Fast food for thought: How to survive and thrive in the corporate university

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SUMMARY

Michael Oakeshott warned in 1950 that the very existence of the university as a place of learning and scholarship was under threat from corporate interests, and that the provision of education was being replaced by the sale of qualifications. By the end of the century, Bill Readings had pronounced that the university was in ruins, just as nurse education in the UK was making the move into higher education. It is against this backdrop of a corporate university sector that is increasingly coming to resemble a fast-food business that nurse academics are struggling to assert their values and make a difference to nursing practice through education, research and scholarship. As it becomes ever more difficult to make our way in the university with any degree of integrity, this paper offers some thoughts and suggests some strategies for not only *surviving* in the corporate university, but for *thriving* both personally and professionally in ways that do not compromise our commitments and values as healthcare professionals and human beings. It is offered as a personal reflection, based on nearly 40 years of experiences in UK universities, firstly as a student and latterly as a lecturer and a professor of nursing. As such, it is delivered from a particular geographical and disciplinary perspective, the only perspective I can talk from with any real authority and authenticity. However, I believe that these ideas, thoughts and suggestions can be applied with a degree of success to other healthcare disciplines in other parts of the world.

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The idea of a university

It is generally accepted that the idea of the modern university was formulated at the end of the eighteenth century and that the first concrete example was the University of Berlin, which was founded in 1810. Cardinal John Henry Newman, writing in the middle of the nineteenth century, regarded the business of the university as 'Liberal Education', the disinterested pursuit of knowledge for its own sake and without any consideration of its application outside of the ivory towers of academe. When Newman spoke and wrote about the purpose of the university as being the pursuit of knowledge, he made it quite clear that he was referring to the pursuit of *learning* rather than the creation of new knowledge through research. For Newman, then, the university:

is a place of *teaching* universal *knowledge*. This implies that its object is, on the one hand, intellectual, not moral; and, on the other, that it is the diffusion and extension of knowledge rather than the advancement. If its object were scientific and philosophical discovery, I do not see why a university should have students; if religious training, I do

not see how it can be the seat of literature and science. (Newman, 1982, p. xxxvii, his punctuation and emphasis)

Furthermore, Newman was very explicit about what constituted a liberal education, arguing that a well-rounded diet of the classics, theology and philosophy was a sufficient foundation for *any* profession, including medicine and law and, presumably, nursing and the other healthcare disciplines, since 'it prepares [a man] to fill any post with credit, and to master any subject with facility' (Newman, 1982, p. 135). Newman was strongly opposed to the growing demands of an industrial society for narrow specialists, arguing that professional training had no place in the university, which should be concerned only with the pursuit of knowledge for its own sake.

The decline of scholarship and the rise of the McVersity

Clearly, Newman's idea of a university was never going to endure very far into the twentieth century, and it is now more than sixty years since the political theorist Michael Oakeshott predicted the imminent demise of the traditional Enlightenment university with its values of broad scholarship and the disinterested pursuit of knowledge:

A University will have ceased to exist when its learning has degenerated into what is now called research, when its teaching

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has become mere instruction and occupies the whole of an undergraduate's time, and when those who come to be taught … desire only a qualification for earning a living or a certificate to let them in on the exploitation of the world. (Oakeshott, 1950, p. 125)

In the intervening years since Oakeshott issued this warning, a number of writers have charted the rapid demise of the traditional Enlightenment university. By the end of the 1950s, the American sociologist C. Wright Mills had recognised the threat to scholarship posed by the emerging corporate mission of industrial-scale research, and was echoing Newman in his call for academics to 'Stand for the primacy of the individual scholar; stand opposed to the ascendancy of research teams of technicians' (Mills, 1959, pp. 245–6). Four years later the bio-scientist Bernard Forscher (1963) was similarly concerned about the sheer volume of under-theorised and irrelevant research projects in the 'hard sciences' and the accompanying demise of scholarly and theoretical work. By 1990, Ernest Boyer had noted that the term 'scholarship' was now being used almost exclusively to refer to 'basic research' and that its traditional meaning of 'a variety of creative work carried on in a variety of places … measured by the ability to think, communicate and learn' (Boyer, 1990, p. 15) had been lost.

