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**NEW REALITIES: THE
RELATIONSHIP BETWEEN
HIGHER EDUCATION AND
EMPLOYMENT**

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NEW REALITIES: THE RELATIONSHIP BETWEEN HIGHER EDUCATION AND EMPLOYMENT

ABSTRACT

The paper addresses one aspect of the 'New Realities' of higher education: the employer-higher education interface. It asserts that the primary purpose of higher education is the transformation of students to become critical, lifelong learners. It explores the development of the 'employability' agenda in higher education, examines the nature and implication of organisational change for graduates and assesses what attributes graduates will need in the next decade. Flexible organisations need flexible, and increasingly empowered employees, that in turn calls for transformative and empowering learning. The way that higher education might address this, particularly in the context of lifelong learning, is explored.

Introduction

To address the relationship between the academy and employment is to risk, at least in some quarters of academia, being seen as an apologist for anti-intellectualism, for the erosion of academic freedom and as proposing that higher education should be about training graduates for jobs rather than improving their minds. However, in addressing 'New Realities' this paper is far from suggesting that higher education should change its focus to training.

On the contrary, rather than training, the paper takes as axiomatic that the primary purpose of higher education is to transform students by *enhancing* their knowledge, skills, attitudes and abilities while simultaneously *empowering* them as lifelong critical, reflective learners.

The analysis of the transformational¹ role of higher education are discussed in detail elsewhere (Harvey and Knight, 1997) and space precludes rehearsing them. Supplementary to this fundamental axiom are two propositions:

- that higher education will need to be transformed to achieve this purpose;
- transformed (enhanced and empowered) graduates play a key role as transformative agents in society.

The whole is contingent on two supplementary presuppositions:

- the world is changing rapidly and will continue to change rapidly;
- higher education wishes to play a role in accommodating, facilitating and leading change rather than resisting change.

The 'New Realities', that encourage a closer look at the relationship between employment and higher education, should not, then, be conceived as a nexus in isolation of a far more fundamental review of higher education. The higher education-

¹ Furthermore, the term transformation is becoming widely used in relation to higher education. As usage widens, so too does meaning. Transformation is sometimes used to simply mean 'change', in some cases 'reform' of a system would be a better term. In some usages, such as Scott (1995, p. 157) transformation mean restructuring, and in that sense begins to get closer to the use implied here, that of 'dialectically deconstructed transformation'. Dialectically deconstructed transformation is not just attitudinal change nor simply structural rearrangement. Methodologically, it involves deconstructing prevailing conceptualisations and rebuilding alternatives. Pragmatically, it involves dissolving traditional values and organisational forms and rebuilding 'inclusive' organisational structures. (Dialectically deconstruction and reconstruction should not be confused with postmodernist deconstruction.)

employment interface should not be seen as an ‘add-on’ to academic study. Conversely, the ‘employability’ of graduates should not be seen as the focus of higher education. Rather, employability is a subset of, and fundamentally contingent on, transformative lifelong learning.

Before returning to the theme of lifelong learning it is useful to explore the context and, in so doing, the paper draws heavily, but not exclusively, on the United Kingdom (UK) experience for three reasons:

- the UK government is probably in the vanguard on the employability issue compared to most of the rest of Europe;
- the UK has a large number of multi-national corporations and a well-established graduate recruitment process;
- the UK is probably an extreme case of non-subject specific recruitment.

Employability on the agenda

Since the late 1980’s, there has, in many countries, been increasing pressure on higher education to contribute directly to national economic regeneration and growth (Ball, 1989, 1990). Increasingly, national and international assessments of the role and purposes of education indicate a need for higher education to contribute significantly to ‘meeting the needs of the economy’ (DES, 1987; EC, 1991).

A major factor behind this pressure has been the growing concern, within individual economies and within the European Union as a whole, about future competitiveness. For example, the Industrial Research and Development Advisory Committee (IRDAC, 1990) of the European Commission argued that the output of education and training systems (including, in particular, higher education) in terms of both quantity and quality of skills at all levels, is the prime determinant of a country’s level of industrial productivity and hence competitiveness.

This view was, for example, recently endorsed by an Expert Group appointed by the Irish Government: ‘A highly skilled and motivated work force is essential to remaining globally competitive’ (EG, 1998) and by the Department for Education and Employment (DfEE) and the Committee of Vice-Chancellors and Principals (CVCP) in the UK: ‘It is becoming generally believed that improved skills training for the UK work force would lead to increased competitiveness’ (CVCP/DfEE/HEQE, 1998a, p. 2). Furthermore, the DfEE estimates that the public rate of return on state investment in higher education is 7–9%, and the private rate of return to graduates themselves is between 11–17% (CVCP/DfEE/HEQE, 1998a, p. 2).

Recent UK research has also specifically argued that small businesses benefit from employing graduates. A study of 1100 small business improvement projects, 250 small firms and 56 case studies of successful small businesses in Merseyside showed that graduates enhanced small businesses. Benefits included improvements to IT systems, enhancement of production processes, development of new products, updating of administration systems, expansion of client bases and, most important, management support that frees up owner’s time. It was estimated that 70% of graduate impact is ‘indirect’ — freeing up time — allowing owners to focus on improving the business performance (GEU, 1988). With that in mind, owners of successful small businesses perceived graduates as medium- rather than short-term investment and give them opportunity to develop or ‘grow the job’.

Research undertaken at the Centre for Research into Quality during the 1990s (Harvey, Burrows and Green, 1992; Burrows, Harvey and Green, 1992; Harvey with Green, 1994, Harvey, Moon and Geall, 1997) highlighted the ways in which this

pressure on higher education is reflected in the expectations that employers have of graduates. The research, which fed directly into the National Committee of Inquiry into Higher Education, Chaired by Lord Dearing (NCIHE, 1997), emphasised, among other things, the effectiveness of work experience.

At the heart of the Dearing Report is the assertion that the primary purpose of higher education is to prepare students for the world of work. Following Dearing, there has been growing pressure from government and government agencies to ensure better links between higher education and employers. For example, a recent joint CVCP and DfEE Report noted that:

Employers and employer-led organisations, as consumers of graduates, should be important influences on the context and content of employability skills training programmes. As recommended by Dearing, HEIs should review the extent and nature of their existing links with employers and employer organisations so as to improve the interface and to enhance the responsiveness of their institutions to employer needs. The review will need to consider how the institution will interact externally with employers, employer organisations and other agencies; it will also need to look at the extent to which partnerships with employers can be enhanced and developed.

(CVCP/DfEE/HEQE, 1998a, p. 10)

However, government policy in the UK to enhance employability of graduates is part of a wider strategy to extend the skill base in the UK. In early 1998, the Secretary of State for Education and Employment appointed a *Skills Task Force* (STF) to advise on the development of a *National Skills Agenda*. This presumes current skills shortages and a gaps in the labour force. The first task of the STF is to identify shortages along with strategies to overcome them. Although the STF will not report until the end of 1999, a consultative document *Towards a National Skills Agenda* (Sept. 1998) emphasises that partnership is key: partnerships between employers, individuals, central and local government, educational establishments, voluntary sector, Training Enterprise Councils (TECs) National Training organisations (NTOs) and the European Union. The main objectives are to:

- equip those at risk of exclusion with skills needed especially at NVQ level 2 (A-level);
- promote skills beyond level 2;
- help employers identify their own skills needs and to adapt their training accordingly;
- providing individuals with good information and guidance and encouraging suppliers of education and training to be responsive to their needs.

As part of this, the University for Industry is to be launched in 2000. It will, in effect, be brokering agency designed to advance these aims — the ‘hub of a brand new learning network’.

Locked into this is a proposed further expansion in higher education of both part-time and full-time provision (the former supported in part by employers). Along with this expansion is a growing focus on making graduates ‘work-ready’:

The Government has endorsed the view of the Dearing Committee of Inquiry ‘Higher Education in the Learning Society’ July 1997, that enhancing the employability of graduates is a key task for higher education.

(DfEE, 1999, p. 40)

The British Government made it clear in 1997 with the publication of the *Graduate Apprenticeship Framework* (DfEE, 1997) that it wanted a clearer link between graduates and the world. It is now piloting Graduate Apprenticeships in up to eight business sectors.

Furthermore, there is an intention to link some funding for higher education in the UK to 'employability'. This is a joint Exchequer and DfEE initiative endorsed at ministerial level and civil servants are currently working on ways of implementing this through the development of an employability performance indicator.

In anticipation of such moves, and in the wake of the assessment of skill shortages in Wales, the Higher Education Funding Council for Wales (HEFCW, 1999) recently undertook a pilot audit of all its higher education institutions to discover the nature and extent of the employability-skills development offered by Welsh institutions.

In a sense, in the UK, the perspective has already insinuated itself into the academy. *The Final Report of the Graduate Standards Programme* (HEQC, 1997) undertaken by the Higher Education Quality Council, a body owned by the universities, also encouraged higher education to put in place programmes that develop skills and qualities as well as ensuring a sound understanding of subject matter.

However, that does not mean that there is no resistance to the idea. Many academics are suspicious of closer links to business. While not often articulated in print, there are frequently expressed reservations within the academy that enhanced employability links will infringe academic autonomy, undermine critique and result in 'training' rather than 'education'.

The competence model in its dominant form in Britain treats the production of learning as a process susceptible to central governance through a systems approach based on the specification, monitoring and assessment of outcomes. It is a model which has aroused much debate among practitioners and researchers, particularly as those centrally involved in technical, vocational and professional education and training question current notions of competence and resist the changes involved in their traditional professional responsibilities.

(Bates, 1999, p. 116)

There are, in addition, 'champions' of the resistance: Barnett (1997), for example, has consistently cautioned about the need for higher education unfettered by the needs of business and unencumbered by concerns over competencies.

Identification and supply model

At governmental level, the agenda has clearly shifted to a reconceptualisation of the higher education mission, which higher education needs to address positively rather than retreat into cloisterism (Harvey, 1995) and refuse to have anything to do with what they might see as 'training for jobs'.

The onus being placed on higher education as part of this employability strategy is threefold:

- to make closer links with employers to help them identify and adopt strategies to overcome any skill shortages;
- to be a responsive provider of education or training in areas of higher-level skill shortage;
- provide graduates that are more 'work-ready' by ensuring that employability elements are explicit parts of undergraduate programmes.

