

Comment and Opinion

Teaching, Learning and Research in McSchools of Pharmacy*

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As the intake of students into schools of pharmacy increases annually, the teaching and research activities of academic staff are increasingly under scrutiny. In this paper, we propose that there is clear evidence that a process of McDonaldisation is underway in universities, as institutions seek improvements in efficiency, and try to meet the requirements of various assessment exercises. In response to the pressures of rationalisation and increased surveillance, many academics have knowingly or unwittingly modified their activities.

Whilst rationalisation and accountability are not necessarily harmful, we argue that this process ultimately results in a standardised learning experience for students, who have become consumers of an educational experience. Reduced opportunities for intelligent, reflexive thinking or for participating in small group learning exercises seriously compromises vocational students' capability to communicate, problem solve and exercise professional judgement. Moreover, McDonaldisation of research activities disregards idiosyncratic research in favour of predictable research, conducted for extrinsic reasons—most often to generate income and increase publication output. Whilst most tenured academics may actively resist McDonaldisation, the employment of postdoctoral researchers on fixed, short-term contracts, and reliance on practitioner-teachers, contracted on an *ad hoc* basis, is evidence that McDonaldisation is established within schools of pharmacy. Ultimately, if the process of McDonaldisation is not robustly resisted, we will be left with McSchools of Pharmacy where scholarship is an anachronistic pursuit and academia becomes a career, rather than a vocation.

Keywords: McDonaldisation; Pharmacy education; Rationalisation; McSchools of pharmacy

INTRODUCTION

Universities are bureaucratic organisations in which academic staff are exposed to the bureaucratic tenets of rationalised and assessed procedures. The American sociologist, George Ritzer, has coined the term, *McDonaldisation* to describe the process whereby the policies and practices initially developed to maximise profit for the fast-food industry by optimal, efficient, routinised production and delivery of food are increasingly adopted by among others, the education and health care sectors (Ritzer, 1998; 2000). McDonaldisation is an extension of Weber's sociological theory of rationalisation, employing the fast-food restaurant as a model to explore what Weber called formal rationality, i.e. the search for the optimal means to an end is governed by rules, regulations and social structures. Ritzer has identified four dimensions of the rationality inherent to *McDonaldisation*:

Efficiency: optimal methods are used to complete a task.

Predictability: the production process is organised to ensure product uniformity and standardised outcomes.

Calculability: outcomes are assessed quantitatively, with quantity rather than quality being emphasised.

Control: since people are inherently unpredictable and inefficient, control is achieved by automation or de-skilling of the workforce.

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We have previously suggested that Ritzer's four dimensions of rationality are evident in the multiple and supermarket chain pharmacies that now dominate community pharmacy in the UK. As these bureaucratic organisations pursue efficient, rationalised, standardised and above all, profitable pharmaceutical service delivery, they can be said to represent the *McDonaldisation* of Pharmacy (Harding and Taylor, 2000; 2001).

The forces for rationalisation however, have extended beyond the health care sector and are beginning to impinge on higher education, leading some commentators to argue for the inexorable rise of the McUniversity (Parker and Jary, 1995; Ritzer, 1996). In these institutions "research turns into so many publications or citations and teaching into the development of programmes which process larger and larger numbers of students cheaply." (Parker and Jary, 1995, p. 329). In this article, we will describe the driving forces for McDonaldisation within higher education generally and pharmacy education in particular, and provide examples of McDonaldisation already evident in UK schools of pharmacy. We then go on to discuss the consequences, for both students and academic staff, if McDonaldisation continues unabated.

DRIVING FORCES FOR McDONALDISATION IN HIGHER EDUCATION

Increased Student Numbers

The primary driving force for McDonaldisation in higher education is government policies promoting mass higher education during the latter part of the 20th century and extending into this century. Participation in higher education in the UK increased from 14% for 18-year olds in the early 1970s to a current participation of greater than 32% for those aged 18–21 years (Lomas, 2001). The current UK Government's stated aim is for a 50% participation rate for 18–30 year olds by the end of this decade. Yet the rising population of university students has not been matched by an equivalent increase in resources or staffing levels. Hence there is a need for expediencies in the form of increased rationalisation, efficiency, and cost-effectiveness. In 1986 there were 1251 entrants to pharmacy degrees at UK schools of pharmacy (Pharmaceutical Journal, 1992), in 1991 this figure had risen to 1422 (Pharmaceutical Journal, 1992) and in 2002, there were 2068 entrants (Pharmaceutical Journal, 2002) representing a 65% increase in entrants per year, over a period of just 15 years. To compound the situation, in 1997 students were enrolled onto four-year rather than three-year degree programmes, so that not only has the annual intake increased, but each school of pharmacy now

accommodates four, rather than three year groups. The introduction of tuition fees and funding directly linked to student numbers, results in institutions seeking to increase their enrolments, and develop systems to efficiently "manage" their intakes.

