

**Auditing as a tool of public policy -
The misuse of quality assurance techniques in the UK university expansion
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Over recent years, UK universities have undergone a government-driven expansion of their student intake, with a target of fifty percent of each age cohort graduating with a degree. The aim was to increase the average educational standard of the UK educational system as a whole - albeit at the cost of reducing the average academic standard within the university sector (Smith & Webster, 1997; Charlton, 2002).

The combination of necessarily reduced student selectivity (both in admissions and examinations) and substantially reduced funding per student created the problem of how to manage the decline in academic standards and inflation of the degree qualification. After some years of trying more informal methods (Williams, 1997), the chosen government set-up the QAA (Quality Assurance Agency for Higher Education; QAA 1998), who would use the managerial tool of quality assurance auditing.

Yet the QAA is now regarded as a failed experiment - expensive, damaging to efficiency, and probably ineffective (THES editorial, 2001; Baty, 2001). This failure is now widely accepted by all parties including the government and the QAA - although the nature of the failure and suggested response vary widely between total abolition and reform with enhancement.

We explore the formal nature and constraints of auditing, and describe the way in which these constraints were disregarded under the pressure of political expediency and public relations hype that misrepresented the proper function of a national teaching inspectorate.

Education for growth

The need for continually increased level of mass intellectual education is a consequence of the need for continual economic growth and increasing social differentiation in order for modern societies to sustain themselves (Luhmann, 1995). Indeed, modern societies are actually characterised by growth - by achieved continual growth and by the expectation of future growth (Gellner 1983). And this imperative towards growth and differentiation characterises the education system just as it does the economic, political and legal systems, because any static or contracting system will tend to become dominated by other growing systems (Maturana & Varela, 1980; Luhmann, 1995).

Growth generates rapid change in social organisation and individual functions. So, in a modernising society, the purpose of education is to produce enough people with the generic intellectual capability to be able to train and re-train into a wide range of functions. In other words, the educational output should be advanced generalists capable of, and motivated for, rapid and flexible specialisation (Gellner 1983). This implies the need for as high as possible a level of formal education or 'literacy and numeracy' for as many of the population as possible (given the existing constraints of other competing claims for resources and time). This can be summarised in the statement that modernisation implies continually raising the average level of intellectual skills in the population.

As well as the need for high level literacy and numeracy skills, maximising flexibility in the intellectual workforce implies that there be a common language of communication and a common intellectual culture, so that individuals can perform a wide range of functions and easily be inter-changeable (Gellner, 1983). Many of the requirements of a modern economy could be described as a 'socialisation' for 'employability'. It has been suggested that the large measurable economic advantage derived from each incremental lengthening of the educational experience may be due to formal education contributing to 'incentive-enhancement preferences' (Bowles & Gitnis, 2000). In sum, university graduates make more functional employees, that require less supervision and are more responsive to the incentives of the workplace. Graduates have - in a word - better 'attitude'.

Economic drives towards educational expansion

From the economic perspective, the function of the educational system is to provide the kind of skilled manpower necessary to maintain continual economic growth. Whereas in traditional societies there was only a small literate class, the specialised complexity of modern societies has greatly increased the need for communication (because more specialisation entails more co-ordination; Kindler & Kiss, 1969; Pokol, 1991; Luhmann, 1995). In a modern society, therefore, essentially *all* the population need to be literate and numerate at a basic level, and the higher the level of literacy and numeracy this mass of population can attain, the greater the complexity (hence efficiency) of communication which can be supported.

Economic growth is essentially a product of the progressive division and specialisation of labour (Gellner, 1988; Wright, 2000). But the specialisation of economic function in a modern society differs from that in traditional societies (Gellner, 1983). In traditional societies there was very little general education for most of the population, and specialised education (apprenticeship) was very prolonged, leading to a lifetime of dedicated practice. The result was that the level of skill of masons, woodcarvers, jewellers etc. was extremely high, indeed so high was the required skill level that craftsmen were in effect irreversibly committed to their specific practice.

In a stable (or slowly changing) society this kind of lifelong specialisation was practical, but in a modern, growing and rapidly changing society life-long

specialisation is damagingly inflexible both to individuals and to the economy. Compared with traditional societies, modern economies tend on the one hand to de-skill the highly skilled (eg. craftsmen and trades people), but on the other hand to require much greater generic skills even from the 'unskilled' workers (eg. labourers need to become literate and numerate) The result is that a modern furniture manufacturer needs much less specific training than a traditional cabinet-maker, but a modern farm worker needs much more education than a medieval peasant.

