Skill Formation and Restructuring within the UK Printing Industry.

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Submitted in accordance with the requirements for the degree of PhD.

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May 1999

The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

Abstract

This study examines the dynamics of skill formation through a case study of the UK printing industry. The analysis presents an integrated assessment of the key factors shaping skill demand, supply, acquisition and deployment within the industry. Particular attention is given to the inherited traditions of training provision embedded in the industry's national training agreement, the production and human resource management (HRM) strategies of employers, trade union policies and concerns, and the role of evolving labour market strategies for the industry.

Following an embedded case study design, the study utilises complementary empirical techniques to explore the dynamics of skill formation at the national, local and workplace level. Empirical data are presented on the relationship between restructuring processes, the dynamics of skill formation and firms' HRM policies and practices. The findings show the way in which investments in training and development are shaped, and influenced, by patterns of industrial and organisational restructuring, and how these processes of restructuring are themselves mediated by national, and local economic and sectoral developments. Whilst the printing industry's historic structures and mechanisms for skill formation appear to be in a state of atrophy, there is little evidence to suggest that firms are supplanting traditional industry provision with well developed internal labour markets and career paths.

At a conceptual level, this study challenges accounts which seek to understand policy debates concerning training interventions and skill upgrading strategies *in isolation* from the detailed realities of enterprise restructuring within specific firms and industries. The thesis identifies the need for an analysis that highlights the inherent tensions in the training system between capital, labour and the state, and reveals the way processes of skill formation are inserted into, and played out in, the *contested* environment of the industry, the local labour market and the workplace.

Acknowledgements

Firstly, I would like to thank Professor Peter Nolan, my supervisor, for his support and encouragement. Secondly, I owe a debt of gratitude to all those members of the Industrial and Labour Studies division, past and present, who have contributed so much to my academic development, particularly Jason Heyes and John Knell. Thirdly, I wish to acknowledge all those firms, agencies and individuals whose cooperation made this research possible, in particular, Henry Rigg at Leeds Development Agency for his enthusiasm and support with the printing survey.

Finally, I would like to dedicate this work to Hilary for her constant love, encouragement and companionship.

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Introduction.

Training and development are frequently regarded, by both academic commentators and policy makers, as important determinants of economic success, with processes of skill formation accorded a privileged explanatory position in recent theories of economic growth, new production concepts and human resource management. Yet, judged against this consensus, the British vocational education and training system is regarded as ineffective and inadequate. For many commentators, this can be explained through examining the way institutional constraints at the macro-level of the UK economy have combined over time to stymie the upgrading capacities of British industry. Thus, in a seminal account of the 'British training problem', Finegold and Soskice (1988) point to the mutually reinforcing weaknesses of the industrial relations system, the organisation of industry, the structures of the state, the financial market and the regulatory structures of the state. Following this lead, much of the vocational education and training literature has concerned itself with mapping out the possible institutional pre-requisites of a more successful training system.

A central argument of this thesis is that such an approach results in an overly technocratic reading of the British training system, whereby firms' investment decisions and training practices are abstracted from their specific industrial and competitive contexts. As a consequence, any analysis of the 'inherent tensions' in the training system between capital, labour and the state is lost. The aim of this study is to produce new evidence on the impact of restructuring processes on skill formation and human resource management (HRM) practices. Rather than focusing on the economy as a whole, the study examines the dynamics of skill formation through an *embedded* case study of the UK printing industry. An analytical account is presented of the interplay of factors shaping skill demand, supply, acquisition and deployment within the industry. A unique aspect of the study lies in its attempt to reveal the way processes of skill formation are inserted into, and played out in, the contested environment of the

industry, the local labour market and the workplace. By exploring the *contested terrain* of skill formation at different levels of empirical analysis, the study presents an integrated account of the various roles played by capital, labour and state institutions in shaping and constraining processes of training policy formulation and practice.

Introducing the printing industry.

The printing industry is particularly worthy of empirical enquiry as it has a strong skilled tradition and a history of contestation between capital and labour over issues pertaining to skill formation. Key here, was the traditional, tight control exercised by print unions, through the provisions of apprenticeships, over the supply of labour into the industry. Under the apprenticeship system, print unions sought to impose a 'quota' on employers restricting the number of trainees entering the trade each year. This 'quota', when combined with the lengthy, six year period, of training, meant that employers faced significant restrictions on recruitment and manning arrangements, and also ensured a degree of 'social closure' between unions. In response, employers typically conceded improvements in wages and terms and conditions of employment in return for union concessions over trainee numbers. The importance of skill formation to this pattern of concession bargaining proliferated after the Second World War as employers sought to obtain significant productivity improvements in the face of increasing technological change. During this period, an increasing number of bitter jurisdictional disputes also took place between different trade unions over training issues. Craft unions, for example, faced with rapid innovation and technological obsolescence, pushed employers to prioritise re-training opportunities to redundant skilled workers rather than employed unskilled workers.

The transformation of technology during the 1970s and 1980s placed increasing pressure on traditional definitions of skill, union demarcations, and established training arrangements. As a consequence, a number of union amalgamations were forged, leading to the establishment of a single union for the industry in 1991, and significant

innovations took place in the area of training and development. Most notably, in 1983 the traditional time served apprenticeship system was replaced by a nationally negotiated agreement on recruitment, training and retraining based on training to standards. The Recruitment, Training and Retraining Agreement was recognised by the TUC and a number of prominent academics as an innovatory, and relatively unique, example of social partnership over training.

For the purpose of the study, the unique focus of the printing agreement facilitates an engagement with a 'best practice' scenario, allowing an exploration of the key social processes that can complicate such joint union-management initiatives. Taking the agreement as the benchmark for training policy and practice within the industry, it is possible to explore how it connects with the changing character of employer strategies, union concerns and evolving government policies towards VET. Moreover, whilst the agreement is limited in coverage to the general printing trade -national and provincial newspapers are thus excluded - it is important to recognise that the industry itself is complex and heterogeneous. Indeed, with the general trade encompassing direct mail production, packaging, security printing and jobbing printing, amongst many others, it is more accurate to understanding printing as a series of industries rather than a general industry. This complexity allows the study to investigate the way product market and specific competitive concerns shape firms' training policies, practices and skill trajectories.

The case study of printing also examines processes of skill formation at different levels of analysis. A key aspect of the study, in this respect, is the way it explores how training policies and practices at the workplace are *influenced* and *mediated* by the traditions of skill supply and working practices in the industry, specific competitive concerns and local labour market considerations. Central here is an identification of the factors that not only *drive* skill formation strategies, but *sustain* them.

Organisation of the thesis.

The thesis is organised into eight chapters.

Chapter one sets out the key themes and issues underpinning the training debate. The review presents a number of theoretical contributions to the training debate, including recent debates around post-Fordism and HRM, and provides an assessment of the relationship between skill formation and contemporary processes of work restructuring.

Chapter two outlines the principal methodological concerns of the thesis and describes the data collection techniques employed. The methodological approach of the National Institute of Economic and Social Research (NIESR) is explained and a number of weaknesses are drawn in order to set out the methodological position of the current study. The overarching research strategy adopted by the thesis is the case study approach, thereby enabling the researcher to pursue a position of 'methodological pluralism'. The virtues of a single industry case are identified and explained.

The next five chapters report the empirical findings of the study.

Chapter three examines the nature and impact of recent processes of restructuring within the printing industry, paying particular attention to changing patterns of employment, technological change, the institutions of industrial relations and the evolving training framework. A brief history of industrial training in the industry is set out. Specific consideration is given to the way in which recent national training initiatives, such as NVQs and modern apprenticeships, have been integrated into the existing training arrangements in the industry.

Chapter four situates the printing industry within the dynamics of a local economy, in this case the Metropolitan district of Leeds. Printing remains a major source of employment in the city and, in response, a number of sectoral initiatives have been

launched by the Leeds Training and Enterprise Council and the Leeds Development Agency. The chapter assesses the extent to which these initiatives have been able to foster long-term co-operative strategies for skill and technological upgrading and a number of problems are identified. The ability of the local printing college to meet the changing skill demands of printing employers is then examined.

Chapter five examines the linkages between enterprise restructuring and skill formation at the level of the workplace, focusing specifically on three Leeds based printing firms. Our analysis distinguishes between those factors that trigger training and those factors than sustain human capital investments. Each company is dealt with in turn, and the empirical material is organised around the following themes: company characteristics and the competitive environment, company policy towards new technology, human resource management strategies and training policy, and their relationships with local agencies and training providers.

Chapter six reports the findings of a detailed case study of a single printing company. Our analysis situates processes of skill formation within the broader context of changing working practices and work methods and the associated outcomes for the shopfloor division of labour. Drawing from interview material and shopfloor observation, the chapter considers the attitudes and experiences of three groups of shopfloor workers to training provision and technological change at the company.

Chapter seven presents a more quantitative analysis of the relationship between enterprise restructuring and patterns of skill formation, drawing upon the findings of a postal questionnaire of printing firms in the West Yorkshire region. The survey identifies the key issues prompting and constraining training activity amongst printing firms in the region, and investigates the nature of training activity, issues of skill demand, the formality of training provision, and industrial relations concerns. The

chapter assesses the extent to which printing firms are adopting a strategic approach to skill formation that embeds training activity within a broader developmental approach.

Chapter eight identifies the significance and implications of our findings. The key findings of the empirical chapters on the dynamics of skill formation in the printing industry are briefly summarised, then the broader implications of the study are drawn out in terms of: training and development and HRM research; the role of trade unions as agents of skill formation; training policy formulation; and the methodological concerns of the thesis.

The survey instrument, circulated to printing firms in West Yorkshire, and accompanying covering letter are included as appendices.

Chapter 1: Skill Formation and Restructuring: Themes and Issues in the Training Debate.

This study examines the dynamics of skill formation through a case study of the UK printing industry. An analytical account is presented of the key factors determining and shaping the skill formation strategies of printing employers. Particular attention is given to the inherited traditions of training provision embedded in the industry's national training agreement, the production and human resource management strategies of employers, trade union policies and concerns, and the role of evolving local labour market strategies for the industry. The originality of the study lies in its attempt to situate processes of skill formation within the *contested terrain* of a specific industry, thereby allowing an integrated analysis of the various roles played by capital, labour and state institutions in shaping and constraining processes of training policy formulation and practice within the industry.

The chapter is organised as follows. Section 1.1 briefly outlines the characteristics and recent history of the UK training infrastructure. Section 1.2 presents a number of theoretical contributions to the training debate, and provides an assessment of the relationship between skill formation and contemporary processes of work restructuring. Section 1.3 examines the more prescriptive concerns of much of the vocational education and training literature, particularly with regard the 'institutional failure' of the British training system. The section argues that a more detailed assessment of the structural characteristics of the UK economy is needed and, in this respect, explores in more detail the changing UK labour market and the industrial relations of training. It is against this backdrop that the key aims and scope of the study are presented. Section 1.4 presents a number of concluding remarks.

1.1 The structure of training in the UK.

Training and development are frequently regarded, by both academic commentators and policy makers, as important determinants of economic success. Recent theories of

economic growth, 'new' production concepts and 'best practice' human resource management (HRM) techniques all accord skill formation a privileged explanatory position (Keep, 1989a; Lucas, 1988; Piore and Sabel, 1984; Romer, 1990). Yet, judged against this consensus, the British vocational education and training (VET) system is regarded as ineffective and inadequate. This position is nothing new, indeed, the weaknesses of the British VET system have been debated for well over a century (Aldcroft, 1992). But, in recent years, against a backdrop of increasing unemployment, the further deterioration of the UK's position in the international division of labour and the emergence of 'new production paradigms', the problem has, for many commentators, become more entrenched. Thus, as Ashton *et al* (1989:132) note, '..in the 1980's....the increasing competitiveness of the world economy began to make the skill deficiencies in Britain more glaringly apparent'.

Compared with other advanced industrial nations, these skill deficiencies are perceived to exist at every level of UK industry (Handy *et al*, 1988; Prais, 1995; Steedman, 1993). Prais (1985), for example, noted that only a third of the British workforce has vocational qualifications compared to at least two thirds in Germany. Similarly, reviewing the evidence on training expenditure, Keep (1989b) notes that most British employers spend less than one per cent of turnover on training compared to an average of three percent in Japan, Germany and the USA. In a series of studies, the National Institute for Economic and Social Research (NIESR) has consistently *associated* this comparative under investment in training and human resources with poor company performance and product quality (Daly *et a*l, 1985; Mason *et al*, 1996; Steedman and Wagner, 1989)[1].

Given the consensus that exists over the weaknesses of the British VET system, it is important to explore how employers, the state and trade unions have responded to such

[1] The methodological foundations of the NIESR work have been subject to a cogent critique by Cutler (1992), who basically argues that the studies have sought to prescribe a loftier set of policy pronouncements than their empirical findings deserve.

debates. Are we witnessing an increased emphasis on training and development in British industry? How has the state sought to modernise and change the system and infrastructure of skill formation? What effect do these changes have on employers human resource management strategies? How can British trade unions influence the quantity and quality of training provision at the level of the workplace? What constraints prevent investments in skill formation? These are all key questions, but given the importance attached to national training infrastructures in influencing 'both the level and amount of training undertaken by companies' (Ashton and Felstead,1995:238), we begin our review with an examination of recent UK training policy reform.

1.1.1 The reform of UK training policy.

Historically, training policy in the UK has been characterised by 'voluntarism', with 'periodic and (partial) attempts at intervention and regulation' (Heyes and Stuart, 1996a:3). Prior to the 1960s, the state played a limited role in training policy formulation, the war years aside, with the responsibility for skill formation residing solely with industry (Sheldrake and Vickerstaff, 1987). During the 1960s, this was to change, however, as the state sought to pursue more 'interventionist' strategies amid increasing concern over the faltering state of the UK economy and criticism of the perceived rigidities of traditional craft apprenticeships (Forrester *et al*, 1995). Consequently, the Labour government's 1964 Industrial Training Act led to the creation of a series of Industrial Training Boards (ITBs), comprised of both employers and trade union representatives. Under the ITB approach, higher levels of training provision were encouraged via a complex levy-grant system which was designed to act as a 'redistributive tax on training' (Rainbird, 1990:11). Following mounting criticism, particularly over the ability of ITBs to meet the requirements of small firms, the levy-grant system was replaced in 1973 by a levy-exemption, and the Manpower Services Commission was set up to monitor the progress and operations of the ITBs (Senker, 1992).

The election of a Conservative government in 1979 signalled a major shift in training policy formulation. As Ashton and Felstead (1995:240) observe, throughout their period of office, successive Conservative governments pursued two key objectives with respect to training provision. The first was the creation of a training market. The second was to empower employers to take 'control of the delivery of training at a local level'. Under the 'market model' of training (Campinos-Dubernet and Grando, 1988), as Table 1.1 indicates, an array of initiatives have been introduced aimed at improving levels of investment in skill formation. In this regard, the government sought to increase labour mobility and reduce employers' information costs through a standardised framework of National Vocational Qualifications, and enhance the choice (and the burden of acquiring training) of individual 'consumers' of training, both employed and unemployed, through a system of Training Credits (Ashton and Felstead, 1995; Heyes and Stuart, 1996a; Marsden, 1995; Marquand, 1993). Trade union involvement in training policy formulation was marginalised as the tri-partite Industrial Training Boards and Manpower Services Commission were replaced with locally based, employer dominated Training and Enterprise Councils (TECs). As the following passage from the Employment for the 1990s White Paper makes clear, according to the government, the TEC initiative would allow a more efficient alignment of the supply of training with the demand for skills.

'The creation of TECs is a truly radical step. It will give leadership of the training system to employers, *where it belongs*. Through their participation and involvement it will change the focus of training and bring home the importance of training for business success to every employer throughout the country. By increasing employer responsibility for local training arrangements and enterprise support and development, TECs will ensure that training provision is more relevant to employers' needs and so improve the skills and enterprise of the workforce. By promoting training arrangements that are clearly linked to business success, TECs will generate more private investment in training. As employers recognise the economic necessity to train and the returns available, they will be encouraged to make larger investments in training' (Department of Employment, 1988: 43: *emphasis added*).