Universities as Sites for Educational Consumption

Consumer culture has permeated the UK education system; perhaps best exemplified and articulated through publication of league tables of school examination results. Likewise, in universities, education and training have come to be viewed as commodities to be consumed by the universities' "customers"—the erstwhile students. The performance of universities in both teaching and research is published in league tables in order for students to make informed choices. Consumer choice then lies at the very heart of higher education (Taylor and Harding, 2001). The introduction of tuition fees and student loans, and the abolition of maintenance grants means students now "pay" for a service, and as with all consumers become empowered to demand that the goods and services "purchased" are of the appropriate quality and represent good value for money. This may be particularly pertinent to pharmacy, with an extended degree and consequently a prolonged period of indebtedness for students.

Academic Accountability and the Commodification of Academic Labour

We have previously described how the introduction of formal, structured assessments for both the teaching and research activities of university teaching staff necessarily generates an assessment culture, which directly impacts on their teaching, research, publishing and administrative activities (Harding and Taylor, 2002). Whilst the Research Assessment Exercise (RAE) and Teaching Quality Assessment (TQA) are embodiments of the McDonaldisation process, they also effect changes in academics' behaviour. To attain the highest "ratings" and future promotions, lecturers are required to tailor their activities, either by self-imposed constraint or by direction from university managers. Such assessment systems then, lead to standardised teaching and research, an example of the "irrationality of rationality" inherent to McDonaldised systems (Ritzer, 1998). Ultimately, in responding to the pressures for increased rationalisation, academic labour is treated as a commodity whose value resides in its cost-effective utilisation or exploitation.

We shall now consider how examples of the four defining features of McDonaldisation can be found in higher education institutions.

SOME EXAMPLES OF THE DIMENSIONS OF McDONALDISATION EVIDENT IN HIGHER EDUCATION

Efficiency

Efficiency concerns the application of optimal methods of productivity, with minimal wasted effort or expense. Deteriorating staff–student ratios necessitate efficient teaching strategies. Teaching methods are scrutinised, particularly those which are demanding on the time of “permanent” academic staff (a scarce resource), such as small group tutorials and practical classes. New efficient teaching methodologies may be necessary. For instance, self-directed learning is the epitome of efficient teaching, in that students “do the work themselves” interacting with literature sources and computers rather than their lecturers. This mirrors the situation in McDonaldised fast-food restaurants, where customers act as unpaid employees, clearing away their own rubbish and mixing their own salads.

Successive RAEs have required that “research-active” staff produce at least a minimum number of research papers over a given time-span. To achieve this, research once published as a large paper, monograph or even a book, is broken down to permit the efficient production of numerous, small papers — “salami slicing”.

Predictability

As all universities must comply with the uniform requirements of the TQA and RAE, creativity and innovation in research and teaching become stifled, as individual academics and institutions strive to comply with the criteria and performance indicators of a particular assessment system (Harding and Taylor, 2002). Research and teaching outputs become increasingly predictable and designed with the requirements of the assessment procedures in mind.

Within UK schools of pharmacy, there is an additional source of standardisation and predictability, namely the “indicative syllabus” produced by the Royal Pharmaceutical Society of Great Britain (RPSGB). Whilst not compulsory, the requirement that the curricula of all schools must be accredited by the RPSGB every five years ensures that the indicative syllabus forms a core of teaching within all schools of pharmacy, proving a driving force for homogenisation of course content.

In addition, the nature of the teaching experience itself has become more predictable—with courses designed to deliver stated outcomes, using standardised ancillary teaching materials. As consumers, students expect, by right, to receive handouts for each lecture or tutorial. These handouts are often of a uniform format and increasingly accompany lectures

delivered using a PowerPoint package. Standardised delivery, allied to the modularisation of degrees and the prevalence of computer-assisted learning means that learning experiences are increasingly strategically routinised rather than exploratory.