In fact, both of these trends are aspects of the increased complexity of organisation systems (Luhmann, 1995). Complexity of individual human cognitive processing is progressively replaced by machines or computers or complex systems of organisation (such as a factory or hospital). Unskilled activities are thereby progressively eliminated and highly skilled activities are de-skilled - what is required is a workforce composed *mainly* of individuals with moderate and flexible skills. This is the nature of economic pressure that pushes the educational system towards mass higher education in a modernising society.

Political drives towards educational expansion

Gellner (1983) has commented on the fact that modern societies are no longer cohesive due to their domination by a single political system, but are principally unified by the mass of the population having experienced a common educational process, from which they derive a shared 'language' for communication (including distinctive behavioural as well as verbal elements).

In traditional societies, a person's loyalty might be to the village, caste or class - in early modern societies the nation state was the focus (Weber, 1978). But all these ideologies have lost their grip, and since the advent of universal compulsory education the shared school experience has increasingly become the main basis of social cohesion.

Education is the basis of complex communications, and the participants in complex systems of communication are differentiated from those unable to participate. These complex socially integrating systems are termed culture (including both professional and everyday culture; Habermas, 1989; Luhmann 1995). The ability to understand and participate in cultural communications is a consequence of prolonged socialisation, of which formal education is an ever more vital part (Gellner, 1994). Even the mass media require high and rising levels of cultural literacy - the progressively abbreviated 'sound bite' is only possible where a complex implicit understanding can be assumed (Luhmann, 2000).

This need for social cohesion forms the *political* factor driving educational expansion: the idea that a prolonged common education is the basis for national unity, and that extending this common education into university will generate an expanded, more skilled, more flexible and economically better-adapted middle class. These intellectual workers will also have the right 'employability' attitudes to become functional in the modern economy.

The political ambition of university expansion therefore implies the radical agenda of generating a new, more highly-educated middle class which will implicitly dominate future society and provide the basis for continued modernisation (Siedentop, 2000).

Deliberate reduction in university academic standards

The impact of modernisation on the UK university system is due to the fact that the university degree is the level of attainment to which the mass of the population will be brought (Smith & Webster, 1997; Charlton, 2002). The aim of current policy is to

create a cohort of at least half the age group which have received a common general education up to at least undergraduate degree standard. This group is intended to form the generic communication experts to occupy a central role in the future economy, able to undergo rapid post-graduation training to handle specialist information and perform processing tasks at a relatively higher level, and able to communicate with each other in a complex yet concise manner, without significant 'class' barriers of manners, style and accent.

The method of modernising university reform is therefore to expand university intake at the undergraduate level, and to simplify the intended function of graduates. Instead of producing an intellectual elite of specifically career-oriented specialists at the time of graduation (intended teachers, doctors, lawyers etc), universities will become a mass-production system for generically-educated 'intellectual workers' who will be suitable for rapid training into a wide range of moderately skilled economic functions either at postgraduate schools or 'on the job'.

Over the past decade and a half, UK universities have been required to teach many more students than before, but for broadly the same cost to the government (and universities have so far been prevented from raising significantly more money by capped fees). Naturally, this will tend substantially to reduce educational standards relative to the preceding 'boom' era of the 1960s and 70s, because poorly-resourced systems will typically produce a lower quality output than well-resourced systems.

But the primary cause of reduced standards is the truly enormous expansion in intake. From after the second world war, the percentage of the school age group participating in degree-level higher education in England climbed from less than 5 percent in the 1940s, to c.17 percent in 1987, up to c.32 percent in 1995 with the trend having continued (Trow, 1991; Smith and Webster 1997). In itself, such expansion will inevitably inflate the value of a degree certificate, which depends on its relative rarity. Furthermore a mass system contains a majority of students who are less able and less motivated than those in a highly selective elite educational system, and this also would contribute to a lower average level of examination attainment.

For all these reasons it can be seen that the UK university expansion entails a significant reduction in degree standards - in the sense that the average university graduate will have a lower educational attainment after expansion than before. The point to recognise is this: the reduction in academic standards within the university sector is not an accident. Indeed, such a decline is actually *entailed* by the policies adopted.

Such a planned decline in university standards is (in principle) defensible, and should not automatically be deplored. Although average educational attainment within the university sector will certainly decline; if the objectives of expansion are achieved, then the average academic standard of the educational system as a whole will increase. As described above, it can be argued that the advantages of a system of mass higher education to society in general can more than compensate for the specific disadvantages within the university sector.