Table 1.1 : *The Major Training Policy Developments 1964-1998*

1964	The Industrial Training Act. Introduction of Industrial Training Boards (ITBs) and the levy-grant system.
1973	The Employment Training Act. Manpower Services Commission (MSC) set up and levy-exemption introduced.
1978	Introduction of the Youth Opportunities Programme (YOP).
1981	The Employment and Training Act 1981. Announced that 17 of the 24 ITBs were to be abolished and replaced by non-statutory sectoral bodies.
1982	The New Training Initiative (HMSO). Technical and Vocational Education Initiative (TVEI) launched.
1983	Youth Training Scheme (YTS) fully operational. Enterprise Allowance Scheme (EAS) introduced.
1986	New Workers Scheme introduced. Restart introduced. Two year YTS introduced. National Council for Vocational Qualifications (NCVQ) review set up.
1988	Abolition of the MSC, to be replaced initially by the Training Commission under the auspices of the Department of Employment. All but 2 of the remaining ITBs abolished. Employment for the 1990s (HMSO). Introduction of 82 Training and Enterprise Councils (TECs) in England and Wales and 20 Local Enterprise Councils (LECs) in Scotland. Training for Employment (HMSO). Announcement of Employment Training (ET; subsequently replaced with Training for work). Career Development Loans introduced.
1990	Investors in People (IiP) launched
1991	Training Credits introduced (to replace YT by 1996). Education and Training for the 21 Century (HMSO) End of NCVQ review -NVQs introduced. The National Education and Training Targets (NETTs) introduced.
1993	Employment Training replaced with Training for Work (TfW)
1994	Competitiveness. Helping Business to Win (HMSO). Introduction of Modern Apprenticeships.
1998	The New Deal Launched. New National Training Organisations. The Learning Age: A Renaissance for a New Britain (HMSO). Employee EducationDevelopment Fund set up. University for Industry (UfI) and Individual Learning Accounts launched.

Source: Chapman, (1994: 170, taken from Forrester et al, 1995:14); Keep and Rainbird (1995); Finegold and Soskice (1988); D/EE (1998).

In practice, however, the efforts of TECs have been hampered by inadequate funding and an over-emphasis on training for the unemployed (Felstead, 1994; Peck, 1996).

In addition, employers have also been exhorted to develop more planned and strategic approaches to their training investments through the introduction of the Investors in People initiative. Companies interested in achieving the Investors in People (IiP) standard, which exists as a nationally recognised benchmark of training quality, are expected to make a public commitment to the development of *all* employees, must put training at the centre of business planning and should regularly review the training and development needs of all employees. The standard thus exists to enable organisations to improve the quality and effectiveness of their training and development practices (Down and Smith, 1998).

Table 1.2: *National Education and Training Targets*.

Foundation Learning.
1. By 1997, 80% of young people to reach NVQ 2 (or equivalent).
2. Training and education to NVQ 3 (or equivalent) to be available to all young people who can benefit.
3. By 2000, 50% of young people to reach NVQ3 (or equivalent).
4. Education and training provision to develop self-reliance, flexibility, and breadth.
Lifetime Learning.
1. By 1996, all employees should take part in training and development activities.
2. By 1996, 50% of the workforce to be aiming for NVQs or units towards them.
3. By 2000, 50% of the workforce to be qualified to at least NVQ 3 (or equivalent).
4. By 1996, 50% of medium to larger organisations (200 or more employees) to be 'Investors in People'. *This target was increased to 75% by 2000.*

Source: *National Advisory Council for Education and Training Targets* (ND).

Encompassing the recent changes in the training system are a set of National Education and Training Targets (NETTs), which establish a range of targets for VET through to the year 2000 (see Table 1.2). In essence, the targets are intended to 'offer a framework that binds together a wide range of other initiatives (eg. NVQs, IiP) in the education

and training field and give them coherence' (Skills and Enterprise Briefing, June, 1992: issue 16). Crucially, they also underpin the activities of the TECs with measurable performance indicators.

Whilst little research has been conducted into employers' training practices, there is evidence to suggest recent improvements in levels of training provision. After a slow start, the take-up of Investors in People increased rapidly. By 1996 4,125 companies had achieved recognition status, while a further 19,673 had made a written commitment to work towards accreditation (Down and Smith, 1998). Nonetheless, this failed to meet the national target, which aimed for 50% of all medium to larger organisations (approximately 6,000 companies) to have achieved the IiP standard by 1996 (*People Management*, September 1996). The Labour Force survey shows that the proportion of workers receiving job-related training increased from 9.2% in 1984 to 14.7% in 1993 (Ashton and Felstead, 1995). Raper *et al* (1997) also suggest that companies are increasing their emphasis on workplace related training. Yet, where training takes place it is typically of short duration (three days or less), with an emphasis on on-the-job training. For commentators such as Streeck (1989) and Finegold (1991), this is unlikely to produce the 'broad and high' skills companies need to compete successfully in the high value-added product markets of the future. Furthermore, evidence also reveals that the take-up of NVQs, particularly among the adult workforce, is currently running well below the projected targets (D*f*EE, 1998: 34). In this context, many commentators, drawing on levels of under achievement in the retail, hotels and catering, and construction sectors, regard the targets as unattainable (see Forrester *et al*, 1995; Keep and Rainbird, 1995). It appears, therefore, that substantial increases in training activity are still required if the British 'training problem' is to be tackled.

1.2 Theoretical accounts of skill formation.

1.2.1 The problem with the 'market' model: the issue of regulation.

The reform of the institutional structures and policies of training since 1979 did not, of course, take place in a vacuum. Rather, it was a key element of the previous Conservative government's agenda of supply-side reform, geared towards increasing the competitiveness of the UK economy by excising perceived 'barriers to employment' (Department of Employment, 1988)[2]. Thus, driven by the belief that the economy should be exposed to the unfettered force of the market, successive governments sought to reduce the role of the state, deregulate markets and empower employers and, to a lesser extent, individuals. As many commentators have noted, this neo-liberal agenda was underpinned by a contradictory tension between 'the free economy and the strong state' (Gamble, 1988). Or, as Wedderburn (1989) puts it, in order to 'defend the spontaneous order' the government was prepared to intervene wherever necessary. The role, and perceived power, of trade unions was a notable target. Hence, numerous measures were introduced throughout the 1980s and 90s to curtail the influence, involvement and immunities of trade unions.

As the previous section noted, in the area of training trade union involvement has been marginalised and employer influence enhanced with the introduction of locally based Training and Enterprise Councils. Furthermore, as Ashton *et al* (1989) note, the free market approach to training also sits easily with the recent 'openness' of the UK economy to foreign inward investment. Indeed, as advocates of such investment the Conservatives were keen to talk up the 'spillover effects' of inward investors, particularly with regard Japanese multinationals, (MNCs), on the British economy more generally. In this respect, supporting evidence can be found from contemporary theories of economic growth which stress the potential of MNCs, as conduits of knowledge, to transmit the productive flow of 'ideas' across national borders (see

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[2] The 1988 white paper, Employment for the 1990s, identified 3 key barriers to UK competitiveness and employment growth: poor industrial relations; excessive pay increases and inflexible pay arrangements; and a lack of investment in training.

Romer, 1993:44)[3]. The extent to which MNCs have had a transformative effect on the UK economy remains heavily contested however, and more detailed primary research suggests that MNCs have tailored their human resource practices to accommodate existing weaknesses in the national and local economy, thereby reproducing any underlying skills deficits (Knell, 1993; Nolan and Walsh, 1995; Peck and Stone, 1993). At a more general level, however, much of the VET literature has concerned itself with assessing the role of the state, and the institutional make up of specific national systems, in relation to skill formation, focusing specifically on the 'failure' of the market model.

The basic point of departure for much of the VET literature draws upon Becker's (1975) distinction between 'general transferable' and 'workplace specific training' (see Streeck, 1989; Rainbird, 1992). Specific training is likely to 'increase a worker's productivity only in so far as he (sic) continues to work in the same firm' (Layard, 1994:32). By contrast, the productivity gain emanating from general training is transferable to other companies, and as a 'collective good' becomes susceptible to poaching by rival firms. Given the uncertainty firms face in internalising the benefits of general training they are more likely to rely instead on external labour market provision or investment in workplace specific skills[4]. This is, then, a classic case where externalities reduce the production of a good to a sub-optimum level[5].

The weaknesses of this approach are well rehearsed. Firstly, at a concrete level, the distinction between general and specific training is not that clear cut, with most specific

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[3] For a detailed treatment of 'new growth economics' and its associated policy implications see Crafts (1996).

[4] The corollary is that investment in general training will only take place where individuals are prepared to pay for it.

[5] Becker's (1975) analysis refutes the existence of a poaching externality since firms would expect investment in general training to be borne by individuals. As Stevens (1996) notes, this logic could provide support for much of the Conservatives training reforms, including the abolition of the ITBs and the subsequent emphasis on the individual. Despite this, most VET commentators depart from Becker's original argument and assume that a poaching externality exists (see Stevens (1996) for a useful discussion).

training containing and element of general training and *vice versa* (Smith and Hayton, 1997; Stevens, 1996). Secondly, the argument relies on clear assumptions about the operation of labour markets, including the rationality of actors, the free mobility of labour, perfect competition and zero information and transaction costs (Dolton, 1993; Marquand, 1993). Furthermore, as Katz and Ziderman (1990) note, firms may face possible information costs when hiring workers with general skills and, so, in certain circumstances, may be prepared to invest in general training. These caveats aside, the fundamental point for Streeck (1989:94) remains the same:

'Since the rewards of his investment can so easily be 'socialised' whereas the costs remain his own, an employer in a competitive labour market will therefore be tempted not to train, or to train as little as possible, and 'buy in' needed skills from his competition. As these are likely to perceive their pay-off matrix in much the same way as he, they will probably prefer not to train either. *As a result there will be a chronic undersupply of skilled labour*. (Emphasis added).

Consequently, under a system driven by employers' self interest, and the 'imperatives of market rationality', 'high' skills will only be produced in exceptional circumstances (Streeck, 1989: 94).

This line of reasoning is particularly pertinent to the case of the UK, which, as Ashton *et al* (1989: 139) note, has 'a long term history of reported skill shortages...., most apparent in times of cyclical upturn'; moreover, there is also 'evidence of an overall tendency for British industry to specialise in relatively low-skill lines of production'[6]. Attempts by successive Conservative governments to solve the 'training problem' through the creation of a purer market for skills has, for many commentators, only entrenched the situation still further (Finegold and Soskice, 1988; Keep, 1992; Marsden, 1995; Streeck, 1989). Thus, Marsden (1995) argues that recent attempts to

[6] It should be noted that Ashton *et al* (1989:139) identify two possible kinds of skill shortage. The *disequilibrium* kind is where 'firms queue up to hire skilled workers or try to entice them away from competitors'. The *equilibrium* kind denotes a comparative shortfall of skills with to regard foreign competitors, due to British firms specialising in low-skill production processes.

reduce information costs through a more transparent system of certified NVQs may enhance the scope for poaching. Such an environment contrasts sharply with countries such as Germany and Japan where it is claimed 'there is a perceived need to create institutions that bond employers and employees, with a view to giving them a longer time horizon to appropriate the gains from training' (Booth and Snower, 1996:3). In Japan this purpose is served through an entrenched system of internal labour markets and controlled competition between capital, whereas the German 'dual' system is underpinned by a highly developed framework of apprenticeship training and institutional regulation. Focusing on the German case, Streeck (1989, 1992) documents the advantages of such a neo-corporatist regime over the laissez faire approach prevalent in the UK, identifying the important regulatory role played by trade unions, employers associations, local chambers and the state in simultaneously constraining and enabling the generation of the type of skills needed to compete in the volatile markets of the future.

In summary, it is important to note that the economic and political imperatives underpinning much of the training debate are predicated on a clear assumption. That the current epoch of capitalist restructuring favours those organisations that place a premium on high, broad and flexible skills and continuous investments in training (Streeck, 1989). At a more abstract level, such concerns are associated with the emergence of 'new' flexible production regimes and more progressive and sophisticated strategies for the management of human resources. It is to such debates that we now turn.

1.2.2 The emergence of post-Fordist production systems.

Debates over the transformation of work are long standing, but throughout the 1980s and 1990s have intensified as commentators have sought to delineate the impact of changing economic and competitive environments and technological developments on capitalist production strategies. Highly contentious, in this regard, are claims that the

old regime of accumulation based on Fordist mass production is being superseded by a new era of competition predicated on post-Fordist production systems (Aglietta, 1979; Best, 1990; Hirst and Zietlin, 1989, Kern, and Schumann, 1985; Piore and Sabel, 1984; Sabel, 1982; Womack *et al*, 1990,). Whilst the form of post-Fordism varies - including models of 'New Competition' (Best, 1990), 'flexible specialisation' (Poire and Sable, 1984), and 'lean production' (Womack *et al*, 1990)- the economic limitations of production systems based around mass production are a constant theme. As Nolan (1994: 165) explains:

'Post-Fordism, (as noted), is defined in opposition to Fordism. Most commonly it is identified with the renaissance of craft work in small and medium sized firms, decentralised production systems and increased product specialization. These trends in production organization are traced to the early 1970s when the crisis of Fordism supposedly took hold. Mass markets are said to have become redundant. Moreover traditional patterns of labour organisation and control, based on deskilling and rigid hierarchy, are deemed inappropriate to the so-called 'new times' and the new production and economic paradigm which is taking root in the advanced industrial countries'.

Such an approach is epitomised by 'flexible specialisation', which Piore and Sabel (1984) argue is most evident where regional networks of small, craft based firms, most prevalent within the 'industrial districts' of Northern Italy, compete, and cooperate, on the basis of niche production strategies and permanent innovation. For Piore and Sabel, the technological dynamism of flexible specialisation, based upon flexible, multi-purpose technologies, allows for considerable long-term opportunities for improvements in working conditions. Multi-skilling is regarded as a necessity, thereby enhancing the 'production worker's intellectual participation in the work process' (*ibid*, 278); furthermore, the collaborative and solidaristic nature of employment relations creates putative improvements in the working environment over the adversarial, Tayloristic conditions of mass production[7].

[7] In crude terms, therefore, flexible specialisation affords the opportunity to reintegrate the processes of conception and execution whose separation was, for Braverman (1974), a key feature of large capitalist organisations.

The implications for training are particularly noteworthy and usefully distinguish the different requirements of the two production systems. According to Piore and Sabel (1984: 273), the highly regimented division of labour, and associated separation of conception and execution, that characterises mass production 'makes it possible to rely on two separate institutions for training employees: the formal education system and the firm itself'. The education system generates potential employees with a basic understanding of work, and even though their lack of practical experience can lead to mistakes this is not costly to the firm when amortised over long production runs. The firm itself will only invest in the specific, easily captured training, required to develop core employees. By contrast, the short production runs under flexible specialisation place a premium on broad, collaborative problem solving skills. Problematically, such skills are unlikely to be forthcoming from firms due to the poaching dilemma. Furthermore, the close knit, 'communitarian' nature of flexible specialisation 'depends on a socialization process so daunting that outsiders might be reluctant to pay for training' (*ibid*, 274). Flexibly specialised organisations solve this problem, therefore, 'by linking the acquisition of skill to acquisition of membership in the community of the skilled' (*ibid*, 274). This occurs, so Piore and Sabel argue, via the familial network of the industrial district, and in this sense the acquisition of skills is undertaken by the whole community not just individual firms[8]. Countries such as Japan and West Germany are also identified as having institutions of skill acquisition that foster collaboration through processes of identity formation. In Japan, this occurs through extensive on-the-job training and hierarchical co-operation, whilst in Germany the apprenticeship system creates a collective craft ethos that encourages co-operation between skilled workers.

Whilst selective 'industrial districts', such as Emilia-Romagna (Italy), Baden-Wuerttemburg (Germany) and Sakaki (Japan), are typically identified as the epitome,

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[8] In this sense, Poire and Sabel (1984: 275) argue that flexible specialisation breaks 'one of the classic assumptions of political economy' by integrating economy and society.

and drivers, of the new competition, it is clear that the model of flexible specialisation imputes a broader generality (Hirst and Zietlin, 1989). Firstly, the emphasis on flexible production, upskilling, decentralisation and innovation is taken to have applicability for large multinational corporations, witnessed in debates around lean production (Womack *et al*, 1990). Secondly, and more importantly, at the present historical conjuncture, a post-Fordist trajectory is taken to be the only possible route to long term economic success[9]. Following this line of argument, Hirst and Zeitlin (1989: 168) attribute the relatively poor performance of UK industry from the 1960s to its inability to 'shift from mass production to flexible specialisation'. This is deemed necessary because '[I]n a period of fragmenting and differentiated markets where firms produce for changing demands on a world scale and must respond to competitors' product innovations rapidly, mass production is more often than not a liability' (*ibid*:168). In this regard, Hirst and Zeitlin argue that, historically, inadequate government policies, managerial myopia and union interests have all combined to block flexible manufacturing practices in the UK.