Similarly, with research, the peer review process ensures the predictability of published papers in terms of content and format, and even the nature of research that is funded. Papers are written in accordance with the predominant intellectual paradigm and “...authors must be careful to till old theoretical ground in the prescribed way and cite all the ‘right’ sources” (Ritzer, 1998, p. 47).

Calculability

The quantitative assessment of outcomes is clearly evident within education generally, and higher education in particular. The four years of study for a pharmacy degree represents an experience quantifiable in terms of degree classification. With modular-based courses, that degree classification may itself now be mechanistically derived, based on an arithmetic formula of module marks (Gregg, 1996). Similarly, universities and departments now have their teaching and research “graded”. The research efforts of all research-active staff working within an institution, over a defined period, are reduced to a single figure, whose value can have enormous (and potentially catastrophic) consequences for the financial viability of that institution, or a particular department.

The Transparency Review, TQA and RAE together ensure that an individual academic’s activities are surveyed and quantified, pressurising them to rationalise the time expended on research, grant writing, administration, teaching and publishing. The emphasis of McDonaldised institutions on quantity rather than quality may also be evident in the pressures, exacerbated by the RAE, that all academics should publish the requisite number of research papers in a given time span—necessitating the steady, unrelenting drip feeding of research activity into the exercise, even if incomplete or only partially developed. This may lead to the premature publication of data, publication of data on more than one occasion or publication of two short papers rather than one full length paper (Harding and Taylor, 2002).

Control

Within higher education, technology is increasingly used to increase the efficiency of staff–student interactions. For instance, computer-assisted learning is prevalent, as is computer-graded multiple choice testing. Likewise, much research has become a computer-assisted technical activity with computer-controlled instrumentation generating data

which is statistically analysed and "presented" using computer technology.

THE CONSEQUENCES OF McDONALDISATION

The consequence of McDonaldisation within higher education, evident in the examples above, is that the key activities of academic staff, namely teaching and research are undertaken in a more rational and efficient manner than ever before. This is not necessarily "a bad thing"—increasing student numbers and direct accountability have necessitated that institutions question and, where appropriate, change long established practices. As a consequence, the shambolic "amateurism" that once abounded in universities, protected by the notion of "academic freedom", has been all but eliminated. However, there are negative consequences associated with these developments.

Effects for Students

Over the past 30 years, as governments have sought to obtain value for money, universities have changed from collegial academies to more closely resemble corporate enterprises (McNay, 1995). Modern day universities are thus highly bureaucratised organisations within which education has become dehumanised. Shumar (1995, p. 84) has suggested that "the university increasingly follows a factory model where scholars are labourers in a sweatshop of thought".

In order to overcome some of the problems inherent in traditional, didactic, lecture-based university education, many institutions, including schools of pharmacy, have over recent years introduced small group teaching, and innovative learning methods, such as problem-based learning (Bates *et al.*, 1994). Such learning methods are, however, inefficient for the teaching of large student numbers, though in some instances this may be counterbalanced by the self-directed nature of the learning experience. Nevertheless, as student numbers inexorably increase, and rationalisation becomes ever more necessary, such innovative, cost-ineffective methods may paradoxically be replaced by the more cost-effective lectures they supplanted, or by computer-based learning. Alternatively, the size of teaching groups may become so large that teaching methods, designed and developed for small groups, are used with large groups, negating the advantages offered by that methodology. Additionally, the number of, and need for, practical classes must also be questioned due to limitations of space, costs and the relatively high staff-student ratios required. The pharmacy degree

has traditionally comprised a blend of pharmaceutical and clinical science combined with social and legal aspects of practice. A significant diminution in the number of pharmaceutical science practical classes threatens pharmacists' claims to be experts in all aspects of medicines, and may harm graduates' prospects of securing employment outside the confines of hospital and community pharmacy practice, be it in the pharmaceutical industry, research or other science-related field.

McDonaldised higher education, with reliance on computer-assisted and self-directed learning, routinised lectures, standardised teaching materials and reduced interaction with academic staff creates a paucity of experience for students. Moreover, modularisation and the fragmentation of learning into "smaller packages" may create "a tendency for students to fragment or compartmentalise knowledge, evidenced by a decline in integrative thinking" (Gregg, 1996, p. 13). Indeed, Ritzer (1998, p. 3) believes that exposure to McDonaldised systems "ultimately threatens the ability of those involved in them to think intelligently". Reduced opportunities for intelligent, integrative thinking or for participating in small group learning exercises have serious implications for pharmacy students. Future developments for the practice of pharmacy, as outlined in the NHS Plan (Department of Health, 2000) and the Crown Report (1999) require schools of pharmacy to deliver graduates capable of critical thinking, effective communication, problem-solving and of making professional judgments, at times in the face of clinical uncertainty.