However, this simple rationalist model of identification, partnership and action is rather more complex in practice.

Skills gap

Analytic studies of the labour market have suggested that there is a skills gap between the labour requirements of industrially developed societies and the outputs from the education system (O'Leary, 1981; Lindley, 1981; Teichler, 1989; TUC, 1989; PSI, 1990; IoD, 1991, 1996; Khawaja, 1991; FSW, 1998; EG, 1998).

For example, the Welsh Development Agency in partnership with eleven other agencies, and supported by the European Social Fund, have undertaken *A Future Skills Needs* study for Wales. The study attempts to explore the extent of skills shortages, usually from the employers' point of view, and to make tentative suggestions about overcoming them (FSW, 1988). Similarly, the excellent employment growth of recent years, and in particular Ireland's success in attracting overseas electronic companies, has put pressure on Ireland's supply of certain skills. The Irish Government announced a new Business, Education and Training partnership in late 1997 to develop national strategies to tackle the issue of skill needs, manpower estimating and education and training for business. An Expert Group on Future Skills Needs (EG, 1998) produced an initial report focusing on technology and estimated an annual skills gap, over the next few years, of 2200 technologists (64% at the level of technician and 36% at degree or professional level). The aim is to find ways, in the short-term, to attract in, upgrade or retrain people to fill this gap. The time-lag is such that the restructuring of higher education would not produce suitably qualified people quickly enough.

Reports based on analyses of skills shortages are further endorsed by anecdotal accounts and through the voice of pressure groups, especially of large graduate recruiters, such as the surveys undertaken by the Association of Graduate Recruiters. However, the identification of skills gaps are not as straightforward as they may appear. On one hand, there are communicative and perceptual problems associated with identifying skills gaps and, on the other, there are analytic problems.

Communicative and perceptual problems (Harvey with Green, 1994) include:

- a view that education is a 'once-and-for-all' activity, which ignores the need for life-long learning and skills updating.
- a lack of communication between higher education and commerce and industry;
- the perceived threat to academic autonomy and freedom posed by closer links to commerce and industry.

The main analytic problem is to distinguish between *processural* and *structural* shortages. The former reflects the inability to match those people who have the skills to available vacancies. The latter is more problematic and refers to a gap between the requirements of industry and commerce and the available skills in the economy.

Analysing the extent of a structural skills gap is difficult for five reasons:

- identifying the economic unit of analysis: is it the locality, region, country, or European community?
- identifying the sum of available skills;
- identifying individual and hence summative requirements: being clear whether structural skills gaps are the result of missing individual skills or missing skill combinations? For example, there are plenty of graduates with good IT skills but poor teamworking or communication skills. As the EC noted at the start of the decade:

One feature of current skills shortage is the *widespread lack of important generic skills* and social skills such as quality assurance skills, problem-solving skills, learning efficiency,

flexibility and communication skills. These are in addition to *shortages of critical scientific and technological skills*. In the 1990s the skills content of work is expected to increase. There will be a greater proportion of workers needing communications, language, management and organisational skills.

(EC, 1991, p. 4)

- identifying transformational needs: often employers are unaware of what skills they need to help them transform and thus organisations become trapped into adapting their requirements to the skill level of the available people (FSW, 1998, p. 105);
- identifying and specifying the difference between the ‘expressed requirements’ skills gap and the ‘latent needs’ skills gap;

Furthermore, studies of skills gaps in the past led to various attempts at planning educational provision to match projected skills shortages (Pearson, 1976; DE, 1981; IMS, 1981; Fulton, Gordon and Williams, 1982) but rapid change resulted in forecasts being inexact. Current thinking, though, is tending to revert back into the cycle of identification and changing supply. However, this process, even if it includes accurate analysis and prediction, is far too cumbersome and takes too long — between 5–10 years for any noticeable affect — by which time the requirements have moved on. Chasing the ideal skill-balance in this way is, thus, a problematic strategy. A more appropriate one would be to educate a flexible, empowered labour force.

Organisational change and graduate attributes

At an organisational level, employers have been, for some time, proclaiming the need for highly educated and skilled people if their businesses are to be successful in a rapidly evolving, global economy (DTI/CIHE, 1990; Brown and Lauder, 1992).

The graduate recruitment market is a key interface where employers seek highly educated (mainly young) recruits. This graduate market is in a ‘state of flux’ as a result of high numbers of diverse graduates, many of whom cannot find ‘appropriate’ permanent posts (Pearson, *et al.*, 1999, p. 1). This fluid situation reflects the changes in organisational structure and the consequent nature of the ‘graduate job’ (Harvey, Moon and Geall, 1997).

Downsizing, delayering and flexible working arrangements

Most organisations in which graduates are employed have undergone significant change in the last decade and most are developing structures and practices to enhance their flexibility for further change. Respondents to the *Graduates’ Work* (Harvey, Moon and Geall, 1997) survey, suggested a variety of scenarios and, although there is little agreement on the nature of future changes, there is overwhelming agreement that things will continue to change, both in terms of internal organisational structure and the focus, objectives and future strategies of organisations. These changes will be prompted by the continuing information revolution, by a growing awareness of the need to be responsive to customers, clients and other stakeholders, and by the need to adopt an international perspective. These changes can be summarised as follows.

- Downsizing has been a feature of the last decade and many organisations, large and small alike, believe that they have become ‘leaner’ and ‘fitter’. Some

respondents are of the view that downsizing had reached its limit while others think that further reductions in personnel will take place, although this is likely to affect 'routine production services' more adversely than 'symbolic-analytic services' (Reich, 1991)

- The majority of organisations have undergone significant delayering in the last decade and most expected this process to continue, but at a slower rate. For most organisations, delayering involved a combination of removing 'unnecessary' layers of middle managers and giving managers a broader portfolio.
- Flexible contractual arrangements, including part-time and short-term contracts, outsourcing and home working were expected to increase but not to the extent that some forecasters predicted.

The disappearing traditional graduate career

There is a growing perception in industry that the traditional graduate job is disappearing. While this is not entirely true in the UK and, I suspect, definitely not true in other European countries, there is a lack of clarity, as we approach the 21st Century, as to what constitutes a 'graduate job'.

Changes in the organisation of business have effectively put an end to the 'graduate job' (Harvey, Moon and Geall, 1997). The Association of Graduate Recruiters now defines a graduate job as any job that a graduate does. This is not a fatuous response to a changing situation but one that reflects the diversity of graduate employment. It is also indicative of a growing tendency for graduates 'to grow jobs' within the organisation structures, beyond fairly narrowly designated sets of tasks, to entirely new roles that respond to or anticipate the constant changes in the world of work.

In this context, it is thus irrelevant to ask whether there is an oversupply of graduates. What is important is the general upskilling of the work force in Europe and, with it, the broadening of opportunity. This requires that graduates are better informed about opportunities but also are made aware of the limitations and changing nature of graduate careers. Christian Fisher (1998), for example, suggested that Danish graduates are not as aware as they ought to be of the demands of the world of work. Students, in general, are not really aware of the need for transferable skills, and tend to work for money without considering skills development.

Although downsizing and delayering result in fewer jobs overall, especially in large organisations, it is less clear that they result in fewer potential graduate jobs. Traditional 'fast-track' graduate recruitment may be declining but the shifting nature of work, with an evident shift towards more ownership of the work process, opens up considerable potential for graduates, provided they step outside traditional preconceptions of a graduate career. Changing structures, associated with downsizing and delayering, increasingly emphasise empowerment, which in turn is seen to benefit from, or even require, a more educated work force.

In short, a new set of graduate opportunities appears to have emerged, which graduates need to be aware of and be prepared to seize and develop:

A lot of traditional jobs have disappeared, have been re-structured.... So the jobs are changing and therefore the type of graduate we are looking for is changing as well to fit these different jobs.... Traditionally the production managers have managed the process, the

engineers have maintained it. We are now looking to amalgamate those roles and have an engineer as a production manager.

(Manager of training and development, large steel manufacturer)²

Restructuring, reorganisation and the development of a more client-oriented approach provide other opportunities for graduate work. Furthermore, graduates are tending to target areas that were previously staffed by non-graduates. There are also indications that expansion in small organisations, especially those providing symbolic-analytic services will provide graduate opportunities. Indeed, more graduates are now being employed by smaller companies than in the past.

Facing up to flexibility

Structural changes aimed at developing a more flexible organisation have implications for graduate recruits. Graduates need to be prepared for a less clear career path and promotion ladder in 'flexible' organisations. Graduates are likely to find that promotion and career advancement will be based on evaluation of performance rather than seniority or time-served. Furthermore, graduates should expect to move between different areas within an organisation rather than stay within a specialist field.

I think you can't come in any more and say you want to be a brand manager for the rest of your life, because it won't happen. Even since I have been here we have been through two restructures and my whole career plan, that I had when I came in, now does not exist.

(recent graduate: category manager, large brewing company)

Working in a modern, delayed flexible organisation requires the ability, tact and confidence to interact with a wide range of personnel from senior managers, through colleagues to clients — some of whom may be overseas and operating in a different cultural context.

Within the formal structure nearly everybody is a member of a horizontal team and [graduates] have got to work well with that team.... Then of course they can be in another situation where they are part of a cross-functional team, where there can be quite a range of seniority because of the different skills required for a project.

(head of management recruitment and training, multi-national food manufacturers)

Graduates will also need to be able to work effectively in teams as there is little demand in a flexible organisation for introspective, individualised working. Most organisations operate via project-oriented teams rather than individuals working in a traditional chain of responsibility.

Working in the flexible organisation of the future will involve developing a horizontally and vertically integrated role — being self-servicing in respect of secretarial and administrative skills, using information technology, and developing a broad range of knowledge and ability.

There is no doubt that, although it will be a rocky path, within five years most of us will be filming our own stuff, editing it ourselves, that sort of thing — multi-skilled.