The role of a national teaching inspectorate

Accepting that the academic standard of an average university degree was intended to fall, the rationale of a national system of university inspection would be to monitor and control this reduction in standards. The function of a national inspectorate can be understood in terms of controlling degree *inflation*.

Given the inevitability of inflation of the degree (ie. a progressive reduction in its career-enhancing value to the individual - or a drop in the 'purchasing power' of a degree qualification) an effective system of inspection might aim to prevent this

inevitable inflation from proceeding to a 'hyper-inflation', or total collapse of academic standards.

In the economy, a low rate of controlled, predictable financial inflation is not necessarily harmful - the danger comes from *hyper*-inflation which occurs when the informational value of money becomes unknowable due to large *and unpredictable* inflation (Cagan, 1956; Sargent, 1982). Similarly, if the decline in degree standards was combined with an increased *variance* in degree standards between institutions, then this could be a state of hyper-inflation in which the value of a degree qualification became unknowable - in effect, the degree certificate has no informational content (Andras & Charlton, 2002 & 2002a). The proper aim of a national teaching inspectorate was therefore to prevent a situation in which a university would admit almost anyone, teach them almost nothing, then give them a degree.

This problem of degree hyper-inflation would be most likely to occur in those parts of the system where per capita funding and selectivity was lowest prior to expansion - in other words the ex-polytechnics that were from 1992 re-named universities. The proper main function of a national system of teaching inspection in the context of a deliberate reduction in degree standards would then be to guarantee a *minimum* standard of teaching - especially ensuring that the low-funded, low-selectivity institutions did not make their degrees too easy to attain. Of course, in practice, a system of teaching inspection would need to be universal - both to avoid accusations of prejudice and to prevent short-termist exploitation of pre-existing good reputations.

This analysis implies that the function of a 'teaching' inspectorate was not really to ensure good quality 'teaching' as the word is generally understood. (The meaning of 'teaching quality' to the general public is concerned with the excellence of that personal interaction between teacher and student; Charlton, 2002) The proper function of a teaching inspectorate would be to guarantee a minimum degree of necessary selectivity (eg. in admissions and in examination standards) and a minimum level of educational provision (e.g. of supervision in the form of lectures, seminars, practicals, coursework etc.).

The implicit proper function of a national teaching inspectorate such as the QAA was in fact to ensure a minimum standard of selection and provision. This interpretation is reinforced by the observation that just about the only information that was *not* sampled by QAA was the actual business of classroom teaching. A small proportion of the overall score related to the observation of pre-planned 'demonstration' classes - but there was no random sampling or un-announced visitations to observe real teaching, as had occurred for more than a century of the 'HMI' schools inspectors.

Auditing universities

The choice of quality assurance technologies as a basis for inspection of university teaching was rational to the extent that university teaching is done by an explicit and objective system. If QAA had constructed its audits on the basis of ensuring that each teaching unit was 'delivering' an educational system of minimum acceptable standard, then it would probably have succeeded, and its audits would have been simple, swift and cheap.

The nature of quality assurance auditing is shown most clearly by examining the origins of the practice (Power, 1997). Auditing was originally financial auditing, and the principal purpose of financial auditing is to detect and deter error and fraud in the handling of money within a *closed system*. A closed system is necessary because only within a closed system may it be expected that all money flows will balance. Indeed, financial audit defines the units of closed finance, the units of 'accountability'. There are legal requirements for certain individuals and organisations to be

auditable, and this requirement enforces the monetarily-closed nature of such systems.

Within a closed system, audit detects errors and fraud through sampling information and cross-checking it for inconsistencies when compared with established organisational and practice criteria (Flint, 1988). Independent sources of information should be consistent with each other when checked every-which-way. Since a complex organisation has so many strands making up a web of cash flows, the number of potential cross-checks is almost infinite. Anyone wishing to 'cook the books' has a great deal to fake if they are to ensure that every possible inconsistency between independent sources has been ironed-out.

Financial accounting (usually) works in its job of deterring and detecting fraud because it is (usually) easier, cheaper and more efficient to be honest than to prepare internally-consistent fake accounts which can stand-up to skilled cross-checking. True accounts automatically balance when cross-checked because they are a reflection of reality, while it takes a great deal of work to create audit-proof false accounts.