Effects for Academic Staff—Academics as Production Line Workers

A typical romantic stereotype of academics is as somewhat eccentric and individualistic people, pursuing their research and teaching interests without external constraint and governed by a value system based on notions of professionalism, collegiality and academic standards (Parker and Jary, 1995). Ritzer (1998, p. 49) has speculated that progressive McDonaldisation within universities will lead academia "...away from creativity and more toward the predictability and uniformity of work on the academic assembly line". Nowadays, the university academic has been largely transformed from vocational intellectual to industrial employee, with a downgrading of scholarly activity, and an over-riding emphasis on efficient production of graduates and publications. Lecturers are now constrained to produce and disseminate knowledge having clearly defined value in terms of research funding, their employing institution's RAE submission or for meeting the demands of students as consumers.

McDonaldisation, in pursuit of efficiency and predictability, requires tasks to be divided where possible, into ever smaller constituent elements, with individual workers only responsible for a part of the overall process. Teaching, research and administration are consequently no longer viewed as necessarily being inseparable, complementary activities. Research and teaching—once an individual pursuit is becoming a “team” event. In teaching, the planning, control, delivery and assessment have for all intents and purposes become separable activities, such that an individual no longer controls the whole process. This results in the loss of an individual academic’s autonomy to decide how courses are taught and assessed, with decision-making powers often passing to administrative staff, committees or teaching teams (Rumble, 1998). Likewise, in research, academics are increasingly likely to be part of a research group, and their individual research will contribute just a part to a larger project, over which they may have limited control. Research is designed, planned and executed to ensure a steady production of grants, postgraduate students, publications and conference presentations.

Effects for Academic Staff—rationalisation and the Predictability of Outputs

“Scholarship” is no longer a universally recognized academic currency. Rather, academic output has become routinised and standardised, and this is subjected, at both the institutional and personal levels, to analysis as to whether resources, material and time, have been efficiently expended. Thus, in the current academic environment, outcomes that can be measured, quantified and fitted into the categories of the various assessment exercises are particularly lauded and valued. By contrast, scholarly activities such as the production of textbooks and monographs, once seen as the natural activity for any academic, may now be questioned as to whether time might have been “better spent” (Harding and Taylor, 2002).

The creation of the Institute for Learning and Teaching in Higher Education (ILT) in 1999 to “develop and maintain professional standards of practice” is another driving force for standardisation. The accepted route for membership is completion of a course or programme of training in teaching and learning support, accredited by the ILT. Established academics may obtain membership, by an alternative process, requiring referees, without attending such a course. Membership ultimately involves academics willingly exposing themselves to surveillance and assessment. Membership of the ILT exceeded 10,000 in March 2002. If, as is claimed on the ILT website [www.ilt.ac.uk], membership “is

already being considered in promotion and probation decisions”, then it seems likely that the ethos and methods advanced by the ILT will increasingly pervade UK academia.

Parker and Jary (1995) have suggested that individuals, faced with the changes resulting from increasing McDonaldisation within universities, may adopt one of three categories of adaption—conformity, retreatism or ritualism. The successful academic conforms, becoming “an organisation person, someone dedicated to a ‘career’ with certain progressions and rewards, and someone who knows their (and others’) quality ratings” (Parker and Jary, 1995, p. 329). Within the McDonaldised university system successful academics (and indeed institutions) self-impose constraints on their academic “freedom” and creativity in order to comply with the criteria and performance indicators of a particular assessment system. This corresponds with Foucault’s concept of the “carceral” society in which “docile bodies” are under constant surveillance, and modify their behaviour to ensure continuous efficient productivity (Foucault, 1977). We have previously caricatured those that conform to the new, assessment-oriented system, as “cloned academics” (Harding and Taylor, 2002) although “Stepford Dons” may be a more appropriate epithet. These young, research-oriented individuals, have been recently educated in more rational universities, and are all too aware that higher education has been repackaged as a commodity. They are essentially conservative in nature, unquestioningly conforming and accepting, indeed welcoming the predictable, efficient and readily quantifiable, and tailor their activities to meet the stated requirements of assessment processes, and appointment and promotion committees.