The reliance of the UK economy on Fordist techniques of mass production has however been questioned, with commentators such as Jessop (1994) arguing that Britain never experienced an effective Fordist mode of growth (see also Nolan and Walsh, 1996). More generally, the conceptual and empirical foundations of flexible specialisation, and the other variants of post-Fordism, have been subjected to intense critical scrutiny (Curry, 1993; Hyman, 1988; Nolan and O'Donnell, 1991; O'Donnell, 1993; Phillimore, 1989; Williams *et al*, 1987, 1992). Tackling Hirst and Zeitlin head on, Nolan and O'Donnell (1991) note how attempts by the Greater London Enterprise Board to restructure and regenerate the London economy along flexibly specialised lines ended in failure. Notable weaknesses in this 'experiment' were the difficulties in establishing

[9] Crudely put, Piore and Sabel (1984) identify two historical conjunctures, or industrial divides, when the choice of technological development is up for grabs. The first industrial divide, witnessed the emergence and subsequent dominance of mass production, at the expense of craft traditions. The second industrial divide, arising out of the economic crisis of the 1970s, opens up the possibility for a re-emergence of craft production.

an effective balance between inter-firm co-operation and competition, and an inability to control the action of multinational corporations.

Table 1.3: *The New Competition and the Third Italy.*

	Proponents view	Independent evidence
1. Industrial Structure	small, flexible, family-owned firms, vertical and horizontal disintegration; subcontractors are gaining independence from large firms	small firms' expansion due to the subcontracting activities of large corporations, integrated production, fierce, horizontal competition
2. Technology and innovation	adaptable machinery, R & D integrated with production, continuous and high standards of innovation (product and process)	poor innovation record compared to large Italian firms, piecemeal introduction of new technology
3. Production process	multiskilled, integration of mental and manual labour	low level of skills, family-orientated labour force
4. Working conditions and skill	high wages, high levels of unionisation and high levels of training	low wages, low union density and above-average working week
5. Products	variety, high quality, 'niche' marketing	homogeneous, poor quality, traditional, mass markets
6. Industrial districts	co-operative relations, vertical specialization	geographical clustering of firms within a sector but at the same stage of production
7. Competitiveness and performance	above average rates of productivity, rising market share on the basis of high quality, high cost, specialized products.	profitability based on low wages, sweated (usually family) labour, poor quality products.
8. Future prospects	secure place within the new industrial order	uncertain- subject to the strategies of MNCs

Source: O'Donnell and Nolan (1989) -Taken from O'Donnell (1993).

As Table 1.3 indicates, empirical evidence also suggests an alternative reading of the working conditions and competitive performance found in the supposed 'best practice' industrial districts of the Third Italy. In reality, the small firms that characterise such regions are less productive that large firms, pay far lower wages, rely on poorly trained workers and typically produce standard, low quality products for fiercely contested markets (Amin, 1991; O'Donnell, 1993). At a more theoretical level, Williams *et al* (1987) identify a range of conceptual weakness with flexible specialisation, including an inadequate, and inaccurate, conceptualisation of the differences between mass production and flexible specialisation, a conceptually confused historical analysis of the rise of mass production, and an 'overly romantic' reading of the 'artisan future' of flexible specialisation.

These criticisms aside, it has nonetheless been suggested that recent processes of state restructuring may have laid the basis for a tendential shift to post-Fordism (Jessop, 1993, 1994; Loader and Burrows, 1994; Pierson, 1994). For Jessop (1994), this is speculatively conceptualised in terms of the replacement of the Keynesian welfare state with a new Schumpeterian workfare state (SWS), the origins of which can be traced to the flexible accumulation regimes and supply-side orientated states associated with successful East Asian economies[10]. Whilst the form of the SWS varies, the tenets of flexibility, competitiveness, innovation and entrepreneurialism have clearly underpinned contemporary state restructuring in the UK. This is particularly evident with regard to the changing infrastructure for vocational education and training. Indeed, for Peck (1996:206/207), the 'structure, priorities and discourse of TECs' are resonant of the neoliberal SWS:

'They are locally based, privatised, business-led bodies contracted by central government to provide market-relevant training and enterprise services, operate

[10] A combination of globalising and localising tendencies means that the power of the state is increasingly displaced or 'hollowed out'. For Jessop (1993:7), the hollowed out Schumpeterian workfare state 'provides the best possible political shell for post-Fordism'.

workfare style programmes for the unemployed, and restore the dynamism and competitiveness of local economies through supply-side measures'.

Problematically, the success of TECs has been hamstrung by high and persistent unemployment, a tight and regressive funding regime promoting inter-TEC competition and a limited scope for local innovation. Rather than promoting a local regeneration of the skills base, then, TEC activity has predominantly been directed towards short-term, low quality training provision for the unemployed. Moreover, in a de-regulated environment they have been powerless to regulate, or even influence, the training policies and practices of private sector capital. Thus, for Peck (1996:229), whilst TECs may seem to represent the 'epitome' of a neo-liberal SWS, he concludes that it is difficult to see 'how they can dispense the functions necessary for the reproduction of this state form and its mode of growth'. Instead of offering the basis for a new post-Fordist future they actually reveal the inherent weaknesses of the neo-liberal agenda. Jessop (1994) broadly concurs, arguing that an efficient and competitive post-Fordist regime is unlikely to materialise in the UK; nonetheless, wedded to a belief in the 'new competition', he argues that the continuing weakness of the UK economy is testament to the replacement of flawed Fordism by flawed post-Fordism.

1.2.3. The rise of Human Resource Management.

In its most prescriptive form, as Sisson (1994:5/6) notes, the human resource management (HRM) literature also evokes the economic necessity of shifting away from Tayloristic, mass production policies and practices, although the emphasis is focused more on management *strategy* than organisational *structure* and technological innovation. Against a backdrop of increased product market uncertainty, an intensification of competition and the rise of Japanese companies, proponents of HRM argue that the development of sophisticated human resource strategies are increasingly the key determinant of a firms competitive success (Beer *et al*, 1984; Guest, 1989; Kochan and Osterman, 1994; Storey, 1995; Walton, 1985). The basic components of a

HRM approach are widely debated but, following Storey (1995:6), the key features are summarised in Table 1.4. At its crudest, the HRM model is concerned with adopting a strategic approach to the management of people, by deploying a variety of 'new' working practices to harness the full potential and, most importantly, the commitment of the human resource for the benefit of the organisation.

Table 1.4: *The HRM model.*

1. *Beliefs and assumptions*

   * That it is the human resource which gives competitive edge.
   * That the aim should be not mere compliance with rules, but employee commitment.
   * That therefore employees should be very carefully selected and developed.

2. *Strategic qualities*

   * Because of the above factors, HR decisions are of strategic importance.
   * Top management involvement is necessary.
   * HR policies should be integrated into the business strategy -stemming from it and even contributing to it (*commonly termed external fit*).

3. *Critical role of managers*

   * Because HR practice is critical to the core activities of the business, it is too important to be left to personnel specialists alone.
   * Line managers need to be closely involved both as delivers and drivers of the HR policies.
   * Much greater attention is paid to the management of managers themselves.

4. *Key levers*

   * Managing culture is more important than managing procedures and systems.
   * Integrated action on selection, communication, training, reward and development (*commonly termed internal fit*).
   * Restructuring and job design to allow devolved responsibility and empowerment.

Source: Storey (1995:6) (*Comments added*)

For Storey (1995: 8), the development of a HRM approach is often fundamentally linked to the notion of 'managing culture change', as it is through this process that the 'self-evidently prized objectives' of consensus, flexibility and commitment are unlocked. Consensus is portrayed in terms of a shared set of beliefs and assumptions; flexibility affords productivity improvements through the removal of restrictions and demarcations on labour mobility; and commitment is important in eliciting employees to work beyond contract, or to ''go the extra mile' in pursuit of customer service and organisational objectives'. Training and development are often regarded as the 'vital component' in this process of cultural change. Indeed, for Keep (1989a:111), companies who treat their human resources as basic commodities rather than resources to be invested in 'cannot meaningfully be said to be practising human resource management'. The economic imperatives underpinning this assertion are, for Keep, relatively straightforward. Firstly, in order to capture the benefits of any training investment, it makes sense for companies to introduce other HRM policies, that will retain, motivate and ensure the maximum use of any new skills acquired by employees. In this regard, career paths may be fostered through the creation of developed internal labour markets. Secondly, training is an important behavioural device in terms of securing commitment and realising the latent potential of employees. As Keep (1989a: 112) explains:

'These motivational aspects of HRM are bound up with investment in training and development insofar as such investment is a powerful signalling device, which enables employers to confirm to their employees that they are being regarded as important to the company's future success. Obversely, there is little use in firms claiming to their workforces that they have become people-centred organizations that regard their employees as important and valuable, if they subsequently refuse to invest in people'.

In support of his position, Keep identifies companies such as Jaguar Cars, Lucas Industrial, IBM, Hewlett Packard and Marks and Spencer as exemplars of best practice HRM. All of these companies claim to be integrating training and development with their wider business plan, and adopting a strategic and structured approach to training

that includes the use of sophisticated systems of recruitment and selection, training needs appraisals, career planning and the encouragement of teamworking and functional flexibility. Keep did not explore the actual management of skill formation within these companies in any significant detail. It is difficult to discern, therefore, how integrated such initiatives actually were with broader strategic concerns, how internally coherent the initiatives were, or the relationship between these putative HRM practices and company performance.

Nonetheless, the centrality of training to HRM has received some support from recent, primarily American, survey research examining the impact of 'bundles' of HRM practices on performance outcomes. This research has consistently associated skill formation criteria, such as multi-skilling, internal recruitment and appraisals, with increased levels of job creation, reduced labour turnover and higher productivity and profitability (see Huselid, 1995; Ichniowski *et al*, 1996; Wood and de-Menezes, 1998). How the 'bundles' combine and cohere are typically left unexplained, and the actual diffusion of the high performance 'bundles' is also claimed to be limited (Ichniowski *et al*, 1996). Within UK companies, there is also evidence to suggest an increased role for HR specialists on the main board of directors, and recent studies claim that the 'presence of HRM specialists can 'make a difference' to organisational performance' (Hyman, J. 1996:321; Guest and Hoque, 1994; Price Waterhouse/ Cranfield 1990). Despite these findings, the changing roles and responsibilities of the HR and training functions remains a neglected area of study (see Rainbird, 1994a).

Other research findings are less optimistic. Storey's (1992) qualitative research into fifteen mainstream British companies (including Jaguar and Lucas) found that HRM initiatives were often introduced for diverse reasons, with little in common, suggesting that such practices are often less integrated than they at first appear (Storey, 1992). Furthermore, companies tend to operate a 'pick and mix' approach with regard to HRM practices, with the effect that many initiatives are often fleeting and far from enduring.

Broader survey evidence also reveals a limited take-up of HRM initiatives, and a pragmatic and opportunistic approach to the management of labour, amongst British companies (Guest and Hoque, 1993; Marginson *et al*, 1993; Millward *et al*, 1992). Whilst many companies have dabbled with isolated components of HRM, the more coherent and sustained model identified by the prescriptive HRM literature has thus yet to emerge.

For commentators such as Legge (1995a,b), the partial and piecemeal nature of most enterprise restructuring may, in itself, be indicative of the conceptual ambiguity underpinning many models of HRM. First, potential tensions are evident in integrating the values and policies underpinning the best practice 'soft' model of HRM with business strategy, as the fit with business strategy would require a *contingent* approach to people management that could undermine the degree of internal consistency associated with the 'soft' HR values[11]. Secondly, contradictions and tensions exist *between* the actual values and practices, including commitment, flexibility, quality and culture, embedded in the 'soft' HRM model. (Delbridge and Turnbull, 1992; Garrahan and Stewart, 1992; Sewell and Wilkinson, 1992). As Delbridge and Turnbull (1992) note, in their review of supposedly 'best practice' Japanese production systems, the practices of flexibility, teamworking and quality management are often utilised as sophisticated methods of workforce control. The corollary is that:

'[T]he rhetoric may be of employee involvement, development and autonomy but the reality is workers operating under clearly defined (and dictated) managerial guidelines, under constant surveillance, and solving managerially defined problems without the time, resources or power to input developments which may qualitatively improve their work experiences' (Delbridge and Turnbull, 1992:68).

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11 The soft model of HRM is primarily concerned with the *human resource*, in contrast to the hard model which emphasises *resource management*. Whilst the epistemological assumptions underpinning the two approaches have become central to much of the 'what is HRM' debate, the basic dichotomy is nothing new and is very similar to McGregor's (1960) theory X and theory Y and Friedman's (1977; 1990) distinction between responsible autonomy and direct control.

In short, whilst the rhetoric of HRM is often articulated in terms of a 'soft', development model, the reality is far more likely to take a 'hard' form, emphasising 'the quantitative, calculative and business-strategic aspects of managing the headcounts resource in as 'rational' a way as for any other economic factor' (Storey, 1989:8). Similar findings are presented by an increasing number of case studies examining the aftermath of production restructuring, with attempts to increase functional flexibility typically resulting in the enlargement of (similar) tasks undertaken rather than genuine multi-skilling (Elger, 1996; Geary, 1995).

Collinson *et al* (1998:6) argue that this 'intensification thesis' may, however, be overly pessimistic[12]. Their research into quality management initiatives reveals a widespread acceptance, and considerable enthusiasm, amongst employees towards the importance of quality issues. This did not lead to higher levels of trust between employees and management however, as

> [W]orkers, like managers, had pragmatic expectations of TQM programmes. They did not necessarily seek 'empowerment' and they had retained a sense of distance from management....On balance, employees identified with the principles of quality management and involvement in problem solving, even though this involvement remained limited to immediate work tasks (*Ibid*, ii).

Similarly, whilst Heyes and Stuart (1996b) found a significant association between the receipt of training and positive employee attitudes, this was not regarded as indicative in itself of increased commitment to organisational or operation goals. Rather, employee motivation was 'most likely to occur where employers (have) developed a structured, formalised approach to training' whereby skill formation was linked 'to job tenure and reward' (*ibid*: 19). The key point here is that much of the HRM literature, proponents and critics alike, tends to operate with an 'unrealistic benchmark' of high

[12] Collinson *et al* (1998) attribute the 'intensification thesis' to a growing number of studies, typically in the labour process tradition, examining the nature of Japanese manufacturing concepts. Such studies tend to portray labour as the *passive victim* of a 'new regime of subordination' (Garrahan and Stewart, 1992) based upon tight managerial control, a continual intensification of work and constant electronic surveillance.

commitment and empowerment (Edwards and Wright, 1998:284). In this regard, empirical research assessing the hard *reality* of firms' strategies of labour management against some abstract soft model of HRM *rhetoric* provides little analytical purchase on the complex patterns, outcomes and triggers of contemporary enterprise restructuring. Certainly, whilst the importance of training to HRM is universally accepted, it is not clear why British firms have failed to develop a strategic and coherent approach to skill upgrading. Furthermore, if there is limited evidence of the 'best practice' soft model of HRM, what types of training and HRM practices do firms employ?

1.3 The limits of transformation and the scope of the present study.

Despite the centrality afforded skill formation in recent academic debates around industrial restructuring and new management strategies, the consensus of opinion suggests that a fundamental transformation in the skills base of the UK economy has failed to materialise. Indeed, in stark contrast to government attempts to increase the *supply* of skills through the creation of a training market, the actual *demand* for enhanced skills amongst British companies appears to be lacking (Keep and Mayhew,1995, 1996). In this context, Finegold and Soskice (1988:25) assert that a 'complex web of institutional constraints' has served to stymie government attempts at VET reform, stifled employers' demands for highly skilled labour and 'best-practice' HRM techniques and trapped Britain in a 'low-skills equilibrium' (LSE). This concept refers to a 'self-reinforcing network of societal and state institutions which interact to stifle demand for improvements in skill levels' (Finegold and Soskice, 1988: 22). Included in this network of institutions are the organisation of industry, the industrial relations system, firms and the work process, the structures of the state, the financial markets and the regulatory infrastructure of VET. Other VET and HRM commentators tend to adopt a similar explanatory framework, with four common themes worth emphasising[13]:

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[13] See Keep (1989a), Keep and Mayhew (1995), Rainbird (1994b) and Storey and Sisson (1990, 1993).