² The quotations from employers contained in this article are from the *Graduates' Work* research (Harvey, Moon and Geall, 1997). The research was designed to provide a firmer base on which higher education might respond to employer perceptions. There have been many studies that have attempted to prioritise skills required by employers in general, or in specific sectors. What these studies have tended to show is that 'skills' such as communication, teamworking, interpersonal skills, problem solving and analysis are accorded high priority alongside attitudes or dispositions such as flexibility, adaptability, willingness to learn, motivation and various self-skills. However, most of these studies rely on quantitative data collection methods such as questionnaires or content analysis of job advertisements. While these are indicative, they tend to suffer from a major problem: terminological confusion and imprecise clarification of concepts. What one organisation means by 'communication skill' may be entirely different from another, which in turn may differ substantially from what a teacher in higher education implies by the term. The research attempts to address these issues in three ways: by exploring in depth, what it is that employers think significant, and recent graduates regard as important in their development, to enable new recruits to become successful at work; by identifying why particular attributes are important in the current, and likely future, workplace organisation; by adopting a qualitative approach designed to get behind the meaning of the skills, competencies and abilities so as to explore what they involve, in practice, in the work setting. In short, the research lets employers and recent graduates speak for themselves to get an idea of the 'real' work context of the roles played by graduates and thus the holistic set of attributes necessary to be successful in different work settings.

(specialist journalist manager, large public broadcasting organisation)

The flexible organisation of the near future is likely to impose substantial workloads and considerable responsibility on graduates from the outset, with an expectation that they will work flexible hours.

We have considered a two- or three-shift system and that may well come to pass.... That would be a major shock for a company like this, which operates on a reasonably high intellectual plane. We are all people who like our weekends and social lives and it would be a reversion, almost a smokestack-type mentality, and that would be horrible. But it is something that we have to accept, it may actually come to pass, in fact it is almost certain to come to pass.

(general manager, small medical lasers manufacturer)

More and more graduates, for their first job, are likely to be in 'non-traditional' areas of work that may not even be 'graduate level'. Graduate expectations of their prospects need to be realistic but positive. Much of their initial work may provide only a low level challenge. In which case graduates need to 'grow the job' and there is encouraging evidence that many do so.

You could do it without a degree but whether you would develop it into something more I don't know. My counterparts in other factories don't have degrees. I don't think it affects the job that they do. It probably affects how they develop that job, whether they go looking to add responsibility to what they have already got.

(recent graduate, buyer, medium-sized health product manufacturer)

Satisfaction with recruits

All of this means that the graduate job is unlikely to involve an extensive period of integration and in-house training. On the contrary, more and more graduates have to 'hit the deck running'. Therefore, it is heartening to find that employers are mainly satisfied with the graduates they recruit. Despite some statements of discontent (CBI, 1989, Tate and Thompson, 1994) research into employer satisfaction has shown that in most respects graduates are satisfactory and fulfil or exceed employer expectations (Harvey with Green, 1994; Stasz, 1997; IES, 1998). For example, a recent study of 100 human resource executives and personnel directors, mainly from the Times Top 500 companies interviewed in Sept. 1998, 90% indicated that they were satisfied with graduates recruited: an increase from 75% in 1997 (PHR/G, 1999).

However, what is it that determines employer satisfaction?

When employers say that they are satisfied it means that they are satisfied with the *standard* of graduates (even if the criteria for this are not always clearly specified) *or* that graduates fulfil the *requirements* expressed by employers *or* that employers get a *return* for the money they invest in graduate recruitment and employment *or* that graduates assist the organization to *adapt* to the rapidly changing situation of the 1990s and beyond. These are not mutually exclusive and employers may judge their satisfaction by one or more of these. Furthermore, the basis for judging satisfaction for one area (such as graduate knowledge) may be different for judging satisfaction with another area (such as interpersonal skills).

(Harvey and Knight, 1996, pp. 58–9)

These different emphases on satisfaction reflect different organisational structures and ethos. Increasingly, organisations see themselves as faced with the issue of flexibility (Hutchinson & Brewster, 1994) and can be characterised by the way they respond to that challenge.

Organisational flexibility

Flexibility is a complex notion, by no means restricted to flexible working arrangements. Although cost concerns tend to predominate, it is possible to identify a continuum of flexibility concerns ranging from 'cost-flexibility' through 'response-flexibility' to 'stakeholder flexibility' (Harvey, Moon and Geall, 1997).

Cost-flexibility

Cost-flexibility refers to the ability of an organisation to respond to financial imperatives. Many organisations regard cost-flexibility as essential to establish, retain or maximise their market position: be it measured by market share, turnover, profits, or ability to demonstrate effectiveness in artificial public sector 'markets'.

In essence, a cost-flexible organisation is able adjust its expenditure to meet actual or forecast changes in its variable income. It does this by reducing the proportion of its total costs that are fixed costs, in particular it treats labour as the major fixed cost. Flexibility is, thus, achieved through contractual arrangements that enable the organisation to adjust its labour costs to match the flow of income-generating work. This may involve adjusting the numbers of paid workers through the use of short-term and part-time contracts to meet peaks and troughs in work activity. Alternatively, flexibility derives from contractual arrangements that permit changes in the *workload* of a relatively stable work force.

Cost-flexibility is heavily driven by financial measures of performance, conformity to established added-value practices and a considerable degree of self-management. Communication is usually in the form of top-down requests for information and bottom-up syntheses and recommendations for action. Opportunities for employees to control their working situation tend to be constrained by well-established parameters.

Response flexibility

Response flexibility emphasises the need for organisations to be more responsive to customers, clients or stakeholders rather than just shareholders. Response flexibility values employee, customer and client loyalty. Response flexibility moves towards a culture in which diverse views are considered and which emphasises leadership towards a common purpose rather than controlling management towards a singular financial objective.

In practice, response flexibility permits a considerable degree of project working, local management control and encourages local leadership. The response-flexible organisation is cost-conscious but also attempts to develop partnerships with client groups to secure a mutually beneficial longer-term future.

Stakeholder flexibility

Stakeholder flexibility sees flexibility as necessary for more than cost-adjustment purposes. Stakeholder flexibility is not just about employees being flexible to suit the financial imperatives of the organisation. It is also about the organisation being flexible to maximise the potential of the work force. Stakeholder flexibility is characterised by a structure that effectively engages stakeholders in the organisation's

strategic decision making, direction and ethos, by openness and dialogue, by a range of success criteria in addition to financial indicators, and by a supportive environment for innovatory facilitating leadership. A stakeholder-flexible approach:

- communicates its clearly-defined purposes and values to all those important to the company's success;
- realises that by learning from all those who contribute to the business it is best able to improve returns to shareholders;
- builds reciprocal relationships with customers, suppliers and other key stakeholders, through a partnership approach (RSA, 1995)

There is a preoccupation in Britain, probably more so than many other European countries, with financial performance. However, to be able to predict changes and be able to discover what changes will be needed in the medium term requires changing attention from the 'financial health of the organisation to its strategic health' (BOC/LBS, 1994, p. 23). Companies that have profits as their major goal are less profitable, in the long run, than people-centred organisations (Waterman, 1994) and corporate cultures that emphasise a range of stakeholders have better long-term profitability (Kotter and Heskett, 1992).

Empowerment of the work force

Expansion, restructuring and reorganisation, alongside more intensive use of information technology and the emphasis of a client-oriented approach provide the impetus for a shift towards a more empowered work force. While implicit in many comments, about ten per cent of the *Graduates' Work* sample explicitly related delayering to the empowerment of the work force. However, empowerment means different things in different organisational contexts. Empowerment can be seen to fall into three broad categories: 'self-regulatory'; 'delegated'; and, 'stakeholder' approaches.

Self-regulatory empowerment

In many areas, empowerment appears to equate with the encouragement of self-management which ranges from 'taking a lot of responsibility for your own actions' through to 'allowing people who can do a job to manage it themselves'.

'Self-regulatory' empowerment involves training staff to take on responsibility and to develop a wider set of organisation-determined competencies. 'Self-regulatory' empowerment improves communication in as much as there are fewer levels to block the flow of information. Furthermore, a single manager may be responsible for a wide range of areas in which there are often cross-cutting teams so there is less departmentalisation to inhibit communication, although the communication down from strategic-level management may still be inhibited.

'Self-regulatory' empowerment leads, in theory, to a greater feeling of ownership of the work situation but in practice, overloading self-regulatory employees or teams with too much work and responsibility means that they are not able to plan, prioritise, or be proactive: their whole time is spent meeting the next deadline and feeling overwhelmed by the number of balls they have to keep juggling at once. Employees are likely to feel only nominally empowered with little sense of real ownership and, therefore, exhibit little deep-seated loyalty.

There is a presumption in some organisations that, with an increase in the number of graduates, the work force will be sufficiently educated and self-assured to take on the roles formerly entrusted to intermediate managers.

Delegated empowerment

One manifestation of empowerment linked to delayering is the delegation of responsibility to managers to develop appropriate strategies at the local level. Delegated empowerment provides a good deal of local control and feeling of ownership. However, it is a limited ownership as delegated empowerment usually involves providing people with a framework within which to work but leaving them to make decisions, show initiative and develop ideas, provided they remain within the parameters.

Increasingly you are more in charge of your own destiny, so long as you work within the regulations of the bank then you can almost reorganise your own branch or job and move it in the direction you want. So you are given a lot more power at grass roots level to develop the business how you see fit. ... That brings its own pressures in that if you have changed things and you don't perform then there is only you responsible.

(branch manager, large financial institution)

Stakeholder empowerment

'Stakeholder empowerment' involves broad-ranging development and training of employees. It sees people as the key resource in the organisation, one that needs nurturing beyond the immediate utilitarian requirements imposed by seeing training as an investment requiring a return.

At one extreme, investment in employee development and training is seen as investing in the development of effective critical reflective citizens. Slightly less altruistically, organisations are seeking to include a range of stakeholders in order to stimulate ideas, encourage loyalty and develop a culture of communal involvement in coping with change. The company ethos is communicated to all stakeholders and innovation is encouraged in a secure environment. Ownership is embodied in leadership rather than management and is disengaged from formal structures, being located in team project working.

Stakeholder empowerment is compatible with a stakeholder-flexible approach in which employees, amongst others, are given a larger stake and involvement in the determination of the purpose and direction of the organisation.

In essence, empowerment of the work force, in whatever form, is about finding ways to actively involve employees in dealing with change.

The flexibility option and the nature of empowerment provided for graduates provide the context in which employers seek out the type of graduates they want.