Managerial audit

The relationship between auditing and the management function derives from a formal similarity in the information processing involved. Auditing involves setting up 'second-order' system-referential systems, in a manner closely analogous to the function of management - ie. both audit and management sample information from organisations, model the activity of organisations, and make predictions on the basis of these models which can be checked against further samples (Luhmann, 1995).

Of course, auditing has traditionally been done by external accountancy firms, while management has been done by sub-systems of the organisation being managed - but these conventions are not formally necessary. In principle, management could be out-sourced, while auditing is increasingly an internal activity of subsystems ('quality units') within organisations. Given this similarity, the potential for using audit-generated information for modelling and controlling the organisation was obvious. This led to the development of Quality Assurance auditing as a generic managerial technology (Stebbing, 1993; Mills, 1993).

QA auditing has many analogies with financial auditing. But instead of monitoring money flows in a closed system to detect financial fraud, quality assurance auditing samples information in order to monitor compliance to a system (Power, 1997). So an organisation explicitly defines the system by which they are supposed to be operating, and quality assurance auditing monitors whether that system is, in fact, being complied with.

In this context, the word quality has come to mean something like 'reliability of outcome'. A 'quality' system has the operational meaning of a system that predictably delivers a pre-specified outcome (Power, 1997). For example, the quality assurance management systems of a fast-food franchise are designed to achieve a consistent product - so long as the system is complied-with, you get the same standard of hamburger (within pre-defined limits) every day and everywhere in the world. The outcome is therefore a product of the system, and so long as the system is functional then the outcome is predictable.

In other words, the quality of the product may be 'assured' simply by checking that the system is indeed functioning - in a sense the actual hamburger need not be sampled or tasted. This is what it means to say that quality auditing monitors *systems and processes*, rather than outcomes (Feigenbaum, 1991).

A quality audit operates by sampling what is happening in different strands of the system, and checking the mutual consistency and compatibility with the system blueprint (which is usually provided in the form of a flow chart). Given the validity of its assumption that a given system results in a given outcome (which assumption needs to be empirically tested), in a variety of competitive economic contexts quality assurance auditing has proved itself capable of delivering consistent outcomes with relatively low transaction costs.

Quality assurance in universities

Properly speaking, when QA is applied to university education it would require prior validation in terms of outcomes, to answer the question 'does this system lead to a reliable and satisfactory outcome?' Just as you need first to taste the hamburgers before concluding that your quality assured system is reliably producing good ones, so you need to test that students coming out of a quality assured education systems are indeed reaching a minimal educational standard. Only after the system has been empirically proven to produce predictably tasty burgers (or skilled students) can you neglect this empirical check.

But with QAA there was no attempt made to test the assumption that any specific teaching system led to any specific outcome. Instead it was simply assumed that the existence of an explicit and self-consistent system of teaching was synonymous with excellence. By this omission, university teaching quality assurance lost any meaningful link to educational outcomes.

By ignoring the connection between processes and outcomes, QAA implicitly chose the criterion of pure, abstract 'auditability' as its benchmark. 'High quality' teaching was defined as that which was comprehensively and self-consistently documented in a closed system. This meant that QAA definition of high quality teaching was an explicit system characterised by Mission Statements, aims and objectives, flow-charts, monitoring, feedback and formal procedures for all imaginable contingencies.

By itself, this definition of quality is neutral in evaluative terms - however the public relations 'spin' of QAA equated this technical definition of teaching quality with the general language usage of 'high quality' which has to do with excellent outcome measures, not system properties (Charlton, 2002).

Failure of QAA

The root of QAA failure can be traced back to a very early stage in the policy implementation. Failure can be blamed upon the way that the legitimate goals of university inspection were first subverted and finally defeated by the public relations aspects of the policy.

In other words, the political expediency and media spin concerning the advertised role of QAA, pushed QAA into outright misrepresentation of their function and dishonesty as to what they were doing. In the end, QAA was using a system of quality assurance auditing to try and perform a function which was alien to the capability of the technology.

1. Minimum standards versus continuous improvement

Quality assurance is really about enforcing minimum standards and predictable outcomes, and certainly this was what was required by the UK university system in a time of rapid degree inflation. The function of a national quality assurance scheme *should have been* to oversee this reduction in standards, and to ensure that inflation

did not go further than was necessary to achieve the objective of much higher rates of university graduation.

But the QAA advertised their role as *increasing* academic standards, explicitly by improving teaching, and this meant that there was a fundamental dishonesty involved in the QAA mission. One lie usually leads to more lies, and the claim to be improving standards could only be made plausible by further dishonesties such as the claim that QA auditable systems of teaching were intrinsically superior to non-auditable teaching methods, hence that the post-QAA teaching was *by its own definition* superior.