1. *The failure of management*: British managers are themselves poorly trained. They are, therefore likely to give a low priority to workforce training.

2. *The failure of the financial system*: The promotion of 'short-termism' is inherent to the British system. The institutional separation of industrial and financial capital, the hegemony of shareholder interests, the susceptibility of UK companies to take over, and the dominance of the accounting function all encourage a short-term perspective on internal investment decisions, to the detriment of longer term developments in human resources.

3. *The failure of the VET system*: The essentially voluntarist nature of VET in the UK, by its very nature, affords the state little influence over company practices, limiting itself to the provision of training for the unemployed. Emphasis by government on supply side reforms and also exhorting individuals to invest in VET, with the assumption that in a 'pure' market demand will be forthcoming. Left to their own devices firms will typically under invest in skills for fear of poaching. Training activity will be strongly correlated with the business cycle leading to skill shortages.

4. *The failure of the industrial relations system*: Both employer organisations and unions have proved unable to develop long-term training policies. The problem is accentuated by the traditional adversarial system of industrial relations, an acceptance of voluntarism, the inability of the TUC and CBI to control affiliates, and an historical neglect of training in collective bargaining. A more co-operative approach is advocated if a high skill upgrading strategy is to be fostered.

For Finegold and Soskice (1988:22):

'A change in any one of these factors without corresponding shifts in the other institutional variables may result in only small long-term shifts in the equilibrium position'.

In other words, these institutional constraints are mutually reinforcing. Government attempts to borrow supposed 'best practice' training policies will be unlikely to prove successful in and of themselves. Finegold (1991:113) has subsequently extended this analysis to provide 'a theoretical account of the institutional prerequisites for a high-skill equilibrium' (HSE), stressing three conditions that will propel individuals, employers and policy makers away from the low-skill path. These include an environment of long-term planning, a commitment to co-operation within a competitive

environment and exposure to international competition on the basis of an export orientation. Following this lead, much of the VET literature has concerned itself with training institutions at the macro level, mapping out the possible institutional pre-requisites of a more successful training system.

Yet, a number of weaknesses are evident in this approach to skill formation (Ashton and Green, 1996; Heyes and Stuart, 1994; Marsden, 1995). Firstly, an analysis of workplace relations is conceptually under-developed, with industrial relations concerns limited to a belief in the benefits of 'co-operation' and an analysis of national structures of trade unions and employers associations. This, in turn, reflects a tendency to understand training outcomes principally in terms of exchange relationships, with developments in production, and the position of competing social actors, all but ignored. In other words, by focusing 'attention.. on the supply and demand for skilled labour and the role that skill, characterised as a factor input, may play in facilitating the production of high quality, high value-added goods and services' (Heyes and Stuart, 1994: 37), the social processes shaping skill acquisition, such as the nature of management strategy and worker responses, are neglected (Green, 1992). Secondly, the equilibrium approach is unable to theorise underlying processes of change in training practices and outcomes, other than in terms of exogenously imposed differences between equilibria (Ashton and Green, 1996: 32; Heyes and Stuart, 1994:37). This results in an overly deterministic reading of the British training problem, with firms' investment decisions effectively abstracted from their industrial and competitive contexts. As a result, as Ashton and Green (1996:32) note, an analysis of the 'inherent tensions' in the training system between capital, labour and the state are sidelined.

A concern with the institutional configuration of institutions at the *aggregate* level has, therefore, coincided with a limited amount of empirical research examining the processes and outcomes of skill formation at the level of the firm and industry. Indeed,

whilst commentators regard training as a litmus test of an organisation's commitment to HRM, we still know relatively little about the factors underpinning training strategies and structures at the level of the workplace and how they connect with other HRM initiatives. In essence, much of the VET literature portrays employers as passive, hamstrung by a set of exogenous institutional constraints. Such an account is unable to explain the variation in training practices and outcomes within particular industries and firms.

Nor for that matter is it convincingly explained how, or even if, in the absence of such institutional constraints, firms will develop a high skills strategy (Heyes and Stuart, 1994). As Green (1992: 424/428) has noted, by treating VET reform as an 'all-embracing panacea for advanced capitalist countries trying to compete with low wages of the third world', it is assumed that 'there is but one best way for the economy'. The argument that this trajectory can be achieved by removing institutional barriers such as short-termism or conflictual relations within and between firms is, for Green, too simplistic. Rather than treating the process of skill formation as a technical issue, the social and political contexts shaping firms' productive and competitive strategies need to be empirically examined. In this regard, we conclude our discussion by considering the implications for skill formation of recent historical shifts in employment structure, the competitive environment, and the possible regulatory influence of trade unions.

1.3.1 Shifts in employment structure and Britain's position in the international division of labour.

As Nolan and Walsh (1995:56) note, whilst 'the share of manufacturing employment has fallen in many advanced economies....the magnitude of decline in Britain has been especially pronounced at 41% since 1960'. Since 1979 well over 3 million manufacturing jobs have been lost, against significant increases in employment in the private and public services. These trends look set to continue into the future. Manufacturing employment is projected to fall by around 1.2% a year between 1996

and 2006. At the same time, significant gains in service sector employment are forecast, particularly in public services, financial services and the leisure industry. This shift in employment has been accompanied by a dramatic increase in non-standard employment. By 1996, part-time work accounted for 29% of total employment, an increase of 1.8 million jobs since 1981, and self employment 13% (D*f*EE, 1997). Women account for 80% of all part-time employment, representing approximately 5 million employees and nearly half of the total female workforce (D*f*EE, 1997; Nolan and Walsh, 1995). The share of employment in small firms is also likely to remain high, with 99% of businesses employing less than 50 workers, 47.9% of all employment, by the end of 1994 (DTI, 1996).

In terms of the changing occupational make-up of employment, white collar, non-manual occupations will continue to increase at the expense of overall demand for blue-collar, manual occupations. Whilst this shift is associated with a projected increase in managerial and professional occupations, this will be at the continued expense of demand for technician and craft workers at intermediate level (D*f*EE, 1997). Problematically, the studies conducted by the National Institute for Economic Research suggest that the lack of intermediate skills has been a consistent contributory factor in the comparative productivity shortfall of British industry (Steedman, 1993).

According to the *Labour Market and Skill Trends* report (D*f*EE, 1997:3), the flexibility afforded to employers by the increases in non-standard employment 'aids competitiveness' by allowing the amount of labour used to be adjusted more quickly and closely to prevailing market conditions. But, as Keep and Mayhew (1995: 117) note, the key point is that:

'..changes in the labour market are busy reducing the proportion of the workforce in the type of jobs (full-time, permanent) for which investment in training is most easily supported by employers. An increasing percentage of the workforce are now employed on terms and conditions that implicitly reflect a reduction in their employers' commitment to offer them training and development'.

It could be argued, however, that this only looks at one side of labour flexibility. For, following Atkinson (1984), it may be that employers have sought 'flexibility gains' (Nolan and Walsh, 1995:64) by pursuing a deliberate strategy of workforce segmentation. Under the model, less skilled workers are employed on a temporary and uneven basis, affording numerical flexibility, thereby buffering a reduced group of highly skilled, polyvalent core workers who are inserted into structured, permanent internal labour markets (ILMs) and deployed to achieve functional flexibility. The weakness of this model have been widely noted, revealing little support for such a coherent management approach (see Hunter *et al*, 1994; Pollert, 1988a, b). The increases in casualised employment, as noted above, are intrically related to the growth in service sector employment, an area which has traditionally relied on such contractual arrangements. Furthermore, the restructuring of manufacturing has not only led to significant reductions in the levels of employment, but a deterioration in working conditions for the remaining workforce as the possibilities for advancement through ILMs have become truncated and the allocation of tasks intensified (Lovering, 1990).

In addition to the various ways in which the labour market has been restructured, it is important to recognise the enduring structural weaknesses in the UK manufacturing base. As Nolan and Walsh (1995:67/68) note, the decline of the UK manufacturing sector has followed a path of 'negative' deindustrialisation, characterised by poor productivity growth, low labour costs and a declining share of trade in manufactures. In this context, UK firms, notable exceptions aside, have a competitive advantage in low quality, low value-added, low skill product markets. This situation has been accentuated by the 'international' nature of the UK economy. According to Keep and Mayhew (1996:326), the fact that large British companies increasingly employ the majority of their human resources outside the UK means that investing in the skills of the home labour force 'may no longer be regarded as crucial to the long-term well-being of the firm'. Furthermore, research suggests that inward foreign investors regard the UK as a production base for low value-added operations requiring relatively low

level skills, reflecting, and thereby accentuating, the underlying weaknesses in the skills base (Knell, 1993).

For Green (1992:421/422), the pattern and path of economic development in the UK casts doubt on the possibility that there is single 'best way' to competitive success. Instead, two possible strategies are identified: offensive and defensive flexibility[14]. Under the former, a high wage, high productivity strategy is engendered by worker involvement, regulated labour markets, multi-skilling and the development of long term, locally based, subcontracting relationships between firms. Under the latter, the labour contract is rendered increasingly flexible and management control sharpened as employers seek to compete on the basis of low skills and low wages. The key point for Green is that both strategies are capable of generating profitable growth paths. The corollary is that:

'The existence of more than one possible path to profitability calls into question those commentators who see investment in skills as being in the rational self-interest of employers whose skill requirements are frustrated only by the existence of market imperfections. Indeed, it is possible that employers may see their interests as best served by the continued existence of an exploitable, low skill, low wage workforce' (Heyes and Stuart, 1994:39).

1.3.2 The industrial relations of training.

Whilst developments in government training policy have led to the progressive exclusion of trade unions from national and sectoral decision making forums, trade unions themselves, and a number of academic commentators, have increasingly identified training as a key issue in the development of a new bargaining agenda (see Leisink, 1993; Mathews, 1993). Thus, Leisink argues that in order to meet the current, and future, challenges of industrial restructuring unions must begin to pursue more progressive policies. Such innovation is considered essential if unions are to attract

[14] See also Boyer (1988) and Leborgne and Lipietz (1990)

new members, and to ensure that the direction of industrial change is not solely determined by management. Crucially, innovation is seen to necessitate a movement away from traditional *adversarial* bargaining approaches, restricted to pay and conditions, towards an agenda more likely to foster *co-operative* relationships. More specifically, given the fact that both employers and employees have a common interest in the acquisition and deployment of skills, the pursuit of positive sum '*occupational interests*', such as training, reskilling and participation, are expected to facilitate integrative bargaining relationship where both parties stand to win[15] .

Whilst this approach is an essential corollary of many high-skill prescriptions (Finegold, 1991), a number of weakness are evident (see Claydon, 1993; Kelly, 1996; Stuart, 1996). As Winterton and Winterton (1994: 7) note, 'despite training often being regarded as consensual within industrial relations, the interests of the different parties are not entirely congruent'. In other words, how acquired competencies are deployed, and in whose interest, in the labour process will relate to wider struggles at the point of production. For management, training may be an important mechanism in aligning behavioural characteristics with business objectives; and further, may be regarded as an important element in securing ongoing employee consent to workplace change that could adversely affect effort levels (brought about through broader rationalisations and redundancy programmes). For employees, by contrast, training may be an important device in increasing control over the job or securing improvements in pay in the face of workplace change. At a theoretical level, this indicates the difficulty in maintaining a 'clear analytical distinction between distributive bargaining and integrative bargaining' (Claydon, 1993:25). At a more empirical level, the consensual agenda of skill formation contrasts sharply with the formal exclusion of trade unions from VET policy formulation in the UK, and the hostile reaction of unions to particular initiatives (eg. YTS) during the 1980s (Ryan, 1995).

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[15] The positive sum outcomes associated with *integrative* bargaining stand in contrast to bargaining over di*stributive* issues, where compromised negotiations take place over conflicting issues.

The replacement of tripartite training bodies with employer controlled organisations has coincided with an increased emphasis by trade unions on training and development issues (Forrester *et al*, 1995). For as Rainbird (1990) notes, union involvement is all the more salient in a neo-liberal economy such as the UK, due to an increased requirement on workplace bargaining as a means of obtaining advances in skill training. In this regard, the importance of investing in skill formation has been advocated by a number of British unions in recent years, and 'developmental' issues underpinned the TUC's reassessment of bargaining priorities for the 1990s (TUC, 1991). The substantive aims of the new training agenda focus on equal opportunities, payment for skills and a minimum quota of training days per year, to be achieved procedurally through specific training agreements and training committees.

Evidence suggests, however, that to date trade unions have had little success in extending the bargaining agenda to encompass training and development issues. A widely cited survey of union representatives by the Labour Research Department (1990) found that training was an issue for consultation in only 30% of cases, with just 17% of respondents indicating that training was an issue for formal negotiation. Similarly, ACAS (1992) report that only 19% of unionised workplaces negotiated over training in 1990. More recently, Claydon and Green (1994:37) examined 944 company and sector collective agreements, published by the IDS report, and established between January 1991 and June 1993, to assess whether trade unions 'can have any beneficial effect on the level and quality of training'. Only 40 agreements were found to make explicit reference to training issues. For Claydon and Green, this suggests that in addition to the exclusion of unions from formal institutions at sectoral and national level, 'unions appear to have no indirect influence on the propensity of firms to provide training or of individuals to acquire it' (*ibid*, 49).

Care should be taken, however, in conflating union influence solely with the existence of a collective agreement. For union influence can manifest itself in a number of

informal ways, depending on the bargaining strength of the union and the historical institutions and traditions of training built up at the workplace (Heyes, 1993). Moreover, there is compelling theoretical and empirical evidence to suggest that trade unions can have a positive impact on levels of skill formation. At a theoretical level, Freeman and Medoff (1994) argue that by providing workers with an independent voice, workplace grievances can be expressed within the firm rather than through exiting employment. Unions may, therefore, encourage job tenure and with it the ability of employers to secure a return on training investments. Furthermore, unions may 'shock' employers into introducing best practice production and HRM techniques, by closing off the low wage, low skill path to competitiveness (Nolan, 1989, 1996; Streeck, 1992).

At an empirical level, there is tentative support for this position from Sisson (1993), who found that HRM practices were more prevalent in unionised workplaces. Similarly, econometric analysis of the 1991 Employers Manpower and Skills Practices Survey and the Autumn 1993 Labour Force Survey by Green *et al* (1996) found that employees in workplaces with recognised unions are significantly more likely to receive training than their non-unionised counterparts. Such findings are insightful, yet statistical associations alone tell us little about the underlying dynamics and processes facilitating positive impacts. Furthermore, where union/management training agreements exist very little is known about how they are managed and sustained, whether they actually work, how they evolved and the relationship between formal arrangements and informal accommodations at the workplace. Relatedly, what union strategies and tactics are most likely to be effective? Green *et al* (1996) suggest that the *presence* of a union is a factor in itself, but other commentators argue that *active* union involvement is more likely to elicit positive training outcomes (Heyes and Stuart, 1998; Kennedy *et al,* 1994). Relatedly, how do we understand, and how should we locate, union involvement in training, as an issue of co-operation or contestation, in relation to emerging employer strategies and processes of workplace restructuring?

1.3.3 Aims and scope of the present study.

The aim of this study is to produce new evidence on the impact of restructuring processes on skill formation and HRM practices. Rather than focusing on the economy as a whole, the study presents an analysis of training policy formation and practice within a specific industry. As Porter (1990:85) notes, such a focus is advantageous, for 'how and why commercially viable skills and technology are created, can only be fully understood at the level of particular industries'. The industry in question, printing, is particularly noteworthy, as it has a strong skilled tradition and a nationally determined training agreement regarded by the TUC as an example of innovatory practice. The unique focus of the printing agreement facilitates, therefore, an engagement with a possible best practice scenario, allowing an exploration of the key social processes that can complicate such joint union-management initiatives. Taking the agreement as the benchmark for training policy and practice within the industry, it is possible to explore how it connects with the changing character of employer strategies, union concerns and evolving government policies towards VET. How relevant, for example, is the agreement to the needs of employers? Similarly, how does the training agreement influence training practice at the workplace in a training environment dominated, and run, by the concerns of local employers?

In addition, the industry case study enables skill formation processes to be examined at different level of analysis. Thus, a unique aspect of the study is the way it integrates processes of restructuring and skill formation at the national, local and workplace level. How for example, have local economic agencies, such as Training and Enterprise Councils, sought to engage, and develop relationships, with the industry and its representatives? What training policies and practices are emerging at the level of the workplace? How are these influenced and mediated by the traditions of skill supply and working practices in the industry, specific competitive concerns, technological innovation, local economic agencies and educational establishments? Where companies

are experimenting with new training and HRM practices how does this impact upon the shopfloor division of labour?