In the face of the changing nature of higher education provision, and the career-success of conforming younger colleagues, older academic staff may be unable or unwilling to modify their activities. Labelled as “dead wood” they may seek “retreat into quietism”, or particularly if deemed “research-inactive” with regards to the RAE may be pressurised into retirement or resignation (Parker and Jary, 1995). The third response to McDonaldisation is ritualism. Since “judgement” is by yardstick rather than scholarship, academics devise the appropriate strategies to manage appearances. They may, perhaps somewhat cynically, pursue activities, such as the undertaking of short, unimaginative, research projects in order to generate income and sufficient publications, to be judged favourably by their own institution and external assessment bodies. Some of these individuals, for whom academia retains a vocational element, may also pursue additional scholarly activities, as ends in themselves, often in their own time.

Academic McJobs

Ritzer (1996) has predicted that "Those who teach at McUniversity and its satellites are unlikely to be full-time tenured faculty members. Most will be part-timers brought into teach a course or two. Their pay, like that of the employees of fast-food restaurants, will be low and their benefits few if any". Currently, work as an academic within a UK school of pharmacy is far from that associated with a so called "McJob", which is typically poorly paid, offers little or no job security and requires minimal levels of skill. Although academics are constantly exposed to the pressures of rationalisation inherent in McDonaldisation, nevertheless most do retain a good deal of autonomy in their activities, clinging to the notion of academic freedom, and galvanised by the fact that by their nature, teaching and research can still be unpredictable. Nevertheless, it can be argued that the fixed-term postdoctoral positions, proliferating in universities closely approximate McJobs. Such positions are generally relatively poorly remunerated, based on fixed, short-term contracts, require a restricted range of skills—specific to a particular research project and offer little autonomy. The status of practitioner-teachers within schools of pharmacy is also worthy of consideration. These are individuals employed full or part-time in a pharmacy sector other than academia, usually community or hospital pharmacy, though occasionally within industry. Their status within academia is ill-defined, varying between, and even within, different schools. Practitioner-teachers tend to work on an *ad hoc* basis, being paid, often at a minimal rate, for the hours they are actively involved in teaching. Many do not have contracts and have chosen to involve themselves in teaching because of their commitment to the pharmacy profession, or because of a personal relationship with particular members of full-time teaching staff. For some, the work is a "technical" activity delivering a "learning experience" designed without their input. Others are burdened with considerable teaching and administrative responsibilities, and are involved with course design, delivery and assessment, but without the benefits, support and status of traditional full-time academics. The apparently "lowly" status of practitioner-teachers and the increasing reliance upon them by institutions, for the teaching of the practice elements of the pharmacy degree has a number of implications. The separation of the practice and pharmaceutical science elements of teaching and research is enhanced, and the status of "pharmacy practice" within schools is diminished. This is exacerbated by the fact that the large majority of practitioner-teachers are not research active and hence are not contributing to the school's "research effort". Moreover, a perception that "pharmacy

practice" is taught by "part-timers", who, when not actively teaching are not available for consultation within the school, and whose status is apparently less than full-time academic staff, only serves to devalue "practice" in the eyes of students. This may contribute to the increasing disillusionment of students with pharmacy, even before they graduate and register to practice.

CONCLUSION

Rationalisation and standardisation of teaching and research practices are inevitable as schools of pharmacy seek to educate increasing numbers of undergraduates with a resource that is diminishing in real terms. Drawing on Ritzer's concept of McDonaldisation (Ritzer, 1998; 2000) it is possible to observe the characteristic signs of McDonaldisation within universities. In response to the pressures of rationalisation and increased surveillance, many academics have knowingly or unwittingly modified their activities.

Rationalisation and accountability are not of themselves harmful. However, we argue if their effect is to produce lecturers delivering routinised learning experiences to students and conducting predictable research for the purpose of grant and publication generation, then scholarship becomes a casualty and academia becomes a career, rather than a vocation.

In fact, the work of most full-time academics largely resists McDonaldisation, in that they undertake a wide range of teaching, research and administrative tasks and retain a degree of professional autonomy. However, the increasing employment of postdoctoral researchers on fixed, short-term contracts and practitioner-teachers on an *ad hoc* basis, is evidence that academic work within schools of pharmacy is becoming McDonaldised.

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