Graduate skills

A degree may once have been a passport into graduate employment: it was indicative of a level of knowledge and intellectual ability. However, as a result of organisational changes and the expansion in the numbers of graduates, this is no longer the case. Although graduate jobs are expanding, so is the supply of graduates. In addition, many employers are also looking for various types of experience. Hence a degree is

no guarantee of a job, let alone a career, and should only be seen as reaching ‘first-base’ in the recruitment process:

...the fact that they have that degree basically confirms they are people who think in a certain way and have certain abilities, so the next stage is a number of key competencies.
(personnel manager, multi-national food manufacturer)

Increasingly, ‘graduate attributes’ are more important in the recruitment process than the graduates’ degree subject. United Kingdom employers are at the forefront of ‘any discipline’ recruitment. That is, the majority of vacancies filled by graduates do not require someone from a specific discipline. On the contrary, employers recruiting in the UK often positively seek out graduates from disciplines other than that which would appear to be relevant. For example, many large accountancy and management-consultant firms seek history, classics, social science or physics graduates rather than accountants. Software firms are not looking for computing specialists they need IT-literate people who can communicate and work in teams.

Subject-specific knowledge is not the primary determinant of suitability for employment in most graduate recruitment, the main exceptions being medicine and engineering. Graduate recruiters want a raft of other skills in addition to a first degree and these override the degree specialism in many areas (CBI, 1994, 1995; AGR, 1995; CIHE, 1996; Hansen, 1998). Similarly, Fisher (1998), commenting on Denmark, noted that employers, are also becoming less concerned about the field of study. What they want are bright graduates and they tend to use grades, rather than subject area, as a first filter. More and more employers are taking ‘exotics’ those graduates with degree subjects not apparently linked to the core business.

We have done some research, and in the long-term non-lawyers are more successful than lawyers. We take about a third non-law and two-thirds law, because for a whole variety of reasons we have to train non-lawyers for a year more, so it costs us significantly more. We don’t care where they come from or what their discipline is as long as they are the best.
(head of personnel, large law firm)

The skills needed

Employers and their representatives consistently say that, to succeed at work, most people in future must develop a range of personal and intellectual attributes beyond those traditionally made explicit in programmes of study in higher education institutions.

We do look for communication skills. We look for someone who is a team player. We look for someone who has got the ability to put forward ideas persuasively. We like to recruit people who have good social skills, they are able to relate to other people well. Linked in with that is personality and also the ability to cope with stress.

(partner, large law firm)

At root, employers want *interactive* and *personal* attributes. The core interactive attributes are communication, teamwork and interpersonal skills. These are necessary to communicate, formally and informally, with a wide range of people both internal and external to the organisation; to relate to, and feel comfortable with, people at all levels in the organisation as well as a range of external stakeholders, to be able to make and maintain relationships as circumstances change; work effectively in teams, often more than one team at once, and to be able to re-adjust roles from one project situation to another in an ever-shifting work situation.

Personal attributes are attitudes and abilities including intellect, knowledge (in some cases) willingness and ability to learn and continue learning, ability to find things out, willingness to take risks and show initiative, flexibility and adaptability to respond, pre-empt and ultimately lead change; and 'self-skills' such as self-motivation, self-confidence, self-management and self-promotion. These personal attributes are important to allow graduates to fit into the work culture, do the job, develop ideas, take initiative and responsibility and ultimately help organisations deal with change (Harvey, Moon and Geall, 1997).

On one level the set of specified skills has not changed greatly for a quarter of a century: communication skills, numeracy, self-confidence and self-discipline, problem-solving, analysis and interpersonal skills featured alongside knowledge and intelligence in organisational graduate specifications in the 1970s (Kelsall, Poole, and Kuhn, 1972).

Technological and organisational changes over 25 years have added ICT skills, teamworking, flexibility, adaptability. Furthermore, 'problem solving' has become 'creative problem-solving' and risk-taking has become a key attribute. On the other hand, there is much less emphasis on knowledge and far more on willingness to continue learning.

Adaptive, adaptable and transformative

Employers want employees who can deal with change. At one end of the spectrum, coping with change involves responding to cost-flexible pressures. At the other end, employers want transformative agents who are empowered to deal with change. Employers take on graduates because they add value and, potentially, help transform the organisation.

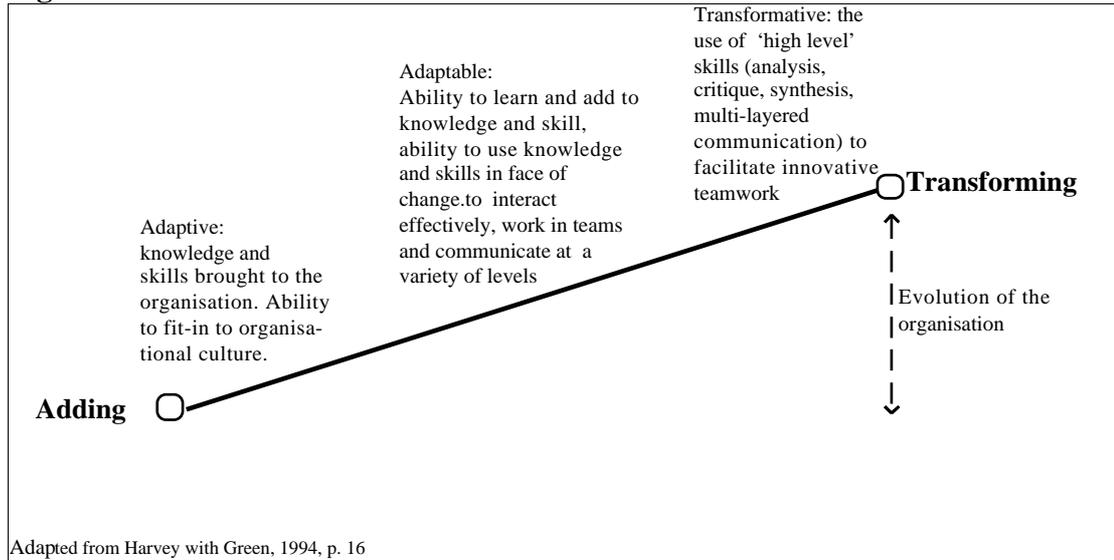
This differential role of graduates can be characterised as an enhancement continuum (Figure 1) such that 'the more that graduate employees are able to operate along the continuum the greater the potential evolution of the organisation' (Harvey with Green, 1994, p. 16).

Employers want people who can 'fit-in' and be effective as rapidly as possible within a given context. Employers want people who adapt to the organisation, understand the job requirement and produce work that has a clear return as quickly as possible. In short they are looking for *adaptive* graduate recruits. The adaptive employee tends to take few risks, does the required job competently, tends to avoid questioning established procedures, which they are able to imitate and adapt to changing circumstances. Adaptive graduates have high expectations that if they please others they will succeed. Adding value, especially in the short-term, relies on knowledge, speed of learning, ability to play a role in teams and generally adjusting to the culture of the organisation.

... what you do need is people with the basic ingredients who are self-starters, to fit into this industry, to fit into the culture that we have.

(manager of training and development, large steel manufacturer)

Figure 1: Enhancement Continuum



Most organisations want something more than adaptive graduates, they are looking for *adaptable* recruits — able and willing to learn and add to their knowledge and skills, demonstrating initiative within the pre-set framework; able and confident enough to use their knowledge and skills in the face of change; and interacting effectively to motivate teams and to communicate at a variety of levels:

Somebody who can work both in a team and on their own, is not afraid to ask questions if they do get stuck. Another aspect is providing fresh ideas. No one person has a handle on all good ideas. So not being afraid to push their own ideas forward, but also, a big thing we look for is, being able to compromise as well.

(software development manager, small, operator-systems design firm)

Individuals have to learn to adjust, to 'fit in' with what is there. However, a distinction can be seen between the adaptable individual who adjusts to a fast-changing situation and an adaptive individual who, in fitting in with the expectations of others, may lose what makes them unique. Taken to its extreme, the adaptive individual loses the core sense of self in order to please significant others.

Employers also want people who can take their organisation forward and who see change as an opportunity not a threat. They want, in short, 'transformative agents', who can help the organisation evolve. Transformative attributes tend to include such things as critique, synthesis, and enabling leadership. The kind of person required by organisations who emphasise transformation is someone who can lead, rather than manage, who can work with and get the best out of other people, maximising their potential and their ideas rather than controlling them through setting specific tasks or tight frames of reference.

I want leaders, I want captains of teams rather than managers of teams. I want that captain to be on the pitch and not the manager up in the stand. I'm not sure university can actually give them the attitude of mind that means they are going to be leaders, that they are going to be risk-takers, that they are going to actually create teams around them and drive those teams, both by helping and by delegating. You tend to get a guy, if he is very good he moves forward himself, he does everything himself, he becomes the proverbial manager — too busy to do anything — and subsequently he doesn't make his team do anything at all.... You just have to have the ability to work *with* people, not have people work *for* you..

(director commercial operations, large vehicle manufacturer)

However, despite the different emphases, the difference between adding value and transforming is not primarily a different set of skills but the difference between having abilities and putting them into practice. It is about the way a range of skills and abilities are applied. It is the difference between fitting into a team, working in a team, and getting the team to push the boundaries. It is the difference between adding value by bringing knowledge to a situation and reconceptualising by asking appropriate questions. It is the difference between having the interpersonal skills to get on with clients, customers, colleagues and using interpersonal skills to 'include' a range of stakeholders.

The real issue is how graduates relate to the enhancement continuum. It is misleading to think of recruitment at one point on the enhancement continuum, with, for example, the 'intellectually brightest' or 'most knowledgeable' graduates recruited at the transformative end of the spectrum. Intellect and knowledge, while important, are not direct indicators of transformative potential.

More important is the ability to move up and down the enhancement continuum and to operate at the right place at the right time. There is a tension between 'fitting the organisation' and being able to innovate, anticipate change and helping develop for the future. In any social setting some level of adaptation is necessary. There are times and places when transformative agents need to just add value. Conversely, graduates who mainly add value also need, as appropriate, to stretch the boundaries or 'grow the job'. A failure to grasp this adaptable requirement, and a presumption that graduates are primarily 'transformative', leads to graduates being more destructive than constructive. Failure to understand organisational culture, commercial pressures, or lack of prior opportunity to put theory into practice can result in a graduates being a 'loose cannon'.

Individuals cannot act alone to transform organisations, they can only operate within the context provided by the organisation. Enabling and empowering employees to move along the continuum is fundamental to the success of an organisation.