It has been noted that for much of the VET and HRM literature training and development are treated as essentially 'positive-sum' issues; consequently, whilst 'institutional failure' prevents training investment the fact remains that improvements in skill formation is in everyone's interests. For Green and Ashton (1994), such an approach fails to locate skill and skill formation within an appropriate social and *contested* context. A key concern of the study, therefore, is to reveal the way processes of skill formation, skill supply, skill acquisition and skill deployment are inserted into, and played out in, the contested environment of the industry, the local labour market and the workplace.

1.4 Conclusions.

This chapter has reviewed a number of debates regarding processes of skill formation and workplace restructuring. It was noted that skill upgrading is a key component of perceived 'best practice' production techniques and soft HRM practices, yet in the UK a combination of institutional constraints have combined to stymie increased investments in training provision. Heavily implicated in this respect is the voluntarist nature of the UK training system, the role of management strategy and industrial relations traditions.

In contrast to the existing VET literature which tends to explore the mutually reinforcing nature of training institutions at the macro level, this study presents an analytical account of the dynamics of skill formation through a case study of the UK printing industry. The concerns of the study are not, therefore, prescriptive. Nor is it our intention to read off and test particular practices against some abstract model of HRM. Rather, the study presents an integrated assessment of the interplay of factors shaping skill demand, supply, acquisition and deployment within the industry. In this

regard, employers' labour management policies, trade union strategies, the evolving industry training infrastructure, local labour market institutions and the role of the state are examined through the *contested terrain* of a particular industry. This will allow a sophisticated and empirical treatment of the determinants of skill formation and the associated impacts on the industrial division of labour to emerge. The next chapter sets out the methodological concerns of the study.

Chapter 2: Methodology

This chapter explores the main methodological concerns underpinning the study. The first section briefly reviews the epistemological and technical problematics that shape particular methodological positions and research strategies. Section two focuses more specifically on the key methodological questions with regard to the training debate and engages in an examination of the 'controlled experiment' approach conducted by the National Institute for Economic and Social Research. Against this backdrop, the methodological foundations of the study are explained and the chosen data collection techniques are described. Section three provides brief conclusions.

2.1 The nature of research: epistemological and technical problematics.

The linkage between method and epistemology is an issue of some debate (Bryman, 1988; Gill and Johnson, 1991 Wass and Wells, 1994). If we subscribe to the view that method and epistemology are inextricably bound, then our conception and understanding of what constitutes social reality will fundamentally influence our approach to study and research. A *positivist* approach would aim to follow the methods and procedures of the natural sciences, in order to refute or corroborate, through rigorous empirical testing, a set of theoretically derived hypotheses. It is thus distinguished by its deductive nature (ie. theory tested by observation) and a concern with explaining causal relationships between variables. Such an approach is typically identified with *quantitative* methods of data collection, including experiments and surveys, which permit generalisation and facilitate replication.

By contrast, *naturalism* eschews the natural science approach, preferring instead to 'ground investigations in people's own understanding of social reality' (Bryman, 1988: 10). The data are typically collected by methods of participant observation or unstructured interviews and are *qualitative* in nature, with the process of explanation

conducted in an inductive manner (ie. theory comes out of the observation) and geared towards subjective meaning and understanding.

In identifying these opposing positions, it is important to note that they are 'characterised by alternative philosophical assumptions about the nature of human action (ontological assumptions) and about how this nature can be revealed through research (epistemological assumptions)' (Wass and Wells, 1994: 2). A research methodology is not, therefore, in itself a neutral technical device, as it is imbued with a set of deeper philosophical concerns (Wass and Wells, 1994:19; May 1993;22/23). This relationship is succinctly captured by Rist's (1977) insistence that:

> When we speak of 'qualitative' and 'quantitative' methodologies, we are in the final analysis speaking of an interrelated set of assumptions about the social world which are philosophical, ideological and epistemological. They encompass more than simple data collection techniques. (Rist, 1977: 62 taken from Bryman, 1988:50).

Thus, at an epistemological level, qualitative and quantitative methodologies stand as fundamental opposites, and *should not* be combined in a single research project. Bryman (1988) challenges this epistemological standpoint however, arguing that in practice many social researchers tend to oscillate between a philosophical position and a more *technical* position, whereby 'the main influence on your choice of research approach should be your research question(s) and objectives' (Saunders *et al,* 1997:86). In this respect, a less rigid, *technical*, point of departure allows a rapprochement between the quantitative and qualitative traditions, with the choice and nature of a particular research strategy determined by the relative merits and limitations of various research techniques. This is appropriate, according to Bryman (1988), for at least three reasons. First, the link between broad epistemological positions and specific methods is not clear cut: for example, participant observation could be utilised for theory testing or quantitative research could provide insights into questions of meaning (see Marsh, 1982). Secondly, methods are relatively autonomous and can be used for a variety of

purposes. Thirdly, a combination of quantitative and qualitative methods facilitates a more rounded picture of social reality.

Whilst it is common for students of research methods to emphasise the benefits that can be gained from a multi-method approach, the extent to which research questions and methodological choices are 'predetermined' by deeper philosophical perspectives is deeply contested. In response to Bryman, Wass and Wells (1994: 18) argue that 'though not explicitly stated, and probably not consciously thought out' a 'particular view of science' will always play an influential role, and as such

> ...it is incumbent on the researcher to acknowledge explicitly the philosophical choices associated with the choice and combination of method and to ensure, at the very least, consistency between techniques in pursuit of the research objectives (*ibid*:19).

As a heuristic device, it is thus worthwhile conceptualising the positivist and naturalist perspectives as extreme ends of a continuum, with a range of possible approaches and methodologies existing between the two[1]. In this regard, it is possible to adopt an approach of 'methodological pluralism' based more upon realist assumptions concerning the ontological nature of social reality (Gill and Johnson,1991; Sayer, 1992). This perspective is sensitive to subjective meaning and understanding, but stresses the way subjective consciousness is shaped by particular concrete and material contexts. Rather than viewing different methodologies and research designs as competing, this approach suggests they may be complementary and combined in order to compensate for weaknesses in individual methods. For example, a survey could be used to establish the extent and pattern of particular events, supplemented by qualitative techniques to tease out the processes underpinning the identified events. The key point for Wass and Wells (1994:19), however, is that the realist synthesis

[1] As 'ideal types' both positivism and naturalism are problematic. By attempting to replicate the natural sciences, a positivist approach encourages reification. Naturalism's emphasis on multiple subjective realities, on the other hand, lays it open to the criticism of being too relativist.

'makes it possible to justify a research design drawing from more than one philosophical paradigm'.

Drawing from this brief review of the more abstract methodological questions, the remainder of the chapter will set out the specific research design and fieldwork techniques employed by the study and explain their relevance for exploring the dynamics of skill formation.

2.2 The research design, empirical focus and fieldwork of the study.

2.2.1 A note on methodological problematics in the training debate.

As noted in Chapter one, the work of the National Institute for Economic and Social Research (NIESR) has proved particularly influential in the area of skill formation and comparative economic performance, providing a standard point of reference for pronouncements regarding the economic benefits of training investment and the nature of the 'British training problem' (see Mason et al, 1996; Steedman and Wagner, 1989). The methodological foundations and empirical findings of these studies have, however, been questioned (Cutler, 1992; Noble, 1997) and, in this respect, a brief review of the NIESR programme will help to set the methodological parameters of the current study in context.

As Steedman and Wagner (1987: 84) note 'the overall objective of the National Institute's research project is to examine the relative contribution of physical and human capital to productivity'. To this end, training as a contributory factor input of human capital is treated as an independent variable which may or may not affect a given measure of efficiency (ie. the dependent variable). In order to isolate the human and physical capital factors, the studies focus on 'matched samples' of firms within a single industry[2]. This 'controlled experiment' approach facilitates replication, and ensures that consistent and representative samples of firms are

[2] Industries include: women's 'outwear', kitchen furniture, basic metal working products, and biscuits.

selected within each industry and country. Data on levels of output, quality, employment, training and qualifications are typically collected via semi-structured interviews with production managers and/or supervisors and direct observation of production processes.

The studies have consistently associated lower levels of training and qualifications in British firms with comparatively inferior measures of productivity and product quality. For example, in a study of food processing (biscuits) plants in Britain, Germany, France and the Netherlands, Mason *et al* (1996) found that the British plants had the lowest 'quality-adjusted' measure of labour productivity[3], produced the lowest quality biscuits through longer production runs, and experienced higher levels of machinery downtime. In explaining these differences, the authors point to the fact that in the more technically demanding areas of production the British workers were far less likely to hold qualifications. Furthermore, comparatively inferior and narrow levels of on-the-job training were found to restrict the flexibility and problem solving capabilities of the British workers. Thus, even though the British plants were 'bulk' producing low quality products their staffing levels were higher and more task demarcated than, for example, the German plants which utilised highly skilled, functionally flexible workers.

The methodological foundations of the NIESR research have, however, been subject to a trenchant critique by Cutler (1992), who questions the reliability and validity of the controlled experiment approach. As Cutler (1992: 171) explains:

> The NIESR studies *do* discover differences in the percentage of employees generally, and in the sample firms, with vocational qualifications (of comparable quality)....Consequently, any argument for the effects of 'human capital' differences would be strengthened if the firms concerned exhibited significant labour productivity differences and similarities in the capital equipment used. It might

[3] Basic output multiplied by a value added measure of the product produced in order to take quality into account.

seem that, as the object of the investigation was to take matched samples of firms, thus controlling for each relevant determination bar the effects of vocational training, then the investigation would be constructed so that this condition was met.

In practice this was not the case, capital equipment was often found to vary in terms of type and age between firms in different countries. The study of manufacturing plants by Daly *et al* (1985), for example, found that numerically controlled machines were far more common in German than British plants, yet the significance of this was left unexplained by boldly stating that 'although there was a relative lack of NC machinery in the British plants in our sample, *in our judgement* the greater part of the productivity gap came from other sources..' (Daly *et al* 1985: 59, taken from Cutler 1992: 171 emphasis added). Further problems are also evident with regard *outcome* measures, which combine comparisons of products and processes, and the actual explanatory *mechanisms* adduced to training, with the studies consistently identifying 'training *en masse*' as critical despite evidence on the importance of training 'key' employees. In conclusion, Cutler (1992: 173) argues that:

> The ideal....is the controlled experiment but the practice diverges: varied measures of labour productivity whose representative character is unclear; differences in capital equipment; indeterminancy on the mechanisms by which training is deemed to work.

Whilst the NIESR studies are able to identify an association between higher levels of training and firms' performance outcomes, methodological weaknesses limit their causal validity and explanatory potential. Even though the current study was not designed to assess performance outcomes, the limitations of the NIESR method are nonetheless informative[4] and usefully demonstrate how inappropriate positivistic methods are for the concerns of this thesis. As Cutler (1992:173) notes, the NIESR studies are premised on an *a priori* assumption of the benefits of training *en masse*, and this is underpinned theoretically by a conventional economic framework which suggests that 'variations in national economic performance can only be understood

[4] The study is able, however, to consider the processes linking skill formation and outcomes.

in terms of variations in the quantity and quality of inputs'. As a consequence, training practices are abstracted from their social and industrial contexts. The role and behaviour of competing social actors are thus ignored, and no attention is given to the way in which traditions and patterns of skill formation within particular industries are shaped by historical and contemporary struggles over the definition of skill. Questions of why companies pursue particular training and labour management practices and how particular patterns of skill formation emerge remain unanswered.

Given the concerns of the present study with exploring the relationship between restructuring processes, the dynamics of skill formation and firms' HRM policies and practices, the 'value neutral', technical approach of the controlled experiment has little utility. It is not the intention of this study to divorce phenomena from context in order to test the impact of selected independent variables. Rather, our analysis of the dynamics of skill formation seeks to explore 'how' and 'why' particular factors determine and shape training practices and broader HRM strategies. Such factors include the role played by local economic agencies, the evolving industrial structure of training and education, as well as the changing nature of social relations on the shopfloor. In short, in order to understand and explain the phenomena of skill formation it must be placed within an appropriate, and often contested, social and environmental context. The study is thus underpinned by a research design that is more flexible and open ended than the controlled experiment, so the voices of competing social actors can be heard and the complexity of contextual relationships uncovered.

2.2.2 Research design: the case study as research strategy.

The methodological approach employed in this study is that of a single industry case study. Following Kitay and Callus (1998) and Yin (1994), the case study approach is understood as an overarching *research strategy* rather than a specific research

technique. The application of a case study thus affords the potential of using a range of data collection techniques. As a point of departure, Kitay and Callus (1998:103) define the case study as:

'A research strategy or design that is used to study one or more selected social phenomena and to understand or explain the phenomena by placing them in their wider context'.

According to Yin (1994), such a research strategy is appropriate when three conditions hold. Firstly, the form of the research question(s) should be concerned with 'how and 'why' questions. So, in terms of the present study, we are interested in examining how processes of restructuring impact upon the dynamics of skill formation and HRM practices, and how, and why, emergent training policies and practices at the level of the work place are influenced and mediated by traditions of skill supply, workplace industrial relations, technical innovation, local economic agencies, broader competitive concerns and so forth. A case study design can trace over time the 'operational links' that underpin such questions (Yin, 1994:6), allowing the researcher to examine the 'processes by which events unfold' and to identify various causal relationships (Kitay and Callus, 1998:104).

The second and third factors facilitating a case study approach relate to the 'extent of control over behavioral events and degree of focus on contemporary as opposed to historical events' (Yin, 1994: 8). With regard the former, this study is concerned with understanding processes of skill formation in terms of the roles, experiences, attitudes and perceptions of competing social actors, an experimental design that seeks to manipulate events or isolate a limited number of variables for statistical testing is thus deemed to have limited explanatory potential. Yin's emphasis on contemporary events must, however, be rejected, not just because, as Kitay and Callus (1998:102) argue, 'this is an unnecessary limitation ...in view of the significant contribution to industrial relations made by historical studies of workers

and unions and more recently management'. But because the present is itself a product of the past. For example, contemporary union involvement in training policy formulation in the printing industry must be understood in terms of the historical exercise of, and struggle over, training (via craft apprenticeships) as a form of job control.

In designing a case study it is important to define the parameters of the case and the specific *unit of analysis*. It is thus necessary to justify the focus of the present study on the dynamics of skill formation in the UK printing industry. How representative, for example, is printing of developments in HRM within UK industry as a whole? At one level, the widely documented changes in new technology, industrial relations and union structures, in parts of the industry at least, may be comparable with events in other industries, particularly manufacturing, but this is not the issue. As Yin (1994:10) notes, whilst case studies are frequently castigated for their lack of 'scientific generalisation', this misses their purpose. By focusing intensively on underlying processes, casual factors and contextual nuance case studies eschew concerns with external validity (ie. generalising to a larger population) in favour of generalising to deeper, conceptual problematics[5].

In this respect, the focus on printing as a unit of analysis can be justified with reference to its unique infrastructure of training provision. In contrast to the increasingly decentralised practice of collective bargaining across much of British industry, a nationally negotiated agreement remains in force in the general printing industry. The training component of this agreement is recognised by both the TUC and academic commentators as an example of innovatory practice (see Gennard, 1987; Leisink, 1993; TUC, 1994). As noted in Chapter 1, a focus on the printing industry may, therefore, facilitate an engagement with a 'best practice' scenario. Or from another perspective, the training agreement and concomitant training

[5] In other words, the goal of case study research is analytical not statistical generalisation (Mitchell, 1983).

infrastructure in the printing industry may represent a *deviant* case. Following Lipset *et al* (1956), deviant case analysis involves selecting a case which appears to contradict a general pattern, the unique characteristics of the case can then be identified, explained and compared and contrasted with the general pattern[6]. How and why, for example, did the training agreement emerge in the printing industry? How is it sustained, if at all? Of particular interest, what factors constrain the effectiveness of the system, and how are tensions from the broader economic environment, the changing UK training system and infrastructure and processes of enterprise restructuring changing, and possibly undermining, the contours of skill formation in the industry?

The changing nature of skill formation within the printing industry can, moreover, only be understood when data is collected at other units of analysis. As Kitay and Callus (1998:105) explain:

'Specifying the boundaries of the unit or site of analysis does not artificially restrict the study, in that one of the key features of case study research is the ability to explore the relationship between a unit and its wider environment in considerable detail'.