In an attempt to understand and explain the growing corporatization of our public institutions, the sociologist George Ritzer (1993) introduced the idea of McDonaldization, which he described as:

The process by which the principles of the fast-food restaurant are coming to dominate more and more sectors of American society as well as of the rest of the world. (p. 1)

Ritzer subjected all aspects of public life to this analysis, and when applied to higher education, the process of McDonaldization can be seen to have replaced the nineteenth-century Enlightenment university with the twenty-first century corporate McVersity. Ritzer identified five principles of McDonaldization, namely efficiency, calculability, predictability, increased control, and the replacement of human by non-human technology, all of which can be seen at play in the way that the university is organised and operationalised. From this perspective, the student is more and more regarded primarily as a paying customer and the purpose of the McVersity is to process the customer through the system as efficiently and cost-effectively as possible. This is achieved by standardising and rationalising both the product and the process, with customer satisfaction replacing education as the mission and goal of the McVersity (see, for example, Rolfe, 2006; Happell and Cutcliffe, 2011). Whereas the purpose of the Enlightenment university was to provide an education, the McVersity is concerned first and foremost with selling qualifications.

Nursing in the McVersity

By the time that pre-registration nurse education in the UK had moved into higher education in the 1990s, the transition of the university from a haven for scholarship and the disinterested pursuit of knowledge to a global competitor in the 'knowledge economy' of late capitalism was more or less complete. The state of the university was neatly summed up by the cultural theorist Bill Readings, who published a book in 1996 entitled *The University in Ruins* which charted the gradual demise of higher education in the USA and the UK. Echoing Ritzer's notion of McDonaldization, Readings' thesis was that the university as an institution had, for a number of reasons, lost its essential and fundamental role in western society and had turned to liberal capitalism and the free market economy in an attempt to reinvent itself as a business with a customer-base and a product to sell. The consequence of this turn, as Readings (1996, p. 22) observed, was that 'the University is not just *like* a corporation; it *is* a corporation. Students … are not *like* customers, they *are* customers'.

It is my contention that in the intervening 15 years since *The University in Ruins* was first published, the university has become ever more corporate, and nurse educationalists, many of whom believed at the time that they were embarking on some great academic adventure, are more and more confused about who they are and what they should or could be doing. This confusion has spread across most healthcare disciplines in many countries throughout the world, from Iceland to Australia. It can be seen, for example, in the current and ongoing debates and disagreements about the tensions between theory and practice, research and teaching, education and apprenticeships, and about whether nurse education is being dumbed-down or over-intellectualised. Most recently, the move in England to an all-graduate nursing profession has reignited a broader debate about the pros and cons of 'graduateness' in the healthcare professions.

We can divide the reactions and responses of nursing and healthcare lecturers and academics to the growing corporatization of the university into a number of categories. Those who have only recently entered academia, and have perhaps themselves been students in the McVersity, will have known nothing else and might wonder what all the fuss is about. Some of those who previously worked or studied in the traditional Enlightenment university, with its emphasis on education as an end in itself, have responded with cynicism, despair or nostalgia to the current state of higher education. Others have enthusiastically embraced the new opportunities opened up by the corporate university for ever more managers, administrators and research workers.

For Readings, none of these responses was acceptable. He suggested that we need to find a way of *dwelling in the ruins* of the university that entailed neither cynical despair nor romantic nostalgia for a lost past. We must, he insisted, find new and productive ways of being and working that neither submit to the corporate agenda nor attempt the impossible task of trying to rebuild the Enlightenment university in a post-industrial, postmodern society where there is no longer a demand for it. Whatever promises higher education might have held out to nursing in the 1990s, we now all find ourselves in a very different institution to the one we initially signed up to. Getting out is not a realistic option, and a wistful plea for a return to some golden age of tea in the senior common room is likely to be met with laughter. Nevertheless, I believe that it is possible (indeed, that it is essential) to rethink and renegotiate our place in the corporate university, if not at an institutional level, then at least as individual academics concerned with the best interests of nurse education, of our profession, and of service users.