Workplace profile

We can begin to build up a 'workplace profile' (Harvey, Moon and Geall, 1997, p. 31) in which the nature of the organisation — adding value, evolving or transforming — can be mapped against the ethos, flexibility option, employee empowerment, and graduate attributes. This can be extended to include staff loyalty, staff development, recruitment procedures and the nature of the higher education-employer interface (Figure 2).³

For example the 'adding value' organisation, whose main imperative is responding to financial imperatives, has little opportunity to exhibit loyalty to employees. It fosters an environment in which the employee's loyalty is primarily dependent on motivating factors such as earnings, promotion or status. Short-term vision by the organisation does not cultivate long-term vision from the employee, and there is no incentive to be committed to the collectivity. Similarly, such organisations use 'safe' recruitment procedures, more often than not, designed to recruit people who will 'fit in' to an organisation and get on with things as quickly as possible —

³ It should be noted that the Workplace Profile is an orienting device to help clarify the relationship between graduate attributes and organisational change in the workplace. There is no 'ideal' profile, in the sense of desirable, optimum or stable state, to which individuals or organisations should strive. The position on the profile will, in part, be determined by external forces. There is no assumption that all individuals or all parts of a complex organisation will fit into a single point on any dimension of the profile. For example, some individuals may add value through directly applicable knowledge and being able to work effectively in a project team, others may have innovative ideas and be able to inspire teams to push boundaries. Some parts of an organisation may need to focus on adding-value while others may prioritise innovation. What this schema offers is a means by which to understand the nature of the organisation and the graduate role within it. It is not to suggest that the transformation end of the continuum is intrinsically better than the value-added end. On the contrary, within every organisation there must be a balance between value-added and transformation.

prioritising ‘self-regulatory’ or ‘delegated’ empowerment. In the value-added organisation, furthermore, a cost-flexible approach matches training to organisational needs. It is more about fulfilling immediate needs and improving job-relevant competencies than any investment in the wider development of the individual. The cost-flexible approach to the higher education-employment interface emphasises short-term enhancement of the organisation, through such things as commissioned research, work-related training courses and continuous-professional development. In such cases, employers are customers looking for value-for-money for their investment. Higher education is a supplier of a product and values such links for the increase in income that are generated (Figure 2).

If an organisation is to be flexible in terms of cost, and also take an inclusive approach — being responsive to a wider group of stakeholders — then there needs to be a balance of adaptive, adaptable and transformative people. That is, there is a need for people who can work in teams, who can relate quickly to an evolving structure and do not expect rigid lines of command and communication, but also people who are able to go beyond this and who take responsibility, inspire people to take forward ideas, who can take on various roles and grow the job, who lead rather than simply manage people.

Figure 2 Workplace profile

	<i>Adding value</i>	<i>Evolving</i>	<i>Transforming</i>
<i>Flexible organisation</i>	Cost-flexible.	Response flexible.	Stakeholder flexible.
<i>Ethos and performance criteria</i>	Short-term investments Success = profit, one-dimensional PI, financial imperatives.	Cost conscious but attempting to develop partnerships with client groups to secure longer-term future.	Long-term vision — ‘inclusive’ Multi-layered PIs, socially responsible: stakeholder criteria.
<i>Empowerment</i>	Self-regulatory empowerment	Delegated empowerment	Stakeholder empowerment
<i>Graduate attributes and approach</i>	Adaptive knowledge and skills brought to the organisation. Ability to fit-in to organisational culture. Takes no risks, does job competently ‘yes’ people who have high expectations that if they please others they will succeed.	Adaptable: Ability to learn and add to knowledge and skill, ability to use knowledge and skills in face of change, to interact effectively, work in teams and communicate at a variety of levels. Demonstrates initiative within a pre-set framework.	Transformative: the use of transformative skills (analysis, critique, synthesis, multi-layered communication) to facilitate innovative teamwork. Inventive, knows boundaries but pushes them.
<i>Employee loyalty</i>	Loyalty dependent on cash and promotion.	Loyalty based on perception of future progress and commitment to principles of organisation.	Wider commitment to organisation through direct involvement as acknowledged stakeholder.
<i>Staff development and training</i>	Looking for enhancement of job-related competencies: return on investment.	Broader enhancement of staff, although still circumscribed by job relevance.	Learning organisation. Competencies plus: empower employees through broad development of staff.
<i>Recruitment</i>	Safe, conservative — prioritise those who will fit in.	Mixture of job-specific and speculative recruitment as senior management/partner feed stock.	Risky — innovative, seeking those who will lead change.
<i>Higher education-Employer interface</i>	Employers as customers interested in value for money. HE as supplier of product, looking for additional cash.	Mutual involvement in mainly short-term projects for added-value.	Employers as participants, interested in spending time and effort as well as cash in building relationships. Academics listening. Development of partnership and exchange of ideas.

Learning

The employer-higher education interface is thus a complex nexus that needs to address organisational structures and missions on the one hand and graduate attributes on the other. However, it is further complicated by a third dimension: the purpose of learning.⁴

Instrumentalism

As was stated at the outset, this analysis takes as axiomatic that the purpose of higher education is to provide *transformative* learning, which, in itself, requires transformation of the higher education project (Harvey and Knight, 1996). Currently, higher education is heavily characterised by *instrumental* learning, which takes two forms that are pulling in different, and increasingly opposite, directions. I refer to the instrumentalism of the *discipline apprenticeship* on the one hand and the instrumentalism associated with *employability* on the other.

The instrumentalism of the *discipline apprenticeship* is, for many academics, what drives the higher education experience for them as scholars, teachers and researchers. It is an immersion in a subject discipline, an absorption of the morays and nuances of an academic world (Becher, 1989; Evans, 1999). Engaging directly with the world of work is seen, at best, as tangential to principal concern of education and, at worst, as anathema to it.

The instrumentalism associated with *employability* is evidenced in three ways:

- the attempt to predict and plan for skills gaps (discussed above);
- the preoccupation of some academics to ensure graduates obtain good jobs in appropriate industries or professions.
- the instrumental learning of the mass higher education student;

A clear example of business orientation is provided by Kingston University's fashion programme:

Kingston University works in very close collaboration with the fashion industry... "Our links with industry are critical to our success... we are here to serve industry — for us, it's all about getting graduates into really good jobs — and they do go on to become important figures in the fashion world. You will find Kingston graduates in the top roles and positions of influence throughout the fashion industry."

(Bridge, 1999, p.1)

Students, in the mass higher education system, are tending to exhibit more overtly instrumental learning. Often, such learning is extremely narrow and intended primarily to secure a qualification or a job rather than reflect an holistic learning experience.

Yes, I chose the course specifically before I went, I didn't really have a clue what jobs there were at the end of it but I just knew that there was a job doing that kind of thing, designing things, going through the whole process and that if you could do a course that was 70% vocational that would take you to a position where it would be possible to get a job.

4

The adaptiveness–adaptability–transformation continuum can also be juxtaposed to different *styles* of learning. Space precludes detailed analysis of this relationship. A rather crude analysis, for example, might suggest that adaptiveness is compatible with behaviourist-style learning, which emphasises assimilation of dominant culture, conforming to standard ways of doing things, disinclination to go back to first principles, imitative practices that allow for a rapid delegation of responsibility to deal with mundane issues, undertake standard work, and deal with unexceptional problems. The value-added end of organisational development requires learners who can rapidly assimilate 'normal' procedures and be effective in 'doing the job'.

The transformative end of the continuum is more likely to be facilitated by the critical-structural learner who engages with structures, tries to get beneath the surface to understand processes. Critical-structural learners tend to push against the boundaries. Critical-structural learning is about deconstruction of ideas and concepts and reconstruction of alternatives (Atkins, *et al.*, 1993; Brown and Knight, 1994; Harvey and Knight, 1996).

(recent graduate, junior design engineer, small private design consultancy)

Instrumentalism impacts on attendance, range of reading, engagement with course, involvement in group projects, and so on. Recent feedback comments from students from all part of the University of Central England show a growing tendency towards career motivated instrumentalism (Blackwell *et al.*, 1999), for example:

I do feel that I am not prepared in June to find a job and be work-ready.

(BA Art and design)

Lectures on different subjects need to be based on disciplines that actually take place in the work environment.

(BSc Building Surveying)

Potential career prospects is low due to lack of work experience or meetings talks etc. on potential career ideas and how to achieve them.

(BA English Language and Literature)

Instrumentalism is, in a sense, being officially encouraged. A recent DfEE Publication *Labour Market and Skill Trends, 1998/99* commented that the 20% of students who enter higher education with little sense of direction 'would particularly benefit from improvements in the availability of careers guidance at pre-university level'. One area in which organisational structure, graduate attributes, the purpose of learning coalesce, at least on the surface, is lifelong learning.

Lifelong learning

When the concept of lifelong learning emerged in the 1970s it was principally seen in terms of 'second-chance' education for adults who had not benefited from educational opportunities available during childhood and youth (see, for example the resolution adopted by the OECD Ministers of Education endorsing recurrent education as a strategy for long-term structural planning). The 1980s and 1990s have seen a broadening of the concept of lifelong learning to a genuine lifelong endeavour.

Rather than the redistribution of educational resources to provide better opportunities for adults, the new impetus for lifelong learning is more broadly based and includes the following objectives:

- to foster personal development, including the time outside work;
- to strengthen democratic values;
- to cultivate community life;
- to promote innovation, productivity and economic growth.

OECD Ministers of Education adopted the following resolution in January 1996:

This view of learning embraces individual and social development of all kinds and in all settings — formally in schools, vocational, tertiary and adult education institutions and non-formally, at home, at work and in the community. The system-wide approach focuses on standards of knowledge and skills needed by all, regardless of age.

(Alexander, 1997, p. 167)

Thus, lifelong learning is much more than second chance but it is equally much broader than continuing education for work. Rather than a single focus on an educated work force for economic competitiveness, the current approach to lifelong learning has wider horizons:

Future economic prosperity, social and political cohesion and the achievement of genuinely democratic societies with full participation, all depend on a well-educated and trained population.

As such, it is a view compatible with basic philosophy of transformative learning.