Following Yin (1994: 41/42), this thesis employs an *embedded* case study design involving several subunits of analysis, including local labour market institutions, individual printing firms and groups of shopfloor workers. Given the potentially flexible and open-ended nature of case study research, these subunits were not predetermined but developed through the rhythms of the research process. Thus, as Kitay and Callus (1998:108) note:

'It is not possible to start a case study with a predetermined research plan. The art of a good case study is in being able to follow leads and pick up on interesting issues as they arise. This is the key difference between case studies and other approaches,

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[6] Deviant case analysis has recently been applied by Gospel and Drucker (1998) in a study of the electrical contracting industry.

such as surveys or experimental design, in which the research design is determined before entering the field'.

Returning to the philosophical positions discussed earlier in the chapter, it is clear than a case study design differs sharply with the deductive canons of a pure positivistic approach, but this does not necessarily imply, by default, a naturalistic position. It was noted that the two philosophical positions are typically characterised by their commitment to quantitative and qualitative methods of data collection respectively. The open-ended nature of the case study implies a position of 'methodological pluralism'. 'The amount of information, the level of detail, and the decision as to when the data collection phase of the case study is complete are a matter of judgement' (Kitay and Callus, 1998:108), thus, case study researchers often utilise, and combine, a range of data collection techniques in order to capture 'missing pieces of information' and to ensure that 'all relevant viewpoints' are covered.

2.2.3 The empirical focus of the study and research techniques employed.

The study's data were gathered between 1993-1998 in the following ways.

i) At an industry level, interviews were held with national representatives of the Graphical, Paper and Media Union (GPMU), the British Printing Industries Federation (BPIF) and the Printing Industry Research Association (PIRA). The purpose of these interviews was to elicit information on the nature of skill formation, and the dynamics of change in training structures and practices, in the industry. In addition, the interviews sought to uncover, and explore, the interplay between processes of skill formation, patterns of economic restructuring and broader changes in the character of industrial relations. The need to corroborate the viewpoints of key informants was essential. For example, initial interviews were conducted during a temporary suspension of the national pay and training agreement, when the

relationship between the GPMU and BPIF was particularly hostile and acrimonious. In order to avoid accusations of bias, our account of events needed to extract the perceptions of both sides in the dispute. Corroboration was also facilitated by the collection of national training committee minutes and unpublished correspondence between the GPMU and BPIF.

More detailed information on the changing structural and employment characteristics of the printing industry were obtained from a range of secondary sources, including industry level surveys and reports, the GPMU journal, and the trade press.

ii) Interviews were also held with representatives of the GPMU and the BPIF at the regional and local level. This helped to complement and develop the insights gained from representatives at the national level, as the interviews sought to assess how training policies determined at the industry level were implemented, and mediated, at the local level. A key concern here was to explore the relationship between the GPMU and BPIF and local economic and development agencies, such as the Training and Enterprise Councils (TECs). Were any local partnerships, for example, emerging over issues of skill formation between the industry and local level bodies? Where they existed, what were the key imperatives driving such coalitions?

In this regard, interviews were held with representatives of Leeds TEC, the Leeds Development Agency (LDA), and Leeds College of Technology. The local labour market of Leeds was particularly worthy of investigation because the city is regarded as the most important provincial print centre in the UK, 'not only in terms of output, employment and innovation but also due to the national and international reputation of some of the companies represented' (Leeds TEC, 1994:56). Furthermore, a number of print related initiatives had been launched by various agencies in the city. The research was able to follow the evolution of these

initiatives, chart any changes, and assess their relative success or failure. For example, initial interviews with representatives at Leeds TEC and the LDA revealed that both had set up sectoral initiatives for the printing industry, with the aim of improving training practices and career opportunities in the sector. Both initiatives were supported by local branches of the GPMU and BPIF, the College of Technology and interested print firms in the locality. Those informants interviewed at the TEC and LDA thus played a useful role as 'gatekeepers' to a host of other useful contacts.

Interviews at the local and national level were conducted at various points during the course of the research, in order to track new developments and patterns of change. A number of print-related seminars and presentations were also attended.

iii) Turning to the empirical research on printing firms, ten contacts were initially identified from interviews with key informants at Leeds TEC and the LDA. Each company was subsequently approached, by letter, and asked if they would be prepared to grant access for case study work. Four companies eventually agreed to participate.

In three of the companies, management strategy and training policy and practice were explored through interviews with the director responsible for human resource matters and where possible one other manager. Trade union representatives were interviewed in two of these companies, the third did not recognise a union. The interviews explored their business characteristics and competitive environment; company policy towards new technology; human resource management strategies and training policy; and the relationship with local economic agencies and training providers. All three companies had at some time been involved in one of the print sector initiatives run by the TEC or LDA.

In the fourth company, a more intensive programme of research was conducted, involving: 20 semi-structured interviews with management, union representatives and shopfloor workers; a three week period of direct observation; and a workforce questionnaire (200 questionnaires were distributed, covering both operatives and administrative and clerical staff, generating 44 usable responses). The rationale underpinning this more detailed schedule of work was that:

(a) The company was regarded by representatives from both the TEC and LDA as an exemplar HRM organisation, even though it explicitly refused to take part in any of the print sector initiatives.

(b) The company had recently moved to a new, greenfield site location, affording them the opportunity to implement new working practices and methods and to establish a coherent set of HRM practices.

(c) The company had introduced a range of unique technologies which may prefigure future trends in the industry.

The case study considers the change management process at the company and examines in some detail how this was experienced by shopfloor employees. The questionnaire was designed to gather broad data on employees' experiences of, and attitudes towards, training provision at the company, and included questions on training incidence, type and quality. The interviews and observation sought to explore in more detail the dynamics of skill deployment, career development and the changing shopfloor division of labour by focusing on, and differentiating between, the various parts of the production process.

Having described the process of data collection, a few comments are needed on the methodological strengths and weaknesses of the techniques employed. In this

context, the interviews conducted at national, local and firm level all followed a *semi-structured* approach. Thus, rather than adhering to a set of standardised and predetermined questions, the interviews were loosely structured around a number of 'thematic guides' that aided comparison but, at the same time, allowed the respondent the freedom to elaborate on issues of particular interest or concern. The semi-structured approach is acutely sensitive to context, enabling the researcher to follow new leads as they arise, 'probe beyond the answers' given and request expansion when required (May, 1993:93). Whilst the qualitative data collected facilitates exploration and explanation, it is often regarded as weak in terms of reliability and generalisability (Saunders *et al*, 1997). As May (1993:97) notes, however, the reliability of the data can be enhanced by ensuring 'that the person answering the questions has access to the information which the interviewer seeks', and that they have a clear understanding of the purpose of, and their role in, the interview procedure. The generalisability of the data was strengthened by taking account of different view points, at various levels of analysis, within the overall case study of the printing industry (Bryman, 1988). In short, the purpose of the interviews was to facilitate analytic rather than statistical generalisation.

Many of the interviews were tape recorded, respondent permitting. The disadvantages and advantages of tape recording were, again, thought out clearly before hand. As Saunders *et al* (1997:228) note, taping an interview may 'inhibit some interviewee responses', can lead to disruptions 'when changing tapes', and requires significant time for subscription, but this process may free the interviewer to concentrate more intently on questioning and listening, ensures a permanent, 'accurate and unbiased record', and allows 'direct quotes to be used' in the written analysis. Furthermore, the detailed transcripts proved invaluable in categorising the analysis thematically and in comparing interview responses.

In summary, as May (1993: 109) notes, 'if both the strengths and weaknesses of ...interviewing and approaches to their analysis are understood, they provide a way of understanding and explaining social events and relations'.

iv) The final component of the empirical work involved a large scale, questionnaire survey of printing firms. Rather than generating an original, random sample of print firms in the UK, a decision was made to compile a more comprehensive, locally based sample. This decision was aided by an offer of support from Leeds College of Technology and the LDA, who were both willing to donate their mailing lists of printing firms in West Yorkshire. The two lists were combined, edited and updated by a representative of the LDA, printed onto envelopes and then passed onto the researcher. This collaboration was helpful in reducing the time and resources allocated to the survey, but it is important to note that the LDA imposed no constraints on the design or distribution of the questionnaire. The decision to target print firms in the whole of West Yorkshire, rather than just Leeds, was based simply upon anticipating enough returns to conduct a meaningful analysis. Moreover, by targeting every printing company in West Yorkshire we could ensure that the sample was more closely aligned to the national picture in terms of firm size and production activity.

The first draft of the questionnaire was presented to representatives of the LDA and Leeds College of Technology, and subsequently piloted with selected firms involved in the Leeds Print Initiative. To ensure a high response rate, each questionnaire was posted to a named individual, and included a covering letter, explaining the study's purpose and use, and a stamped addressed return envelope (see Appendix 1 for covering letter). Every respondent was ensured complete confidentiality and promised a summary of the key findings. In total, one thousand and sixty nine questionnaires were sent out in January 1998. A reminder letter and additional copy of the questionnaire was posted to non-respondents one month later. Overall, the

survey elicited 108 usable returns, a final response rate of 10%. The poor response rate can be explained by five factors. Firstly, whilst every attempt was made to ensure a good response, once the questionnaires were posted the researcher had no control over the process. Secondly, even though the survey population was based upon the most comprehensive databases in the locality, problems nonetheless arose. In particular, a significant number of firms, especially the smaller ones, had gone out of business or moved address. Thirdly, the questionnaires were sent to all publishing as well as all printing firms in the locality, despite the emphasis of the questionnaire on printing. This was because it was considered virtually impossible to weed out all companies whose sole interest was publishing, but it was also felt that such companies might have training practices that would be of interest. As it turned out, no publishing companies responded. Fourthly, a strict guillotine was imposed on questionnaire returns. Finally, at ten pages, the questionnaire may have been considered by some potential respondents simply too long and time consuming. Overall, however, the responses covered a wide range of print sectors and included firms of all sizes, particularly very small ones. Moreover, the relatively high *number* of responses generated a wealth of interesting, and industry relevant, data for analysis.

One of the main advantages of questionnaire based surveys is the relative ease with which data can be generated, compared to the time and costs incurred in the conduct of interview based fieldwork. Yet, whilst surveys have the potential to gather data fairly rapidly, there is some debate over the relevance and utility of the data generated (see Marginson, 1998; May, 1993). Firstly, as May (1993: 87) notes, there is the issue of 'meaning equivalence', '[H]ow can survey researchers guarantee that their questions will be interpreted by the respondent in the manner in which they intended when there is no opportunity for dialogue'. Secondly, as Sayer (1984: 246) explains, the actual *explanatory* power of extensive studies may be limited, '...not so much because they are a 'broad-brush' method lacking in sensitivity to detail,..but

because the relations they discover are formal, concerning similarity, dissimilarity, correlation and the like, rather than causal, structural and substantial'. Thus, it is widely accepted that the survey method is unable to probe and explain complex, social processes[7].

Whilst the printing industry questionnaire survey was conducted *after* the qualitative research it was not designed to test a set of hypotheses derived from the case study work or a range of formal theoretical priors. Its purpose was not, therefore, *explanatory*. Rather, the main aim of the questionnaire was to *complement* the more qualitative case study findings by providing a broader, generalised set of data on the *extent* of training and HRM activity. It thus sought to elicit *descriptive* data (see Saunders et al, 1997) on the quantity and quality of skill formation, in order to identify emerging patterns in firms' HRM policies and practices and also to provide an up-to-date snapshot of training activities and concerns. When combined with the detailed nuance of the case studies, the broad ranging data provided by the survey allows us to build on the principle of methodological pluralism and enables us to produce a study that is methodologically triangulated.

The questionnaire was thus designed to examine the training practices and skill requirements of print firms, in order to identify the main issues and problems affecting human resource strategies and investments in training. A particular concern, was to identify the extent of the uptake of recent government sponsored training initiatives, such as Investors in People and NVQs. It was structured into five sections: company details; workforce details; training and human resource management issues; production issues and industrial relations issues (a copy of the questionnaire is included as Appendix 2). The interview data proved invaluable in designing questions that were sensitive to the concerns of the printing industry and attuned to the way they might be interpreted (May, 1993:76).

[7] Although this has been contested (see Marsh, 1982).

The questionnaire data was collated and analysed on the computer package SPSS for Windows. Again, given the descriptive design of the survey, it was not our intention to subject the findings to rigorous, multi-variate, statistical tests. Indeed, the lack of ordinal variables precluded such an analysis. Instead, the data are presented in terms of simple aggregates and, where appropriate, disaggregated by firm size. Similarly, where suitable, a number of cross-tabulations were conducted. In addition, a number of open questions allowed respondents to record in more detail their views and perceptions on relevant issues.

2.2.4 Presentation of empirical findings.

As far as possible, the purpose of the empirical chapters is to present the key data and facts emerging from the fieldwork, more detailed opinions and judgements on the results are reserved for the concluding chapter. Given the *embedded* nature of the case study, the findings descend from the industry level, to the local level and then to the actual firm level. The findings from these sub-units are then integrated in the concluding chapter (see Yin, 1994).

2.3 Summary.

This chapter has briefly considered the key philosophical, methodological and empirical concerns underpinning the study, and has documented the data collection techniques employed. The discussion rejected the positivistic undertones of the NIESR work on training and development, noting that such studies effectively abstract training practices from their social and industrial contexts. Indeed, whilst the NIESR studies deploy a matched-plant approach in specific industries, the actual traditions, conflicts, and institutions defining the industries are given no attention. By contrast, this study explores the dynamics of skill formation through an *embedded* case study approach. Processes of skill formation can thus be situated within the *contested terrain* of the printing industry, and explored at the national, local and firm level.

Chapter 3: The Structure of the UK Printing Industry and the Industry's Framework for Vocational Education and Training.

Over the last 20 years the printing industry has experienced a period of dramatic, technologically induced change, with more developments taking place during this period than the previous 450 years combined (Gennard, 1987)[1]. The ramifications, as many commentators have noted, have been varied and significant, undermining long-standing processes of skill acquisition and deployment and also challenging, and in certain parts of the industry eradicating, the traditional job controls established by print workers and their unions (Cockburn, 1991; Gennard and Dunn, 1983). This chapter explores the nature and impact of recent processes of restructuring within the industry, paying particular attention to changing patterns of employment and the evolving training framework within the sector. In this context, the next section will briefly outline the changing structure of employment in the industry. Section 3.2 will document the changing nature of technology and processes of printing. Section 3.3 considers the industrial relations framework, and section 3.4 describes the evolution of the industry's training structure. Section 3.5 will conclude the chapter by assessing the implications of the preceding analysis.

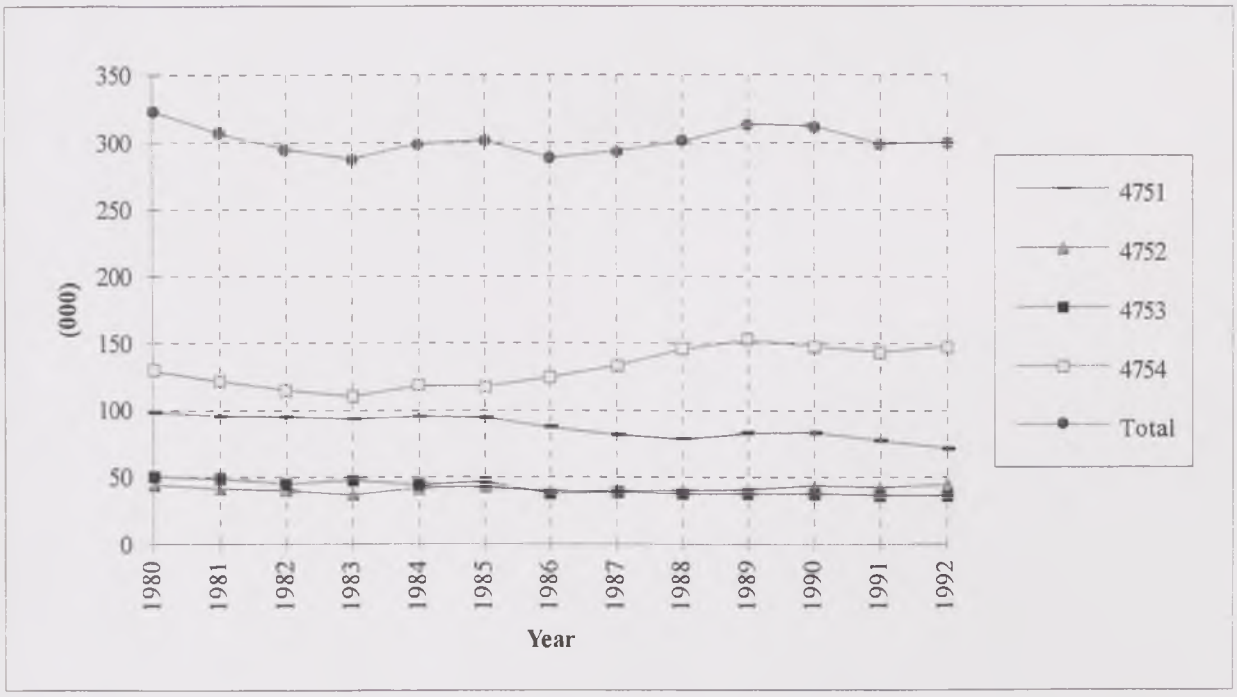
3.1 The Structure of the UK Printing Industry.