Learning to survive in the McVersity

The wholesale move of nurse education in the UK into the university sector was accompanied by a growing emphasis on theoretical perspectives from disciplines outside of nursing such as sociology and psychology. Prior to the move, the vast majority of nurse education, or perhaps we should say nurse *training*, took place on hospital premises and followed an apprenticeship model in which students and tutors alike were part of the health service workforce. The move into higher education brought with it a number of clear benefits. The status of nurse education and nurse educators increased immeasurably, as for a while did the public perception of the profession of nursing. The introduction of a new 'academic' curriculum broadened the theoretical scope and perspective of the discipline, although much of this new material was taught in the first instance by non-nurses drafted in from other departments. The greatly intensified emphasis on research was very welcome in an academic discipline which lacked a coherent evidence-base, and served to open up channels of communication within the discipline as nurse tutors and lecturers began to publish and speak at conferences.

However, the move to higher education also had a number of disadvantages. Most significantly, it contributed to a separation of nurse education from nursing practice, both physically as many

schools of nursing moved out of the hospitals and into university premises, and also professionally as many former nurse tutors found themselves with new employers and new job titles. By the end of the 1990s, nurse education had become a separate profession from nursing, with psychological and sociological consequences that have still not been fully resolved. The most significant of these is the pressure exerted by the university to sign up to an agenda that privileges research over teaching and theory over practice. Many nurse academics now found themselves under new contractual arrangements with new goals and performance indicators which judged them according to the size of their research grants and the journals in which their papers were being published rather than on the beneficial impact that their work was having on nursing practice and the health and well-being of service-users. The challenge for nurse academics is to stake a claim for our discipline in an institution that has little regard, even less respect, and no obvious place for nursing as an academic subject.

Finding our place

It could be argued that, from the outset, nursing never really fitted into the academic structure of the university. When pre-registration nurse education initially moved into the higher education sector, university disciplines could be divided (with a few exceptions) into theoretical subjects such as philosophy, maths and literature, and applied subjects such as engineering, law and architecture. As higher education becomes increasingly focussed on vocational training, the pure disciplines are either under threat of closure or have already vanished, whilst the applied subjects are expanding and flourishing. This should be good news for nursing and the healthcare professions, which are most certainly applied subjects.

It would be a mistake, however, to think about subjects such as nursing in the same way as mechanical or civil engineering. The university has for many years accommodated technological disciplines such as engineering, law and business studies which involve the relatively straightforward and direct application of theory to practical problems. University-based *technologists* generate and test knowledge and theory and then pass it on to *technicians* who apply it in the field. For example, a technologist might draw up a plan for a new bridge based on research and best evidence, and a technician would then construct the bridge by rigorously following that plan. The technologies sit well within the university, since they depend heavily on theoretical research, which is then applied to a practical problem in a simple and straightforward way, according to what Donald Schön (1987) has referred to as the principle of 'technical rationality'.

However, nursing does not readily fit the technical rational model in quite the same way, and there can be no simple translation of theoretical knowledge and research findings into practice. Caring for a patient or service user is complex and complicated in ways that building a bridge is not. Steel girders have measurable physical properties and always behave in the same way under the same conditions. People, however, respond differently at different times and in different situations in ways that are never fully predictable. Much of the knowledge required for practice cannot therefore be taught in advance and straightforwardly applied without regard for the specific context and the individual service user. Indeed, some of it cannot even easily be expressed in words. The healthcare disciplines are certainly *applied*, but are only partly technologies; they are also *practices* in the same way that music, art and teaching are practices. Unfortunately, practice disciplines do not fit well with the current university ethos and mission in the way that technologies do, and for that reason they have traditionally been located outside of the university system in colleges of music, art schools, teacher-training colleges and, of course, schools of nursing.

Medicine could perhaps be cited as an exception to this rule, and has a very long and successful history of being taught in universities. More so that nursing, medicine might be regarded as a hybrid, straddling the technological and the practice disciplines. However, the medical curriculum in the UK has traditionally followed the technical rational model of a two-year theoretical pre-clinical course followed by a three-year practical clinical course, although some universities are beginning to introduce more integrated 'systems-based' approach. The example of medicine illustrates well the challenges involved in attempting to integrate theory and practice within the traditional academic structure of the three-year under-graduate curriculum, and suggests that it is perhaps only possible by extending the course or by only offering it as a post-graduate or 'second entry' degree as in the USA.