The involvement of higher education in lifelong learning has been growing over the last decade and higher education institutions will be expected to play a key role in the continuous renewal of competence in modern organisations.⁵

Despite more clarity about the underlying philosophy of lifelong learning there is still a degree of ambiguity about what lifelong learning involves for higher education in practice. Lifelong learning, in many institutions, is linked to all those areas of work other than undergraduate and postgraduate research degrees. For example, the job description for the newly appointed Director of Lifelong Learning at Coventry University places the major emphasis on enabling second-chance type involvement rather than developing post-graduation lifelong learning.

Others, place more emphasis on the continuation of professional or vocational education (CVE) as part of lifelong learning. CVE develops employer-related knowledge, skills and understanding via short and long training programmes (some of which have accreditation options). CVE is a significant means by which higher education institutions 'contribute to the wider needs of the economy' (Thomas, *et al.*, p. 8). There has certainly been official support for developments in this area in the UK.

In 1994, Higher Education Funding Council for England announced a development fund for CVE provision and made £60m available for the period 1995–99. The intention of the fund was to encourage institutions to make CVE an integral part of their overall strategy. In total 117 institutions submitted bids for funding and 97 were accepted and the programme was audited in 1998 (Thomas, *et al.*, 1998)

The development funding has been used to strengthen links with other employment-related agencies including Training and Enterprise Councils (TECs), Chambers of Commerce, small and medium enterprises, professional bodies as well as major private and public sector employers. The evaluation of the CVE programme strongly supports 'strengthening the relationships between HE and the economy'. However, to better accommodate the expectations and requirements for lifelong learning, the evaluators suggest that any new initiative should be broader in scope than CVE as it is traditionally conceived. In particular, higher education institutions should be encouraged to develop institution-wide, integrated practices and to provide a 'networked response' to the needs of key participants — not least in SMEs (Thomas, *et al.*, p. 7).

The focus of lifelong learning, in practice, and such proposals for a widened perspective seem, nonetheless, to tie lifelong learning to the employability agenda. The wider, democratic, philosophy of lifelong learning does not appear at the forefront of development. Indeed, these approaches to lifelong learning also appear to be rather remote from the philosophy of integrated learning. They are not closely linked to the 'mainstream' education of the university (undergraduate degrees and postgraduate research) nor is there any suggestion that the focus of the university should fundamentally change. In effect, there are two universities — the 'proper one' and the lifelong learning university.

The 'New Reality' is to merge these institutions. The university of the future needs to be an integrated lifelong learning university (or omniversity) not a fortress of

⁵ In some cases the growth in lifelong learning is genuine addition to work and in others it is a re-labelling of professional education that was already being provided.

academic impregnability. The omniversity is a loosely coupled network of academic, community and employment organisations on a regional basis (Harvey, 1988).⁶

What is to be done?

So what should higher education institutions do to ensure they produce transformative lifelong learning? There are various suggestions in the literature about explicitly addressing employability skills in higher education (Atlay, 1998; Roberts and Maycock, 1995; Anderson and Gubbay, 1997) including the provision of skills modules, the revision of curricula to identify skills elements, the assessment of non-cognitive skills, the incorporation of work experience and the use of ‘live projects’. For example, 50 students from different schools within the Faculty of design at Kingston University were involved in a real, two-week project to revive the image of the British retailers, Marks and Spencer.

Alongside these reviews and suggestions, there is a sterile debate about whether ‘employability’ skills should be embedded in the curriculum or taught in separate units. The core of the debate is that embedded approaches to skill acquisition give employability skills the same status as knowledge and oblige all lecturers to address them. However, ‘bolt-on’ options ensure that the skills are covered and have competent teachers to teach them (CVCP/DfEE/HEQE, 1998b, p. 17; Tait & Godfrey, 1999).

The issue, though, is not about the *delivery* of skills training but about integral *learning* within a wider responsive context. Furthermore, it is not about delivering ‘employability skills’ in some generic sense, rather it is about developing critical lifelong learners — and employability is subsumed as a subset within that.

So the focus needs to be on empowering students to become critical learners. However, there is no easy recipe for this.

Empowering learners

‘Empowering learners’ is a phrase that is growing in currency in academic debates about the future of higher education. However, empowering learners means many different things and it is debatable how seriously academia is about giving students control over the educational process and their post-educational lives.

There are several processes for learner empowerment including:

- choice within the curriculum;
- feedback from learners designed to monitor service provision and the learning experience;
- representation of learners on decision-making bodies;
- the development of a critical, transformative approach to learning.

Choice

It is assumed that the more choice learners have within the curriculum the more they are empowered. This is misleading and is a restatement of the consumerist myth that equates choice, from within a dominant frame of reference, with power (to transcend that frame). The selection of a curriculum usually means, in practice, choosing which

⁶ Space constraints preclude discussion of the nature of the regional omniversity.

teaching programmes to attend and thus which assessment to undertake. While superficially liberating this does not necessarily empower the student. An unstructured collection of small units, which the student selects from a bewildering array of available options, often results in lack of coherence and progression in a programme of study.

A more empowering variation on the theme of choice is the much rarer use of learning contracts. While apparently more restrictive, a learning contract has a much greater potential to empower students. The student does not simply choose which teaching programmes to attend but negotiates a *learning* experience. The teacher is seen as a facilitator. The object of the programme is to achieve specified learning objectives through the identification of required knowledge, abilities and skills. The learning contract, negotiated between student and facilitator, identifies how the required outcomes can be achieved. The student controls *how* they learn and when and how it is *assessed*. In an extreme case there could be no lectures or seminars at all.

Monitoring

Student evaluations of service provision, including the teaching and learning experience, are increasingly evident in higher education institutions. Indeed, many national systems of external quality monitoring require that such systems are in place. Broadly speaking, there are three types:

- student evaluations of the teaching (and learning) at a unit or programme level;
- evaluations of the wider student experience, including all those elements of their experience that impinge upon their learning such as, programme organisation, learning resources, central services and the university environment;
- monitoring of the ‘contractual provision’ guaranteed by institutions to learners (in the UK these are in the form of ‘charters’).

Student evaluation of teaching performance often relies on simple questionnaires that ask such things as whether the teacher presents well, is enthusiastic, turns up on time, makes useful comments on assessed work, and so on. Although student feedback on teaching and learning is important, such stylised forms of student monitoring of teacher performance is a limited form of empowerment for several reasons. First, as a procedure it tends to be effective in identifying very bad teachers but far less effective in identifying the mediocre and good. More importantly, it is not an effective means for suggesting how improvements can be made. Nor is it a method for ensuring such changes are put in place and the learners are rarely ever informed of outcomes. Learners are also usually not involved in formulating the questionnaires and the questions tend to represent the interests of teachers or of their managers. Finally, these questionnaires rarely ask student to reflect on their *learning*, rather than the lecturers’ *teaching*.

Broader evaluations of the learning experience, through such things as institution-wide student satisfaction surveys offer a means of ensuring a student voice and a continuous process of monitoring and improving provision in respect of all aspects of the learning experience. However, this is only an effective form of empowerment if learners are involved in the identification of the areas of concern and if there is a clear process of accountability and action that follows the analysis of student views. Such an action cycle requires the involvement of senior management and a procedure for ensuring that appropriate action takes place. However, even in such ideal

circumstances, this is a limited form of learner empowerment as its focus is on the continuous incremental improvement of the learning context rather than the direct empowerment of the learner.

Representation

Student representation provides another potential form of empowerment. If students are represented on higher education committees and decision-making bodies they can, at least, monitor and report back on the procedures and outcomes. Ideally, students on such decision-making bodies should also have an effective voice. All too often, students are not only in a tiny minority but are not able to engage effectively because of the infrequency of the meetings, the rapid turnover of students and the lack of opportunity to prepare themselves for the style and content of meetings.

Even when students are listened to, it is often the case that the points they are making are not heard because they lie outside the frame of reference or taken-for-granted of the meeting. There is a danger that representation apparently empowers but, in practice, disempowers. In reality, learners need to have equal representation on decision-making bodies if the learner perspective is to be heard.

Critical

While each of the above approaches offers some control over the education process it is debatable how far they go to empowering learners in their post-education careers. The fourth approach attempts to do both. Students, it argues are empowered by developing *their* critical, reflective and transformative abilities. This requires an approach to teaching and learning that goes beyond requiring students to learn a body of knowledge and be able to apply it analytically. Anne Brockband and Ian McGill (1998, p. 2145) argue that facilitation of learning rather than teaching is necessary to 'encourage critically reflective learning'.

Developing a critical approach to learning is about challenging preconceptions, both those of the learner and the teacher. It is about being able to develop opinions and be able to justify them, to be able to think about knowledge as a *process* not some 'thing' they tentatively approach and selectively appropriate. A critical approach is about students having the confidence to assess and develop knowledge for themselves rather than submitting packaged chunks to an assessor who will tell them if it is sufficient or 'correct'. It ultimately requires students to self-assess, to be able to decide what is good-quality work and to be confident when they have achieved it.

Students need to be guided in critical learning and one of the best ways is to make the learning process transparent rather than opaque: to make it so that, for students, it is their learning rather than an initiation into the academic's mysteries. One important element of this is the way that assessment of knowledge and abilities is undertaken.

To empower learners it is important to:

- clearly and explicitly specify the range of skills and abilities, as well as knowledge, that should be achieved from a programme of study;
- explicitly assesses, both formatively and summatively, the full range of abilities (not just knowledge and, implicitly, the higher-level intellectual skills of synthesis, analysis and critique)
- provide clear assessment criteria for each piece of assessed work and give clear feedback against these criteria.

In short, empowering learners requires an approach that treats students as *intellectual performers* rather than as compliant audience. It transforms teaching and learning into an active process of coming to understand. It enables students to go beyond the narrow confines of the ‘safe’ knowledge base of their academic discipline to applying themselves to whatever they encounter in the post-education world.

Increasingly, in a world of change, in which flexibility is a watchword, learners need to be able to help the organisations, in which they work after graduation, to transform in the face of this rapid and continuous change. Graduates will not be able to do that if they are not able to work in teams, communicate well, analyse, and synthesise. More importantly the future graduate needs to be self-transformative, which requires reflective and critical abilities.

Work experience

The use of work experience as part of programmes of study helps to provide a wider view. At one level, as Fisher (1988) pointed out in relation to Danish students, work experience is valuable as it gives students the opportunity to appreciate work-place culture and to understand that they are not going to walk into a job. Although this is indeed valuable in itself, work experience also potentially empowers students by developing their self-skills (not least self-confidence), by providing an alternative context in which to apply their learning, and by giving an opportunity to adapt to a different world, with different priorities and time-schedules. Work experience, according to the vast majority of students who undertake it, and the majority of their teachers, is an extremely powerful developmental process (Westhead, 1997).