Printing is the UK's fifth largest manufacturing industry (BPIF, 1998a). Its structure reflects the diversity of its products and fragmented nature of its market with a few large integrated groups, a number of medium sized companies which tend to specialise in a select product range and a large number of small firms catering primarily for local markets. According to recent data presented by the British Printing Industries Federation (BPIF), the printing industry employs 150,000 people (outside newspaper printing) in 10,000 companies throughout the UK. It should be noted, however, that an accurate assessment of the specific composition of employment within the industry is

[1] See Child (1967) for the most comprehensive history of the printing industry,

problematic. Crucially, as far as this analysis is concerned, government employment statistics tend to aggregate print employment with publishing and occasionally paper industry data. In this context, Figure 3.1 charts the changing pattern of employment in the newspaper, periodical, book and other printing and publishing sectors of the UK printing industry.

Figure 3.1: *Employment in the Printing and Publishing Industry 1980-92* (SIC 4751, 4752, 4753, 4754, based on 1980 classification)



Note: 4751 - Printing and publishing of newspapers
4752 - Printing and publishing of periodicals
4753 - Printing and publishing of books
4754 - Other printing and publishing

Source: *Census of production 1980-1992.*

Total employment in printing and publishing fell by 7% (22,700) between 1980 and 1992, from 323,100 to 300,400, with heavy job losses concentrated in the early 1980s and late 1980/90s. The fall-out of the early eighties was particularly severe, sustaining a trend decline that saw employment fall by 16.15% (55, 400) between 1975 and 1983. These figures mask, however, significant inter-sector variations. As we can see from Figure 3.1, whilst there was a slight increase in periodicals and a slight decrease in books, the largest changes in employment took place in the newspaper and other

printing and publishing segments of the industry, with employment in newspaper printing and publishing declining by over a quarter (27,000 jobs) between 1980 and 1992. By contrast, employment in the other printing and publishing category registered an increase of 14% (18,200 jobs) during the same period.

The printing industry is, then, extremely complex and heterogeneous, made up of a variety of different sectors which defy a single industry label. The other printing and publishing category, generally referred to as the general trade, also includes a series of different industries, such as security printers, carton producers, advertising concerns and packaging companies. Each sector operates with different types of technology, although the underlying printing principles remain the same, with concomitant implications for the labour process, working practices and patterns of skill formation.

Overall, the aggregate statistics suggest that the decline of employment in printing was less severe than for manufacturing as a whole. Thus, the share of printing employment to manufacturing increased from 8.4% in 1981 to 10.0% in 1991 (Leisink, 1993). Nevertheless, such statistics obscure the broader effects of economic restructuring on the composition of employment within the industry. As both Leisink (1993) and Roe (1996) note, the ratio of operatives to administrative, technical and clerical (ATC) staff reversed between 1979 and 1992, as the number of operatives employed fell by 50,000 (27.14%) compared to an increase of 24,800 (18.76%) in ATC staff. Such compositional change is also indicative of the changing sexual division of labour in the industry, as women are far more likely to be employed within the ATC categories.

As noted, employment within the industry is extremely fragmented. In 1992, for example, 19,674 print-related businesses were recorded by the Census of Production, of which, 17,324 employed less than 19 people[2]. By contrast, only 23 businesses were

[2] Given that businesses employing less than 20 persons are not required to complete census returns these figures are based on the best estimates available (Census of Production, 1992).

recorded as having a workforce greater than 1,000. In terms of relative shares of employment, 11.95% of the total print industry workforce in 1992 were employed in the largest businesses (1,000+), compared to 13.21% in large businesses (500-999), 24.99% in medium sized concerns (100-499) and 49.87% in smaller business (<100)[3]. The period between 1981-1992 witnessed a trend decline of the largest printing establishments, with the number of businesses employing more than 2,000 decreasing from 14 to 5. During the same period, there was a corresponding trend increase in the number of small business (<100), albeit with year on year fluctuations. Those businesses employing between 100 and 1999 again fluctuated in terms of numbers, but in general maintained a relatively stable share of total employment (Roe, 1996).

The industry is, then, dominated by small firms, with the smallest of these tending to specialise in: basic, general printing, computerised, graphic operations and desk-top publishing work. Such companies, referred to as jobbing printers, would tend to produce 'bespoke' products within a confined local market (see Rainnie, 1989:100-103). In common with small companies in other industrial sectors there appears to be a high degree of new company start-ups and closures (see Dunne and Hughes, 1990). At the other extreme of the industry, the largest companies tend to operate in the newspaper, periodical and book side of the printing industry. And it is in these sectors that we also find a number of large printing conglomerates (eg. The British Printing Company (BPC)), many of whom operate on an international basis and are increasingly the target of foreign multinationals. For example, at the time of writing Investcorp, the Bahrain based investment group, has revealed plans to buy two of the printing industry's biggest names, Watmoughs and BPC, for £600 million. If successful Investcorp would 'become the most powerful force in the industry, with combined sales of £560m' (Waples, 1998:8).

[3] A quarter of the total workforce were employed in very small businesses (<19).

Table 3.1: *Output, sales and net capital expenditure in the UK printing industry between 1980-1992 (SIC 475).*

	Sales of goods produced (£ million)	Investment in plant and machinery (net £million)	Net output per head (£)	Index of output (1982 = 100)
1980	6 406.9	193.3	13 073	100.00
1981	6 905.9	182.3	15 077	115.32
1982	7 522.7	165.9	17 133	131.01
1983	7 901.4	216.9	18 316	140.11
1984	9 263.6	312.1	20 680	158.19
1985	10 412.0	398.9	22 495	172.07
1986	9 060.7 *	441.2	25 203	192.79
1987	9 764.1	507.2	28 143	215.28
1988	10 964.2	654.0	31 120	238.05
1989	12 197.4	786.8	33 597	257.00
1990	12 752.7	674.3	35 219	269.40
1991	13 312.0	808.7	37 386	285.98
1992	14 577.1	631.1 #	41 120	314.54

Note: * = From 1986 revenue from advertising was to be excluded from the value of sales of goods produced and included in the value of non-industrial services.

= Data in the 1992 results were estimated from information collected in the CSO Quarterly Capital Expenditure and Stocks Enquiries, rather than from the Census.

Source: *Census of Production 1980-1992.*

As Table 3.1 indicates, whilst employment in the industry has declined since 1979, performance has, nonetheless, increased on a year-by-year basis. Between 1980 and 1992 the total sales of goods produced in the industry increased by 227.5%, totalling over £14.5 billion in 1992. Over the same period, net output per head increased even more significantly by 314.54%. Clearly, the decline in employment compared to sales explains the massive increase in net output per head, but as Table 3.1 demonstrates, there was also a significant increase in the amount of investment in plant and machinery during this period. Indeed, whilst investment in plant and machinery did

decline during the early 1980s and 1990s, most significantly by 14% during 1990, the trend increase, in both cases, picked up again within a year.

These aggregate indicators mask, of course, significant performance differentials between the various sectors of the industry identified above. Within the newspaper sector there was a significant decline in the sales of goods produced during the eighties, so much so that even the 1992 recorded sales of £2.24 billion were 14% down on the figures registered in 1984. Nevertheless, there was a significant increase in net output per head (239% between 1984-92) and in investment in plant and machinery during this period, with investment increasing from £87.9m in 1984 to £404.5m in 1990, although this subsequently fell to £230m in 1992.

Sales of goods produced in the periodicals and book sectors of the industry followed a relatively similar trajectory to that of newspapers during the period, with sales declining during the mid to late eighties, before rising again by 1990. In contrast to the newspaper sector, however, sales during the 1990s have surpassed the levels of the early eighties, and by 1992 sales in periodicals (£2319m) and books (£2868m) were larger than those in the newspaper sector (£2240m). Net output per head also increased substantially within the periodical and book sectors, rising respectively from £26,490 and £27,581 per head in 1984 to £54,585 and £54,625 per head in 1992. Net capital expenditure in plant and machinery, whilst substantial in both sectors, was significantly less than in newspapers. In periodicals, investment in plant and machinery rose from £82.1m in 1984 to £96.6m in 1990, declining to £88.7m in 1992. The corresponding levels of investment for the book sector were £55.8m, £74.1m and £69.3m respectively.

It is, however, the other printing and publishing sector of the industry that has experienced the most significant period of growth since the early 1980s. Between 1984 and 1992 the total sales of goods produced increased from £3,016.8m to £7,149.5m, a

rise of 237%. Thus, over the period the relative performance of this category compared to newspapers has become increasingly significant. In 1984 the total sales of the other printing category was only slightly greater than the newspaper sector, but by 1992 the differential was threefold. Furthermore, over the period the other printing and publishing sector's share of the total sales of goods produced for the whole printing industry has increased from a third in 1984 to a half by 1992. The recorded levels of net output per head in the other printing sector have, however, been consistently lower than the other 3 sectors over the period, rising from £16,458 per head in 1984 to £31,114 in 1992. Investment in plant and machinery also increased substantially over the period, from £179.5m in 1984 to £368.6m in 1992.

In terms of the balance of trade, exports of printing material have consistently exceeded imports. The industry achieved a growing trade surplus from £57m in 1983 to £593.6m in 1995 (BPIF, June 1996: *Facts and Figures about the Printing Industry*). According to the BPIF, competition from imports mainly affects book printing (of which 25% is imported), long run advertising material and cartons, with exports dominated by publications and security printing. A large percentage of this, however, is accounted for by publishing sales, although recently there has been an increase in direct exporting by printers (BPIF: Information, ND). Nevertheless, it is clear that the export capacity of the industry is served by specialist areas and dominated by the larger printing groups, with the majority of smaller printing establishments predominantly serving national or regional markets.

3.2 Technological developments.

As many commentators have noted (Cockburn, 1991; Gennard, 1987, 1990, Martin, 1983; Zimbalist, 1979), the rapid pace of technological change has had a transformative impact on the printing industry. The introduction of more sophisticated technological processes are directly accountable for many of the shifts in employment structure observed in the previous section, particularly with regard the reduction of employment

in the newspaper sector. Similarly, as we shall detail later in the chapter, technological developments have been harnessed by printing companies to re-shape the traditional division of labour within the industry built around distinct craft identities, posing fundamental challenges for established training structures.

Nevertheless, it is important to recognise that technology has not been the sole, determining force for change within the industry. As Leisink (1993:3) observes, technological factors and broader economic and political causes are 'interrelated'. Thus, he points to the way in which the economic importance of the printing industry has been challenged by, and subject to intense competition from, the development of commercial broadcasting (see also Gennard, 1987 and Seymour-Ure, 1991). The deleterious effect this has had on print readership and advertising revenues has spurred a number of large press holdings to diversify and become multi-media conglomerates (Tunstall and Palmer, 1991). Further, as Wallace and Kalleberg (1982) point out, in a compelling account of the deskilling of compositors in the American newspaper industry, technology may be the prime cause of industrial transformation, but the underlying and fundamental sources for such patterns of change are rooted in historically constituted social relations of production. Faced with intense economic pressures, a perishable product and powerful trade unions, they argue that newspaper companies had a strong incentive to reduce labour costs and increase managerial control through the introduction of new technology.

This line of reasoning seems particularly apposite with regard the UK newspaper sector, which, as numerous studies detail (Cockburn, 1991; Gennard, 1990; Martin, 1983), underwent a sustained and radical period of restructuring during the 1980s. In this case, new technology enabled employers to re-assert their management prerogative by undermining long-standing union controls over occupational demarcations and labour supply. The subsequent restructuring of the industry became synonymous with a series of severe industrial conflicts, defeats for organised labour and union de-

recognition as both national and provincial newspapers pushed through labour saving technologies and new terms of employment (Gall, 1998). In particular, the introduction of direct-input editorial technology led to large scale redundancies amongst those print workers carrying out the pre-press duties of composition and typesetting. Moreover, in a number of cases, such workers have been replaced with a feminised, lower paid and non-unionised workforce.

Perhaps unsurprisingly, the confrontational changes within newspaper production have pre-occupied most academic analysis, yet we should be wary about associating such developments with the printing industry *writ large*. Firstly, as the previous section made clear, the printing industry is not homogeneous but consists of a number of different sectors. Secondly, as Gennard (1987:127) notes, 'the rate of application of new technology to the industry varies between its component parts and the production processes within those components'. Thus, whilst the introduction of technical change has been just as extensive in the non-newspaper sector it has been applied at a slower rate. Similarly, even in the newspaper sector the rate of technological change varies between different stages of the production process, being most intense in the pre-press stage of the printing process[4].

Nevertheless, whilst the rate and application of technological change varies between different segments of the industry, general trends can be observed in the way in which the actual printing processes are changing. At a basic level, the printing process can be split into four major stages of production (see Scott, 1987):

1. **Composition**: at this stage the text and pictures are *made-up* into the required form of the page.
2. **Preparatory or process stage**: where the text or illustrative material is transferred to a medium appropriate for printing -ie. a printing plate.

[4] This explains why most research on the industrial relations of the printing industry tends to focus on a specific group of workers -ie pre-press occupations- within the newspaper sector (see Gall (1998) for one of the few studies on press workers).

3. **Press/machine room stage**: where the actual format is printed onto reels or sheets of paper.
4. **Finishing**: at this stage the reels or sheets of paper are cut, folded and possibly bound ready for distribution.

Technological developments have significantly affected each of these four stages, in terms of the nature of such work and the quantity and quality of output. Furthermore, the four operations are becoming increasingly less demarcated. For example, computer to press systems are now currently in use throughout Europe and the United States (GPMU, 1995a) and new printing presses increasingly incorporate finishing capabilities.

The key change underpinning these technological developments has been the shift in the printing *process* from letterpress to lithography and the emergence of computerised origination systems. Under the letterpress process, the image is printed from raised metal characters or blocks arranged into page formats. With lithography, by contrast, the image area on the plate is chemically treated to accept ink; the non image area is similarly treated to repel ink. After the plate has been inked, it is pressed against a rubber surface or blanket which accepts the image without wearing down the surface of the plate as in the old letterpress process. The blanket is then used to impress images onto the paper in an operation called *offset.* As Gennard (1990) observes, the growth of lithography from the late 1960s has been inextricably linked to the change in origination from hot metal systems (which were specific to letterpress) to photocomposition and, more recently, computerised origination. It has been this shift, whereby pages are now made-up via computerised operations rather than through the physical manipulation of metal blocks, which has attracted most academic attention, particularly with respect to newspapers.

In summary, changes in the methods of printing and progressions in technological sophistication have taken place across all sectors of the printing industry. Employers

have responded to the opportunities this affords them, with regard to product ranges, volume of output, quality of output and labour requirements (Goss, 1988), in a variety of ways. Clearly, national and provincial newspaper employers have deliberately utilised technology to reduce labour costs and attack union organisation. At the other end of the spectrum, technological developments have facilitated the emergence of an 'alternative' printing industry of very small companies, 'comprising instant print shops, art and advertising studies, in-plant printing, freesheet newspapers and ...desktop publishing' (Gennard, 1987:128), much of which relies on a relatively young, unskilled and cheap workforce (see Goss, 1987). In the remainder of the printing industry, however, the way companies are responding to changes in the production process, and the ramifications this has for working practices, labour organisation and human resource management has not been subject to systematic empirical research. Yet, as the following sections outline, it is in this part of the, general, printing industry that industrial relations have shown most continuity and the employment relationship continues to be regulated by multi-employer collective agreements.