Nursing as a practice discipline

The fundamental distinction between technologies and practices as academic disciplines lies in the relationship between education, research and practice. Technological disciplines regard the three as separate and free-standing, and are premised on a straightforward one-way flow of information from research to practice. The knowledge-base of subjects such as engineering is largely proposi-tional; it can be expressed in books and lecture notes, its application can be perfected in the laboratory or practicum, and then applied directly to real-world settings. In contrast, practice disciplines such as nursing begin with the assumption that education, research and practice are inseparable parts of a greater whole in which knowledge, information and ideas circulate freely in all directions. Practitioners, whether they are musicians, artists, teachers, architects or nurses, ask questions of practice, they challenge established practices, and they learn from practice and apply their learning back into practice. Schön argued that the most important and relevant education *for* practice occurs *in* practice and is, as the Latin roots of the word 'education' suggest, *drawn out* of practice. As he pointed out:

> Schools of engineering lose credibility because they are seen as producing narrowly trained technicians deficient in capacity for design and wisdom .... What aspiring practitioners need most to learn, professional schools seem least able to teach. (Schön, 1987, p. 8)

It could perhaps be argued that just as nurse academics were beginning to understand and act on Schön's ideas for practitioner education in the late 1980s and early 1990s, they suddenly found themselves in a new academic environment with little or no understanding or sympathy for this approach. Thus, Schön continued:

> The professional schools of the modern research university are premised on technical rationality … [which] presents first the relevant basic science, then the relevant applied science, and finally, a practicum in which students are presumed to learn and apply research-based knowledge to the problems of everyday practice. (Schön, 1987, p. 8)

This educational model is clearly inappropriate and ineffective for practice disciplines such as nursing, but whilst many of us have been striving over the past two decades to implement reflective, practice-based curriculums, the higher education agenda has been moving decisively in the opposite direction. And whilst there have certainly been some significant achievements in innovative, reflective, work-based education, it has been an uphill struggle in a culture where outcome is valued over process, where quality is measured quantitatively in terms of degree classification and attrition rates, where education is generally devalued in favour of research and where the value of research is measured in terms of the size of research grants and the number of publications it produces, rather than by the impact it has on practice. The proposed new clinical

research career structures, based on the recommendations of the *UK Clinical Research Collaboration Subcommittee for Nurses in Clinical Research (Workforce)* report (UKCRC, 2007) acknowledge the problem and go some way to integrating clinical and academic career pathways. However, it is notable that the initiative was driven by clinical rather than academic concerns, and it remains to be seen whether the proposals to fund masters, doctoral and post-doctoral work in clinical research will have any effect on the academic structure, funding mechanisms and mission of the university.

Arguably, the university has failed to welcome and accommodate the practice professions into its academic structure; that is to say, it has failed to recognise that the epistemological and ontological needs of nursing and the healthcare disciplines are different from either those of the pure disciplines or those of the applied technical disciplines. In particular, the knowledge-base of practice is only partially accounted for by the research-driven technical rational model. This misunderstanding and miscasting of the practice disciplines has had significant and damaging implications in terms of the educational and research agenda and outcomes that nurse academics are expected to deliver. The failure by universities to rethink their structure and purpose in response to this growing third category of practice disciplines has caused enormous conflict, confusion and casualties amongst academics in the nursing and healthcare disciplines.

Towards a new scholarship of practice

Bill Readings tells us that the university is in ruins and that there are a number ways we, as academics and students, can respond. We can pine nostalgically for the return of the Enlightenment university, we can actively and outwardly rebel against the corporate McVersity that has taken its place, or we can sink into an attitude of passive despair. For Readings, none of these was acceptable, and he argued instead that we should 'dwell in the ruins … without alibis', that is, as authentically and productively as we are able, given that we all need to satisfy the demands of the corporate agenda by teaching, researching and publishing.

Most of the issues I have raised so far can only be addressed on a structural level by heads of department and vice chancellors. Some departmental heads have been more assertive in doing so than others, and some vice-chancellors have been more open-minded and responsive to new ideas than others. For those of us who, despite our best efforts, continue to find ourselves subject to a mission statement that we neither signed up to nor agree with, there is a pressing need to rethink our personal approach to scholarship for practice disciplines such as nursing. From my observations of colleagues who have managed to address the issues of significance and importance to nursing and to service users whilst not only *surviving* in the corporate McVersity but actually *thriving*, and also from my own experiments at pushing organisational boundaries to breaking point, I offer three principles for dwelling in the ruins of the university; three precepts for a new scholarship of practice.