To that end, and in the wake of the recommendations of the National Committee of Inquiry into Higher Education, the DfEE has recently funded eight projects in the UK aimed at increasing and enhancing the provision of work experience opportunities for undergraduates (for example, Harvey, C., *et al.*, 1998).

Ironically, this comes at a time when the relative involvement by students in UK higher education in sandwich courses is declining (Table 1).

Table 1: Sandwich course students as a percentage of full-time first degree undergraduates (home students)

%	1995	1996	1997	Change 1995-1997	% change (1995 = 100)
Computer science	47.3	44.2	42.7	-4.6	-9.7
Mathematical sciences	17.3	16.1	13.6	-3.6	-20.8
Business and administrative studies	39.3	37.2	35.8	-3.5	-8.9
Engineering and technology	26.4	26.1	23.3	-3.1	-11.7
Physical sciences	11.9	10.9	9.8	-2.1	-17.6
Architecture, building and planning	36.8	34.8	34.9	-1.9	-5.1
Agriculture and related subjects	35.2	34.8	33.6	-1.6	-4.5
Subjects allied to medicine	12.0	13.4	10.9	-1.1	-9.2
Social economic and political studies	4.0	3.4	2.9	-1.1	-27.5
Biological sciences	10.5	10.3	9.7	-0.8	-7.6
Creative arts and design	5.3	5.8	4.8	-0.5	-9.4
Languages	3.8	3.9	3.8	0.0	0.0

Adapted from Pearson et al., (1999, p. 37).

Over the period 1995–7 there has been a drop in the number of students on sandwich courses in almost all subject areas. This is despite the growing demand for more work-ready graduates, employers own well-rehearsed praise of sandwich students and students own endorsement of sandwich education. Apart from languages, where there has been no change, the proportionate drop in the percentage of all full-time students who are on sandwich course varies from -27.5% in social economic and

political studies to -4.5% in agriculture and related subjects (Table 4). The main explanation is that as higher education has grown, sandwich provision has grown much more slowly. The reasons for this include:

- pressure on teaching staff, as a result of rapid expansion, and consequently less willingness to take on the extra burden of work-place based supervision;
- lack of resourcing for sandwich courses;
- lack of prestige for staff involved in placement work;
- pressure from the previous government to shorten courses to reduce costs;
- growing student indebtedness, which may discourage sandwich students (although for many it is a year earning money and reducing debt).

There may be official interest in more work experience, although it has to be developed in ways other than sandwich courses, but the process will take time. There is no possibility of reversing the current decline in much less than ten years unless drastic policies, backed up by funding, are introduced. Employability is battling against academic culture.

It must also be remembered that involvement in work experience is only of interest to the vast majority of employers if it benefits them (Ellis and Moon, 1998). However, although it is important to take this into account, at root, work experience must be fundamentally about developing the learner, not training students to do specific jobs. The training should be a secondary function. Central to successful, developmental work experience is the need for a reflective process. 'With all forms of work experience, the experience of work is not enough in itself. It is the learning that comes from it that is important' (Harvey, Geall and Moon, 1998) This requires systematic reflection, set within the context of a wider sphere of learning, and, where possible, facilitated through the institution. In essence, this is a matter of educational philosophy: one that sees the student not as a product or customer but as a participant in a process.

It is active participation in the process that makes it a transformative experience. Students are not, of course, passive recipients of placement services and work-based learning. HE is not like a package tour, an all inclusive deal in which the holiday maker is passively transferred from one location to the next. It is more like the experience of independent travel where the traveller has a much broader experience to gain by engaging in planning and making their own connections. This means taking some responsibility in defining the experience — making the most of the journey as well as the destination.

(Ellis and Moon, 1998, p. 397)

The reflective process is not always facilitated in practice. The conclusion to a recent study in the UK suggested that the:

extent to which HEIs assist students to maximize these opportunities varies in practice. Many individual university departments have established a range of mechanisms by which a student can reflect on their own skill development and discuss progress drawing on evidence of achievements and performance in the workplace. But it is important that students are adequately briefed on such mechanisms, and that they build on prior curricular activities geared to preparing students to learn from their experiences during the work placement. Alongside such tools developed with HEIs, some employers have developed their own 'placement schemes' which provide a framework for monitoring students' development... It is still the case that very many students on work placements may find themselves without the benefit of either a company 'scheme' or a framework provided by their institution.

(Little, B., 1998, p. ++)

Furthermore, much non-course-based learning linked to employment is disregarded, including the life experiences of older graduates:

As a mature student I am amazed that little or no advantage is taken of the life skills and experience older students bring to academic life.

(BA English Language and Literature student at UCE)

In some cases, non-course-based learning is seen as detrimental to academic learning and discouraged, for example, the ever-growing involvement of students in term-time, part-time work. However, this is a reality for many students. Estimates suggest that up to half of all full-time students are working part-time during term time (Table 2).

Table 2 Surveys and estimates of the percentage of full-time graduates working part-time during term time

<i>Institution</i>	<i>% working</i>	<i>Year</i>	<i>Source</i>
National average	30	1993	Ford <i>et al.</i> , 1995
University of Westminster	45	1994	Edmundson & Carpenter, 1994
Manchester Metropolitan	31	1995	Lucas and Lammont, 1998
University of Central England	30	1995	Mason and Harvey, 1995
Leicester University	18	1995	Hallowell, 1995
Oxford Brookes University	57	1995	Paton-Saltzberg & Lindsay, 1995
University of Huddersfield	40*	1996	Interview with Barry Lee
Ripon & York St John	90*	1997	Interview with David Browne
Wolverhampton University	50*	1997	Interview with Colin Appleby
Rover Group Young People Development Survey, 1998	47	1998	Rover Group, 1998
University of Central England	47	1999	Blackwell <i>et al.</i> 1999

*Adapted from Work Experience (Harvey, Geall and Moon, 1998, p. 49. * estimates*

This suggests that undergraduate education needs increasingly to be seen as part of lifelong learning:

Increasing proportions of students in full-time education are routinely combining work with study, which muddies the water of the school-to-work transition.... It is more useful to conceptualise the school-to-work transition as part of a life-time learning process of transferable skills accrual.

(Lucas and Lammont, 1998 p., 41)

Conclusion

The ‘New Realities’ that ask searching questions about the relationship between higher education and employment are, incidentally, asking about the purpose and structure of higher education. In particular, emphasising the need for the development of critical, reflective, empowered learners raises fundamental questions about traditional forms of teaching in higher education and the priorities of higher educational institutions and governments. In so doing it asks some difficult questions about ‘real’ empowerment of learners. This means that the collegium has to ask itself fundamental questions about its role. It means confronting the traditionalist view:

Does the university have to meet the expectations of students where they are, or is the idea that the students grow to fit the expectations the university has of them? Scholarship involves an independence of mind which starts things and persists with them even when no one else prompts. These are attributes of the adult mind, and it is of the essence of the university that it teaches adults.... That is something which may be difficult to remember in the real world of the late twentieth-century ‘new university’, where a lecturer may face 100 students, some with poor entrance qualifications where the department in which he [sic] teaches is rated low for research, and where the keenest would-be scholar has little time for

his [sic] own work. Struggling to keep alive a sense of purpose in that world, a lecturer might see what has just been said as idealistic to the point of romanticism.

(Evans, 1999, p. 10)

Despite appearances to the contrary, the real challenge of the 'New Reality' is not how to accommodate 'employability' but how to shift the traditional balance of power from the education provider to those participating in the learning experience.

Bibliography

- Alexander, T.J., 1997, Lifelong learning — the OECD perspective', *Lline: Lifelong Learning in Europe*, 3, pp. 166-69
- Anderson, J. and Gubbay, J., 1997, Perception, acquisition and utilisation of employment-related skills', paper presented at the SRHE Annual Conference, Warwick University, December.
- Association of Graduate Recruiters (AGR), 1995, *Skills for Graduates in the 21st Century*. Cambridge, AGR.
- Atkins, M.J., Beattie, J. and Dockrell, W.B., 1993, *Assessment Issues in Higher Education*. Sheffield, Employment Department.
- Atlay, M., 1998, 'Integrating skills into the syllabus', presentation at a Conference on Employability, Copenhagen Business School, October.
- Ball, 1989, *Aim Higher: Widening access to higher education*. London, Royal Society for the Encouragement of Arts, Manufacturers and Commerce.
- Ball, 1990, *More Means Different: Widening access to higher education*. London, Royal Society for the Encouragement of Arts, Manufacturers and Commerce.
- Barnett, R., 1997, Beyond competence', in Coffield, F. & Williamson, B. (Eds.), 1997, *Repositioning Higher Education*. Buckingham, Society for Research into Higher Education (SRHE) and Open University Press.
- Bates, I., 1999, 'The competence and outcomes movement: the landscape of research', in Flude, M and Sieminski, S. (Eds.), 1999, *Education, Training and the Future of Work II*, London, Routledge in association with the Open University, pp. 99–123
- Becher, T., 1989, *Academic Tribes and Territories*. Buckingham, Society for Research into Higher Education (SRHE) and Open University Press.
- Blackwell et al., 1999, *The 1999 Report of the Student Experience at UCE*. Birmingham, CRQ.
- BOC plc and London Business School (BOC/LBS), 1994, *Building Global Excellence*. Study of 21 UK companies. London, BOC/LBS.
- Bridge, 1999, 'Kingston fashion students give a glimpse of the next Millennium', in *Bridge*, The Monthly Journal of Kingston University, Issue 21, July, 1999, p.1.
- Brown, P. and Lauder, H. (Eds.), 1992, *Education for Economic Survival*. London, Routledge.
- Brown, S. and Knight, P., 1994, *Assessing Learners in Higher Education*. London, Kogan Page.
- Burrows, A., Harvey, L. and Green, D., 1992, *Is Anybody Listening? Employers' views on quality in higher education*. Birmingham, QHE.
- Confederation of British Industry (CBI), 1989, *Towards a Skills Revolution*. London, CBI.
- Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom, Department for Education and Employment, Higher Education: Quality and Employability Section, (CVCP/DfEE/HEQE), 1998a, *Skills Development in Higher Education: Short Report*. November, London, CVCP.
- Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom, Department for Education and Employment, Higher Education: Quality and Employability Section, (CVCP/DfEE/HEQE), 1998b, *Skills Development in Higher Education: Full Report*. November, London, CVCP.
- Confederation of British Industry (CBI), 1994, *Thinking Ahead: Ensuring the Expansion of Higher Education in the 21st Century*. London, CBI.
- Confederation of British Industry (CBI), 1995, *A Skills Passport: A Vision for Our Future*. London, CBI.
- Council for Industry and Higher Education (CIHE), 1996, *Helping Students Towards Success at Work: Declaration of Intent*. London, CIHE.
- Department for Education and Employment (DfEE), 1999, *Labour Market and Skill Trends, 1998–99*. A Skills an Enterprise Network Publication produced from original material provided by Business Strategies Ltd and Glyn Owen. Sudbury, Suffolk, DfEE Publications.
- Department of Education and Science (DES), 1987, *Higher Education: Meeting the Challenge*, White Paper, Cm.114. London, HMSO.
- Department of Employment (DE), 1981, *Higher Education and the Employment of Graduates*. Unit for Manpower Studies, Research Paper No. 19. London, DE.
- Department of Trade and Industry and Council for Industry and Higher Education (DTI/CIHE), 1990, *Getting Good Graduates*, HMSO, London.
- Edmundson, T. and Carpenter, C., 1994, *University of Westminster Students' Financial Circumstances Report 1994*. London, University of Westminster. Education. London, Department for Education and Employment/Quality Support Centre.
- Ellis, N. and Moon, S., 1998, 'Business and HE links: the search for meaningful relationships in the

