mohrman, E. E. Lawler (Eds.), *Useful research: Advancing theory and practice*: 211–232. San Francisco: Berrett Koehler.
- Thomas, M. J. 2007. Is your doctorate really necessary? *Marketing Intelligence and Planning*, 25: 306–307.
- Thorpe, R., Eden, C., Bessant, J., & Ellwood, P. 2011. Rigor, relevance and reward: Introduce the knowledge translation value-chain. *British Journal of Management*, 22: 420–431.
- Usher, R. 2002. A diversity of doctorates: Fitness for the knowledge economy? *Higher Education Research and Development*, 21: 143–153.
- Van Aken, J. E. 2004. Management research based on the paradigm of the design sciences: The quest for field-tested and grounded technological rules. *Journal of Management Studies*, 41: 219–246.
- Van Aken, J. E. 2005. Management research as design science: Articulating the research products of mode 2 knowledge production in management. *British Journal of Management*, 16: 19–36.
- Walker, D. 2008. Reflections on developing a project management doctorate. *International Journal of Project Management*, 26: 316–325.

Bobby Banerjee is professor of management at Cass Business School, City University London. He received his PhD from the University of Massachusetts. Banerjee’s primary research interests are in the areas of sustainability, climate change, corporate social responsibility, and critical management studies.

Clive Morley is a professor in the Graduate School of Business and Law at RMIT University. His PhD from the University of Melbourne was on tourism demand. Morley’s research generally involves the use of statistical data analysis to address business issues. He was the founding director of the RMIT DBA.