Be good

The first and by far the most important requirement for the new scholarship of practice is to *be good* in every sense of the word. It perhaps goes without saying that we should try to be good in the moral sense, that is, to do the right thing (or perhaps, to do the thing that we believe is right). In other words, I am advocating a values-based scholarship in which we consider the intrinsic worth of what we do as researchers, teachers and scholars as well as the instrumental, outcomes-based reasons for our work. However, a values-based approach to scholarship is not necessarily incompatible with satisfying our university's goals-driven, key performance indicators. The sociologist Richard Sennett (2008) invokes the somewhat neglected idea of craftsmanship, and argues that quality arises from doing what we care about without too

much thought as to the material gain that might or might not arise from it. This is, as we have seen, diametrically opposed to the corporate notion of quality which equates it explicitly with quantifiable profit and gain. We need to have faith that good, high quality work will be recognised, valued and rewarded on its own merits.

Closely linked to the moral issue of being good is the obligation and commitment that many of us have to our profession. Unlike most of our colleagues in the university, as healthcare professionals we sometimes run up against conflicts between meeting our contractual obligations to the university and meeting our moral and professional obligations to our practice disciplines, including our commitment to upholding and promoting our professional codes of conduct. Most professional codes of conduct, including my own, are proactive rather than passive. The code of conduct for nursing does not merely caution me to do no harm, but rather obliges me to do *good* by making the care of people my *first* concern. It suggests, therefore, that when I set out a research proposal or write a paper for publication, my first priority should be that it will contribute to the betterment of nursing practice rather than to the greater glory and profit of my university. This might mean, for example, that I conduct a small-scale action research project that will have a direct impact on patient care, rather than a large funded study whose findings might never be implemented; or that I publish my research report in a professional journal with a low impact factor where it will be read by the maximum number of practitioners. Of course, we all have to meet our contractual obligations to our university in order to keep our jobs and perhaps to compete for promotion, but I am suggesting that we can meet these goals by doing what is good for our profession, for the health service, and for users of the service.

But we will only be able to survive in the corporate university if we are also good in the other sense of the word. If we choose a path that to some extent challenges and subverts the mission of the university, then we must be extremely good at what we decide to do in place of the corporate agenda of grant capture and publication in high impact journals. My own experience suggests that it *is* possible to swim against the tide, but that it takes strength, stamina and a strong belief in the value of what we are doing. It also entails thinking creatively about what we might offer to the university in the place of what they are expecting from us. I could go into detail about how I am trying to make a difference to nursing and healthcare practice in my own work, but I believe that each of us as individuals has to work out our own contribution to the greater good. And, in the end, we just have to *do* it. There is a saying that it is easier to ask for forgiveness than for permission, but my experience is that if what you do has real value and is done well, then there will be nothing to forgive.

Be collegiate

The pressure generated by research assessment exercises, by performance-driven management and by the scramble to win research grants has created a culture of competition between and within universities that simply did not exist 20 years ago. During the past few years I have witnessed increasingly acrimonious disputes between colleagues about whose names should be included on research papers, about the order in which those names should appear, about who 'owns' the paper for REF purposes,[1] and about who should be the principal investigator on research grant bids.

I believe that we must resist and reject this corporate market economy culture of competition, which is anti-educational and

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[1] The REF or Research Excellence Framework is the mechanism by which government research funding is allocated to universities in the UK. It requires members of academic staff to submit (usually) four peer reviewed research publications to a subject panel, and each paper is assessed on a scale from 1* to 4* depending on its quality and impact. Other countries, including Australia, New Zealand, Hong Kong and the Netherlands operate similar schemes.

counter to the co-operative spirit of nursing. In its place, we should develop a new collegiality based on shared values and a common desire to be good. However, collegiality does not seek to avoid confrontation, challenge and critical discourse. Critique of a colleague's work is the highest form of respect that we can pay to it; it suggests that we have read their work closely, have taken it seriously, and have put aside the time and effort to respond to it. The purpose of critique is not to shut down dispute and discussion but to keep it alive. We therefore need to be open to critique from colleagues and to be prepared to offer it at every opportunity; we must think our own thoughts and be prepared to listen, share and learn from the thoughts of others.