A further problem was obfuscation. The sheer complexity of procedures and measures, and their non-comparability between institutions, meant that it became impossible to understand what was going-on in the university system. Instead of measuring and publishing simple, clear-cut and comprehensible proxy measures of selectivity and provision, such as average A-level grades and staff-student ratios, the QAA published numerical scores derived from the aggregation of multiple non-transparent (and non-rational) variables (QAA, 1998). This effectively obscured the bald facts of degree inflation and diminished per capita educational provision, and contributed to the prevailing atmosphere of dishonest evasiveness.

2. Pass-fail versus league table

Like financial auditing, quality assurance auditing (when properly used) classifies systems in a binary fashion as pass or fail, satisfactory or not. By contrast, QAA used auditing to generate grades on a scale - this is evidence of a fundamental misunderstanding of the nature of auditing.

It would seem both strange and suspicious if a financial audit was to award an institution a grade on a scale such as excellent, good, average or poor. Such an audit would be regarded as failing to achieve its objective of checking financial probity. A completed financial audit will either be satisfactory ('pass' - within acceptable levels of tolerance for the system) or unsatisfactory and 'fail'. Either the institution is using a proper accounting system and the books balance - or not.

It was a methodological error to use audit technologies to award grades to British universities. The fault presumably arose from the initial dishonesty of announcing that quality assurance would be used to raise standards, which implies a quantitative system of grading. A proper quality assurance system would maintain minimum consistent standards, but it is not *of itself* a system for continually cranking-up standards.

3. Objective versus subjective measures

Auditing works most straightforwardly when the information sampled is stable, objective and quantifiable and the system being audited is simple. Indeed, objectivity of information and evaluation is a core requirement of auditing (Boynton et al, 2001). By contrast, the QAA tried to measure variables that were inflating, subjective and qualitative; in systems that were highly complex.

Money (for example) is *usually* a highly suitable informational measure for auditing, since it is objectively quantifiable and stable throughout the period being audited (but even money becomes un-auditable in periods of hyper-inflation). And financial audit works best when the system is relatively simple - very complex money flows may become virtually un-auditable (as seems to have happened with Enron).

In principle, it would be possible to construct an auditable system of university teaching by sampling only information that reached a high standard of objective

quantifiability. Trow (1993) has remarked that teaching cannot really be assessed in the short term, but that *not* teaching can. For example, there might be a national standard for a degree which stated minimum criteria in relation to factors such as entry qualifications, staff-student ratio, contact hours, class size, number and type of examinations, distribution of degree classification - and so on. A quality assurance audit could then ensure that all such criteria were being met. (Indeed, exactly this kind of objective, user-orientated and comparative information is freely available for the US higher education system - eg. www.usnews.com/usnews/edu/eduhome.htm)

Instead, the QAA measured all kinds of intangible and subjective factors. Marks were awarded in relation to six categories of activity on a scale of four (QAA, 1998). Most marks related to completeness and consistency of an un-checkably vast amount of paper documentation (for instance there were 17 headings and 64 separate documentation demands relating just to student assessment; QAA, 2000), some marks were awarded for an evaluation of non-randomly selected and pre-warned demonstrations of classroom teaching, some marks were awarded following interviews with non-randomly selected groups of graduates, and so on. All these variables were weighted and combined in a unvalidated fashion.

The outcome was the QAA grades were non-transparent and non-objective. Dependence upon inspectorial subjectivity also contributed to the strikingly intimidating and humiliating nature of QAA visitations (Charlton, 1999). Many auditees felt that they were being evaluated more in terms of demonstrating a suitably subservient attitude, more than for the objective facts concerning their educational selectivity and provision. This contrasts sharply with the realities of an objective financial audit, which may be hard work for the auditee - but is a process from which the honest and competent organisation has nothing to fear.

Expediency versus strategy

The QAA forms a fascinating case study of how an apparently straightforward and readily-attainable policy of maintaining minimum standards while expanding the University system became muddled and eventually defeated by dishonesty and short-termism.

The failure of QAA may be interpreted as an example of the way in which political expediency may unintentionally damage long-term strategy. The unwillingness of the UK government to acknowledge the downside of university expansion, and to explain and argue the case that the overall benefits of their policies would outweigh their specific disadvantages, has led to policies built upon reassuring lies (Andras & Charlton, 2002). This evasiveness has also prevented the (very significant) disadvantages of expansion from being addressed.