- placement market place — part two', *Education + Training*, 40(9), pp. 390–97.
- European Commission (EC), 1991, *Memorandum on Higher Education in the European Community*. 5 November 1991. Brussels, Commission of the European Communities, Task Force, Human Resources, Education, Training, Youth.
- Evans, G.R., 1999, *Calling Academia to Account: Rights and responsibilities*. Buckingham, Buckingham, Society for Research into Higher Education (SRHE) and Open University Press.
- Expert Group on Future Skills Needs (EG), 1998, *Responding to Ireland's Growing Skills Needs*. The first report of the Expert Group on Future Skills Needs to the Tánaiste, and Minister for Enterprise, Trade and Employment and the Minister for Education and Science. Dublin, Forfás.
- Fisher, C., 1998, 'The student perspective', presentation at a Conference on Employability, Copenhagen Business School, October.
- Ford, J., Bosworth, D. and Wilson, R., 1995, 'Part-time work and full-time higher education' *Studies in Higher Education*, 20(2), pp. 187–202
- Fulton, O., Gordon, A. and Williams G., 1982, *Higher Education and Manpower Planning*. Geneva, ILO.
- Future Skills Wales (FSW), 1998, *A Report Addressing The Future Skill Needs of Wales, 1998-2007: Main Report for All Wales*. A report produced by MORI Research and Business Strategies Ltd.
- Department for Education and Employment (DfEE), 1997, Press Release: Minister Announces Studies on Graduate Apprenticeships (London, DfEE).
- Graduate into Employment Unit (GEU), 1998, *Beyond Work Experience: Maximising the impact of graduates on small business competitiveness*. Liverpool, University of Liverpool.
- Hallowell, S., 1995, *Student Finance Survey 1994/5*. Leicester, Leicester University.
- Hansen, E., 1998, 'The employer perspective', presentation at a Conference on Employability, Copenhagen Business School, October.
- Harvey, L., 1995, 'The new collegialism; improvement with accountability', *Tertiary Education and Management*, 1, no. 2, pp.
- Harvey, C., Meeson, H., Franks, Z., Haston, E., Sadler, B., 1998, *Experience Works: Findings from the initial audit*. A report for the Higher Education: Quality and Employability Division of the Department for Education and Employment. Newcastle, Newcastle University.
- Harvey, L. and Knight, P.T., 1996, *Transforming Higher Education*. Buckingham, Society for Research into Higher Education (SRHE) and Open University Press.
- Harvey, L. with Green, D., 1994, *Employer Satisfaction*. Birmingham, QHE.
- Harvey, L., Burrows, A. and Green, D., 1992, *Someone Who Can Make an Impression. Report of the Employers' Survey of Qualities of Higher Education Graduates*. Birmingham, QHE.
- Harvey, L., Moon, S. and Geall, V., 1997, *Graduates Work: Organisational Change and Students' Attributes*. Birmingham, Centre for Research into Quality (CRQ) and Association of Graduate Recruiters (AGR).
- Harvey, L., Geall, V. and Moon, S., 1998, *Work Experience: Expanding opportunities for undergraduates*. Birmingham, Centre for Research into Quality (CRQ) and Association of Graduate Recruiters (AGR).
- Harvey, L., 1998, 'Breaking the mould: from extrapolation to lateral thinking about the future of higher education', *Tertiary Education and Management*, 4(1).
- Higher Education Funding Council for Wales (HEFCW), 1999, Pilot Audit of Employability provision in higher education institutions in Wales. First draft. Cardiff, HEFCW.
- Higher Education Quality Council (HEQC), *Graduate Standards Programme Final report: 1997*. London, HEQC
- Hutchinson, S. and Brewster, C., 1994, *Flexibility at Work in Europe: Strategies and practice*. A report prepared for the European Association of Personnel Management. London, Institute of Personnel and Development.
- Industrial Research and Development Advisory Committee (IRDAC), 1990, *Skills Shortages in Europe: IRDAC Opinion*, November, Brussels, EC.
- Institute of Directors (IoD), 1991, *Performance and Potential: Education and Training for a Market Economy*. London, IoD.
- Institute of Employment Studies, (IES) 1998, *Employers' Perception of Key Skills*. Brighton, IES.
- Institute of Manpower Studies (IMS), 1981, *Graduate Employment and Careers*. IMS Report No. 30. Sussex, IMS.
- Institution of Directors, (IoD), 1996, *Business Opinion Survey*. London, IoD.
- Kelsall, R.K., Poole, A. and Kuhn, A., 1972, *Graduates: The Sociology of an Elite*. London, Methuen.
- Khawaja, S. et al., 1991, *Technical Education: Its relevance to job market. A research report*. AEPAM Research Study, no. 90. Islamabad, Ministry of Education, Academy of Educational Planning and Management.
- Kotter, J.P. and Heskett, J.L., 1992, *Corporate Culture and Performance*. New York, The Free Press, Macmillan.
- Lindley, R., (Ed.), 1981, *Higher Education and the Labour Market*. Guildford, Society for Research into Higher Education (SRHE).
- Little, B., 1998, *Developing Key Skills Through Work Placements*. Revised Draft. London, CIHE.
- Lucas, R. and Lammont, N., 1998, 'Combining work and study: an empirical study of full-time students in school, college and university', *Journal of Education and Work*, 11(1), pp. 41–56
- Mason, S. and Harvey, L., 1995, *Funding Higher Education: Student Perspectives*. Birmingham, Centre for Research into Quality, University of Central England in Birmingham.
- National Committee of Inquiry into Higher Education (NCIHE), 1997, *Higher Education in the Learning Society*. London, HMSO.
- O'Leary, J., 1981, 'A crisis of our own manufacturing', *Times Higher Education Supplement*, no. 450, p. 8.
- Park Human Resources and The Guardian (PHR/G), 1999, *Graduates in the Eyes of Employers, 1998-99*. London, The Guardian and Park Human Resources.
- Paton-Saltzberg, R. and Lindsay, R.O., 1995, *The Effects of Paid Employment on the Academic Performance of Full-time Students in Higher*

- Education*. A report of a study commissioned by the Academic Standards Committee of Oxford Brookes University. Oxford, Oxford Brookes University.
- Pearson, R., 1976, *Qualified Manpower in Employment*. Sussex, Institute of Manpower Studies (IMS).
- Pearson, R., Perryman, S., Connor, H., Jagger, N. and Aston, J., 1999, *The IES Annual Graduate Review 1998–1999: the key facts*. IES Report 354. Brighton, Institute of Employment Studies.
- Policy Studies Institute (PSI), 1990, *Britain's Real Skills Shortage*. January, London, PSI.
- Reich, R.B., 1991, *The Work of Nations: Preparing ourselves for 21st-Century capitalism*. London, Simon and Schuster.
- Roberts, B. and Maycock, M., 1995, 'Work-based learning on an arts degree course', *Journal of Higher Education*, Spring 1995.
- Rover Group, 1998, *Young People Development Survey, 1997*, unpublished report.
- Scott, P., 1995, *The Meanings of Mass Higher Education*. Buckingham, Society for Research into Higher Education (SRHE) and Open University Press.
- Skills Task Force (STF), 1998, *Towards a National Skills Agenda: First report of the National Skills Task Force*. Sudbury, Suffolk, DfEE Publications.
- Stasz, C., 1997, 'Do employers need the skills they want? Evidence from technical work', *Journal of Education and Work*, 10(3), pp. 205–23.
- Tait, H. & Godfrey, H., 1999, 'Defining and assessing competence in generic skills', *Quality in Higher Education*, 5(3) Forthcoming.
- Tate, A. and Thompson, J.E., 1994, 'The application of enterprise skills in the workplace', in Haselgrove, S. (Ed.) *The Student Experience*. Society for Research into Higher Education (SRHE) and Open University Press.
- Teichler, U., 1989, 'Research on higher education and work in Europe', *European Journal of Education*, 24, no. 3, pp. 223–47.
- The Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA), 1995, *Tomorrow's Company: The role of business in a changing world*. London, RSA.
- Thomas, H., Belfield, C., Marr, A. and Rikowski, G., 1998, *The Evaluation of Funding for the Development of Continuing Vocational Education (CVE)*. Birmingham, School of Education, The University of Birmingham and Bristol, Higher Education Funding Council for England (HEFCE), Report, September 98/44.
- Trades Union Congress (TUC), 1989, *Skills 2000*. London, TUC.
- Waterman, R., 1994, *Frontiers of Excellence — Learning from companies that put people first*. London, Brealey.
- Westhead, P., 1997, *Students in small business; an assessment of the 1994 STEP student placement scheme*. London, Small Business Research Trust.