Be radical

The word 'radical' derives from the Latin *radix*, meaning roots. To be radical therefore entails a reflection on where we have come from and a return to our roots as nurses and healthcare professionals. This does not necessarily mean returning to practice; it means re-engaging with the values of practice and with the mission of practice development, that is, with helping to make things better for service users and providers.

The pressures exerted by the corporate agenda of the McVersity present us with a number of barriers to engaging in practice development, and many colleagues no longer feel that it is a feasible or even a valid aspect of the role of the academic. For example, as part of an ongoing debate about what nurse education is for, two eminent professors of nursing recently wrote:

> Practice development should be done by people in practice and not by people in universities, the vast majority of whom have, to all intents and purposes, left practice. Practice development is a diversion from academic activity and, literally, an alternative to academic enquiry. (Thompson and Watson, 2008, p. 74).

In the spirit of collegiate critique, I would like to advance the counter argument that *radical* nursing scholarship encompasses practice development as its most important and vibrant component; that it should be undertaken as a partnership between practitioners and academics (and, in some cases, service users); that it is not necessary to be *in* practice to make an active contribution *to* practice; that rather than being a diversion from academic activity it should constitute an essential component of the activity of *all* nursing academics; and that it is an important and relevant form of academic enquiry in its own right.

To engage in practice development as an academic activity and as a form of academic enquiry means to think again about the relationship between research, teaching, theory and practice, to recognise and foster the connections between them, and to promote the importance of theorising our practice and practising our theory. This suggests that we need also to get back to our roots as educationalists and to remember why we chose education and research as our nursing specialism in the first place. For me, it was not because I wanted to score highly in the Research Excellence Framework, to manage research teams and budgets, to publish papers in journals that would only be read by other academics or to teach students how to pass assignments. Like many of my colleagues, I came into nurse education in order to make a positive contribution to nursing *practice*.

Conclusion

The new market-oriented mission of the university no longer reflects the values and purpose of nurse education and scholarship. Nurse academics therefore face a dilemma: either we succumb to the corporate goals of the McVersity and join the paperchase of REF-rated publications and grant applications, or else we attempt to assert the traditional values of the profession of nursing and nurse education. Standing up for what we believe is becoming more and more challenging as the global recession begins to bite and the McVersity asserts its corporate agenda with ever more force. But whilst it is becoming more difficult to make a difference, it is still possible. We need to be brave, we need to take chances and we need to speak out. But above all, we need to remember why we became nurses and healthcare practitioners in the first place.

References

Boyer, E.L., 1990. Scholarship Reconsidered. The Carnegie Foundation for the Advancement of Teaching, Princeton, New Jersey.
Forscher, B., 1963. Letter to the Editor. Science 142, 339.
Happell, B., Cutcliffe, J.R., 2011. A broken promise? Exploring the lack of evidence for the benefits of comprehensive nursing education. International Journal of Mental Health Nursing 20 (5), 328–336.
Mills, C.W., 1959. The Sociological Imagination. Penguin, Harmondsworth.
Newman, J.H., 1982. (1858) The Idea of a University. University of Notre Dame Press, Indiana.
Oakeshott, M., 1950. The idea of a university. In: Fuller, T. (Ed.), The Voice of Liberal Learning. Liberty Fund, Indianapolis. 2001.
Readings, B., 1996. The University in Ruins. Harvard University Press, Cambridge, Mass.
Ritzer, G., 1993. The McDonaldization of Society. Pine Forge Press, Sherman Oaks, California.
Rolfe, G., 2006. Against standardisation. In: Cutcliffe, J.R., Ward, M.W. (Eds.), Key Debates in Psychiatric/Mental Health Nursing. Churchill Livingstone, Edinburgh, pp. 292–395.
Schön, D., 1987. Educating the Reflective Practitioner. Jossey-Bass, San Francisco.
Sennett, R., 2008. The Craftsman. Penguin Books, London.
Thompson, D., Watson, R., 2008. Response to Rolfe G (2007), Nursing scholarship and the asymmetrical professor [Nurse Education in Practice, 7, 123–127] Asymmetrical professors — unbalanced or misunderstood? Nurse Education in Practice 8, 73–75.
UKCRC Subcommittee for Nurses in Clinical Research, 2007. Developing the Best Research Professionals. UK Clinical Research Collaboration, London.