The damage inflicted by the failure of QAA cannot merely be measured in terms of time and money wasted. Much more significant is the institutionalisation of dishonesty in the higher education sector, the reciprocal culture of cynicism, and the permeation of the system with misinformation that prevents good decision-making. Just as counterfeit money generates instability, so false information exacts a penalty (Andras & Charlton, 2002a). Future UK governments will need to continue the process of educational expansion and social modernisation, but will find this task made more difficult thanks to their legacy of lies.

References

- Andras P, Charlton B. (2002). Hype and spin in the universities. Oxford Magazine. 202: 5-6.

- Andras P, Charlton BG. (2002a). Democratic deficit and communication hyperinflation in health care systems. *Journal of Evaluation in Clinical Practice*. 8: 291-297.
- Baty P. (2001). Russell elite go for jugular of ailing QAA. *Times Higher Education Supplement*. 21 September.
- Boynton WC, Johnson RN, Kell WG. (2001). *Modern auditing 7th Edition*. John Wiley & Sons: New York.
- Cagan P. (1956) The monetary dynamics of hyperinflation. In (Ed) Friedman M. *Studies in the quantity theory of money*. University of Chicago Press: Chicago. Pp 25 -117.
- Charlton B. (1999). QAA: why we should not collaborate. *Oxford Magazine*. 182: 1-3.
- Charlton BG. (2002). Audit, accountability, quality and all that: the growth of managerial technologies in UK universities. In (Eds.) Prickett S, Erskine-Hill P. *Education! Education! Education! : Managerial ethics and the law of unintended consequences*. Imprint Academic: Thorverton, UK.
- Feigenbaum AV. (1991). *Total quality control 3rd edition revised*. McGraw-Hill: New York.
- Flint D. (1988). *Philosophy and principles of auditing*. Macmillan: London.
- Gellner E (1983). *Nations and nationalism*. Blackwell: Oxford.
- Gellner E. (1988). *Plough, sword and book: the structure of human history*. Collins Harvill: London.
- Gellner E. (1994) *Conditions of liberty: civil society and its rivals*. Hamish Hamilton: London.
- Habermas J. (1989). *The structural transformation of the public sphere: an enquiry into a category of the bourgeois society*. Cambridge: Polity Press.
- Kindler J, Kiss I. (Eds) (1969). *Systems theory (in Hungarian)*. Kozgazdasagi es Jogi Konyvkiado. Budapest.
- Luhmann N. (1995). *Social Systems*. Harvard University Press: Cambridge, MA, USA.
- Luhmann N. *The reality of the mass media*. Polity Press: Cambridge, UK.
- Maturana HM, Varela FJ. (1980) *Autopoiesis and cognition*. Reidel: Dordrecht, Netherlands.
- Mills D. (1993) *Quality auditing*. Chapman & Hall: London
- Pokol B. (1991) *The theory of professional institution systems (in Hungarian)*. Felsooktatasi Koordinacios Iroda: Budapest.
- Power M. (1997) *The audit society*. Oxford University Press: Oxford.
- QAA. (1998). *Annual Report 97-98*. QAA: Gloucester
- QAA. (2000). *Code of practice for the assurance of academic quality and standards in higher education. Section 6: Assessment of students*. QAA: Gloucester.
- Sargent TJ. (1982). The ends of four big inflations. In (Ed) Hall RE. *Inflation: causes and effects*. University of Chicago Press: Chicago. Pp 41 - 97.
- Siedentop L. (2000) *Democracy in Europe*. Allen Lane, Penguin: London
- Smith A, Webster F. (1997). *The postmodern university?* Open University Press: Buckingham, UK.
- Stebbing L. (1993). *Quality assurance 3rd edition*. Ellis Horwood: Chichester, UK.

- THES Leader. (2001). There is quality assurance, then there is the QAA. Times Higher Education Supplement. 15 August.
- Trow M. (1991). The exceptionalism of American Higher Education. In (Ed.) Trow M & Nybom T. University and society. Jessica Kingsley: London.
- Trow M. (1993). Managerialism and the academic profession: the case of England.
- Weber M. (1978). Economy and society: an outline of interpretative sociology. University of California Press: Berkeley.
- Williams R. (1997). Quality assurance and diversity. In (Eds.) Brennan J, de Vries P, Williams R. Standards and quality in higher education. Jessica Kingsley: London.
- Wright R. (2000) Nonzero: the logic of human destiny. Pantheon: New York.