3.3 Industrial Relations arrangements.

The traditional strength of organised labour within the industry has been widely acknowledged, enabling considerable job controls to be established by print workers. Indeed, writing in the 1960s, Sykes (1967: 141) considered the printing chapel to be '..possibly the most highly developed form of trade union organisation'[5]. The strength of union organisation and the control of the workplace by print workers arose from a strong occupational identity and strict divisions of labour, with each distinct stage of the printing processes represented by a different union. Thus, in 1950 as many as '12 unions were involved in print production of which 10 were craft societies' (Gennard, 1987:126). As a number of commentators have detailed (Cockburn, 1991, Gennard and Dunn, 1983; Gennard, 1987), however, such union job controls and occupational

[5] The chapel can be defined as 'the basic unit or 'cell' of present day unionism in the printing trade' (Musson, 1954:10), although as Child (1967) documents, chapel organisation pre-dates union organisation, becoming technically incorporated into the union structure around 1840.

demarcations came under increasing pressure, until they were subsequently eroded by the implementation of new technology and new management practices throughout the 1960s, 70s and 80s.

Union resistance to this technological revolution was considerable. Until the mid 1980s, as Gall (1998) notes, print workers, particularly those organised by the National Graphical Association, achieved considerable success in terms of shaping the introduction of technical change and the concomitant impacts on work organisation and working practices. For example, no fewer than eighty new technology agreements were concluded between 1985 and 1988 (Noon, 1991). Nevertheless, faced with increasingly hostile employers, supported by the anti-union project of Thatcher, the print unions eventually suffered a number of major defeats, most notably at Warrington in 1983/84 (the Messenger dispute) and Wapping in 1986/87 (the News International Dispute). Again, as noted in the previous section, provincial and national newspaper employers capitalised on these high profile defeats of organised labour by derecognising the print unions, individualising the employment relationship and introducing a range of new working practices. Indeed, union derecognition in publishing, paper and print accounted for over 20% of all recorded cases between 1984-93 (Claydon, 1996:162).

These developments have certainly weakened union organisation across the printing industry and, as Table 3.2 indicates, union membership has declined significantly since the early 1980s. According to Roe (1996), membership decline enshrines a number of developments within the industry. Firstly, the processes of restructuring of the national newspaper industry has drastically reduced the number of members in the traditional union stronghold of London. Secondly, the decline has been most severe amongst the semi-skilled and unskilled members. Thirdly, the restructuring of the industry outside of newspapers has also led to a reduction in union membership as investments in new technology and flexible working practices have enabled companies to cut back on labour. By way of response, the two remaining print unions, the National Graphical

Association (NGA) and Society of Graphical and Allied Trades (SOGAT), sought to consolidate their position in the industry through a defensive merger in 1991 to form the Graphical, Paper and Media Union (GPMU). Table 3.2 shows that the decline in membership has continued apace since the merger, primarily due to the recession of the early 1990s, but also, as Roe (1996:3) notes, the 'opportunity for reducing demarcation lines given by the creation of a single print union' may have further enhanced 'the momentum for staff reductions'.

Table 3.2: *Union membership changes 1982-1997*

Year	Total working membership	Annual % change	NGA	SOGAT
1982	316,977		112,112	204,865
1983	303,482	-4.3	109,772	193,710
1984	293,958	-3.1	107,465	186,493
1985	289,500	-1.5	107,153	182,347
1986	282,190	-2.5	106,645	175,545
1987	273,915	-2.9	105,351	168,564
1988	262,067	-4.3	105,261	156,806
1989	252,517	-3.6	105,114	147,403
1990	242,368	-4.0	102,820	139,548
1991	224,529*	-7.4	97,353	127,176
1997	135,261#			

Key: * The NGA and SOGAT merged in 1991 to form the Graphical, Paper and Media Union (GPMU).
Total membership in 1997 was 209, 900. Of which, 74,639 (25.5%) were either non-working members or unemployed.

Source: 1982-1991: Sogat and the NGA, adapted from Roe (1996:19/20).
1997: Printing World, June 16 1997 :6.

Despite these reductions in membership, it is important to recognise that the union is still a major force in the industry. Most significantly, outside of the newspaper sector,

which never accounted for more than 20% of union membership (Gennard, 1987), the printing industry is still covered by multi-employer bargaining. Roe (1996) posits a number of reasons for the continued existence of a national agreement. Firstly, many of the 2,955 employers represented by the British Printing Industries Federation remain undecided about the strength of the union. Secondly, the structure of employment within BPIF companies has remained relatively stable. For example, union density for full-time employees remained at around 80% between 1989-92, whilst the 'proportion of permanent employees as a percentage of all employees only fell from 73% to 71% between 1980 and 1989' and 'of these workers 62% were 'craft/skilled' in 1994' (Roe, 1996:4).

Nonetheless, in recent years the agreement has symbolised the struggle over the balance of power between the GPMU and the BPIF. Indeed, a failure to conclude negotiations led to a breakdown of the agreement in 1993, with the BPIF strongly urging their members to move towards single employer bargaining. This was not to be, however, and the agreement was re-instated in 1994. As Roe (1996:7) notes, this partly reflects the fact that during the 1993 impasse no clear view emerged 'as to whether single employer bargaining was 'appropriate' for printing'. Certainly, some employers took advantage of the breakdown in national negotiations to push through opportunistic 'customised deals': but, in general, it appears that the wage campaign undertaken by the GPMU against individual firms was successful, although the BPIF dispute this. According to the employers' association, weekly increases averaged £4.24 during the year, with 27% of companies initiating pay freezes. Against this, the union claim that 82% of agreements met its claim for a £6.50 a week increase on class I rates. Evidence further suggests that the success of the union campaign was universal amongst the larger companies, including the non-BPIF employers who 'shadow' the agreement (Roe, 1996:9).

The relative success of the GPMU's 1993 wage campaign was supported by the willingness of its membership to vote for industrial action to achieve the full wage claim. And, in this respect, it appears the BPIF may have 'seriously underestimated the ability of the union to resist employers exploiting their advantage' (Roe, 1996:8) during the breakdown of the agreement. Despite this, however, it is important to recognise that the re-instatement of the agreement was on terms more favourable for employers. Significantly, any individual arrangements introduced during the 1993 dispute were left undisturbed[6], and the 1994 wage rise was to be covered by local efficiency gains, thus accentuating a trend apparent in agreements over the last ten years towards offering increased flexibility for employers' individual needs. For many employers, the latitude the agreement now offers in terms of flexible working practices and manning arrangements means it largely exists on their own terms. Moreover, for larger companies the minimum rates of pay enshrined in the agreement are set at levels well 'below what they can afford' (Roe, 1996:6), although for smaller companies this constitutes an important minimum threshold.

The pay structures determined by the national agreement between 1995 and 1997 are set out in Table 3.3. As the Table clearly shows, the agreement lays minimum rates for each of the three grades of print workers based on a standard 37.5 hour week. Of particular interest is the minimum earning guarantee which, in 1997, meant that a class III printworker was guaranteed to earn at least £182.70 for a basic working week. In practice, when overtime and shift allowances are taken into account, the majority of printworkers, at all grades, earn more. Evidence from the 1997 Wa*rwick Pay and Worktime Survey* indicates that the mean pay of the median individual in each grade for responding companies was, £407 for Class I, £297 for Class II and £214 for Class III printworkers[7] (Arrowsmith and Sisson, 1998).

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[6] As a consequence of the preservation of this 'status quo' , there were no national minimum grade rates in 1994 (IDS Report 688, 1995). The agreement also lays down set wage rates for apprentices.

[7] The 1997 sample was based on 80 printing firms.

Table 3.3: *Pay structures in the Printing industry, England and Wales, 1995-1997 (£pw).*

Minimum grade rates	1995	1996	1997
Craft/class I	190.17	197.07	203.97
Class II	172.05	178.26	184.47
Class III	163.65	169.31	174.97
Minimum earnings guarantee*	171.38	177.04	182.70

* Minimum earning guarantee (excluding overtime) for a standard 37.5 hour week.
Source: *IDS Reports June 1997/ June 1996/ May 1995.*

The most interesting part of the agreement for the current study, however, is the provisions it sets down for training activity within the industry. For even though traditional demarcations and manning levels have been reduced in recent years, offering employers increased flexibility with regard to labour utilisation, the agreement seeks to ensure that such practices are undertaken by an appropriately trained workforce.

3.4 The National Training Agreement

The craft traditions of the printing industry mean that training has long been an important issue for trade unions, and has historically been a contentious issue between employers and unions in the industry (see Child, 1967). More specifically, the regulation of 'time-served apprenticeships' was essential, as far as the unions were concerned, to ensuring a tight control over labour supply. As Gennard (1990:452) notes, this was achieved in two ways. Firstly, the number of trainees each year was restricted via a quota, 'which established a ratio of apprentices to journeyman'. Secondly, the terms of apprenticeship meant that they were to last, on average, six years, and were to be confined to young people leaving school. Access to craft jobs was thus limited to those who had served such an apprenticeship, and this elitism helped to preserve established demarcations.

By restricting access to the trade and ensuring that the recognition of skills was subject to a lengthy period of time-serving, the unions were able to prevent employers from recruiting labour from alternative sources. It is not surprising, therefore, that struggles over the level of apprenticeship intakes have been central to the history of industrial relations in the industry. As Child's (1967) history of the industry documents, attempts to enforce apprenticeship quota restrictions were a central priority of early chapel organisation and a key spur to the development of local and regional workers' associations in the early 19th century; although it did not become formally established throughout the industry until the late 19th century when more sophisticated, national union structures started to emerge. Issues around skill formation have been central to the collective bargaining agenda ever since.

Access to training and development became an increasing area of priority in the post-war period, as print employers sought to engage with technological change and achieve rapid gains in workplace productivity. Thus, throughout the 1950s, 1960s and 1970s employers conceded improvements in wages and terms and conditions in return for the unions agreeing to relax their strictures on the number of trainees entering the industry. Whilst concessions were made over trainee numbers, individual unions nonetheless sought to maintain strict demarcations with other unions. The number of inter-union, jurisdictional disputes over manning arrangements and access to training opportunities thus proliferated during this period. More specifically, in response to the gradual replacement of letterpress with lithographic technologies, the craft unions in the industry were concerned that non-craft workers did not gain access to craft jobs. As a consequence, the unions responsible for lithographic and letterpress workers came to an agreement that employers should give priority to re-training letterpress workers, rather than allow the upgrading of existing un-skilled litho workers (see Gennard and Bain, 1995: 100-114). In order to try an prevent their continued exclusion from the growing lithographic technologies, and web-offset presses, the two remaining non-craft unions, the National Union of Printing, Bookbinding and Paperworkers (NUPB&PW) and the

National Society of Operative Printers and Assistants (NATSOPA) merged in 1966 to from the Society of Graphical and Allied Trades (SOGAT). Unfortunately, the merger was not successful and SOGAT was dissolved in 1972[8].

The increasing pace of technical change in the mid 1970s and early 1980s had a increasingly transformative effect on the industry, radically affecting the concomitant skill requirements (Gennard and Dunn, 1983; Gennard, 1987). In this regard, as Table 3.4 makes clear, the framework for training provision within the industry was subject to a number of re-assessments. Under the 1975 national apprenticeship agreement, the length of time served was cut from 5 to 4 years and a more rigorous system of monitoring introduced. The relevance of time-serving to the changing needs of the industry became a key issue for debate, however, prompting a commitment to review the apprenticeship agreement in the 1980/81 national agreement. One consequence of this re-evaluation of the industry's training structures was a fracturing of training arrangements, with the national and provincial newspaper sectors going their own way. The major innovations in training arrangements that took place since 1983 were, therefore, *confined to the general trade.*

3.4.1 The Recruitment, Training and Retraining Agreement.

In response, an innovative re-assessment of training procedures took place, culminating in the inauguration of the Recruitment, Training, and Retraining Agreement (RTRA) in 1983 (see Stuart, 1994 for a detailed account)[9]. In more detail, the aim of the agreement was:

> to cover the recruitment, training and remuneration of trainees with the objective of jointly establishing a cost effective and efficient system of modular training, retraining and related further education to suit the needs of the company and the industry, and to provide opportunities for the development of the individual. (BPIF/GPMU National Agreement, 1992/93: Appendix 5.2. A)

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[8] In 1982, the two dissolved unions merged again to form SOGAT 82.

[9] The training agreement has been cited by the TUC as an example of best practice (see TUC, 1991).

Table 3.4: *Framework for industrial training in the UK printing industry : 1972 to present.*

1972	Wage agreement between the National Graphical Association (NGA), the British Federation of Master Printers (BFMP) and the Newspaper Society (NS) calls for a review of the existing apprenticeship agreement.
1975	Introduction of the **National Apprenticeship Agreement**. From 4 August 1975 all new apprentices are required to serve a 4 year apprenticeship (previously 5). The agreement also includes: new wage rates for apprentices; tougher monitoring of training through a log-book system; and a new quota system. Supervised under the auspices of a joint apprenticeship panel (5 representatives from the BPIF and NS and 4 NGA).
1980	A commitment to a review of the '75 agreement is written into the 1980/81 national agreement with the NS and the 1981 agreement with the BPIF.
1982	Negotiations between the NGA/BPIF successfully conclude a new training system for the industry. The NS, however, refuse to meet the NGA position and insist that the details of the 1980 wage agreement are invoked: accordingly, a 3 year apprenticeship system is introduced in provincial newspapers from 1 August 1984 (supervised through a joint NGA/NS standing committee, although Gennard (1990) notes that it only met once).
1983	Introduction of the **Recruitment, Training and Retraining Agreement** (RTRA). Time serving (apprenticeships) replaced by a standards based, modular training approach (traineeships). Under the new system, training periods last 2-3 years with a formal expectation that (initial) Trainees pursue a college course. Chapel involvement is increased through joint company/union 'manpower plans'. Where no plans are concluded a quota is to apply. Supervised under the auspices of a joint training council (JTC) comprising an equal number of representatives from the BPIF and NGA (with the same to apply for the BPIF/Sogat agreement).
1987	1986/87 JTC report reveals that only 614 companies had registered trainees.
1988	*Training for Change*. In response to criticisms of the agreement at both the '84 and '86 NGA conferences, and the poor uptake of the agreement, a promotional campaign is launched by the NGA, Sogat and the BPIF to increase awareness of the RTRA.
1992	The JTC debates the development of NVQs for the industry. BPIF become the industry's NVQ awarding body. Only 100 trainees were registered as at 20/11/92.
1993	National wage negotiations breakdown. JTC terminated on a unilateral basis by the BPIF.
!994	New agreement concluded. Review of the RTRA to be undertaken by a GPMU/BPIF working party. The GPMU consider strategies for greater union involvement with TECs.
95/96	The Recruitment, Training, Development and Apprenticeship Agreement introduced. The new agreement essentially introduces NVQs and the modern apprenticeship into the overall training framework. Personal development plans to be signed by the trainee/management and chapel to help assist companies implement NVQs. GPMU members encouraged by the union to become NVQ assessors.

Sources: Gennard (1990), Yelland (1989), and unpublished Joint Training Councils documents.

Traditional time-served apprenticeships were, therefore, replaced by module-based traineeships. The agreement represents one of the first attempts at an industry level to replace time serving by training to standards.

Under the new arrangements, the intake of labour was to be determined by so-called manpower (sic) plans negotiated between the chapel and the company at least once a year. Where no agreement could be reached, a nationally agreed quota was to be applied. The RTRA was supervised and negotiated under the auspices of the GPMU/BPIF Joint Training Council (JTC), which had a multi-various role: including constant procedural reviews of the system, the development of company training modules and the settlement of training disagreements between management and the union or individual trainee. Upon successful completion of training (usually between two and three years), each trainee obtained (from the JTC) a skilled worker certificate entitling them to the appropriate payments for the requisite level of skill.

According to Gennard (1990), the RTRA sought to tailor training to the trainees and the company's individual needs, whilst chapel involvement consolidated union control over the supply of labour and ensured a much closer involvement at the workplace than under the nationally determined apprenticeship system. It is useful to briefly consider the evolution and purpose of the agreement, as it reveals the contentious nature of training arrangements within the industry. Firstly, it took the best part of 3 years (from 1980 -1983) for the specifics of the training agreement to be negotiated, and the need to relate training provision to a broader agreement on changing working practices led to a number of disagreements. Secondly, the whole concept of the agreement was to enable greater union control and involvement over the training process, from design of the training modules to monitoring and assessment of training standards (Gennard, 1990 : 462). At the workplace, union involvement at the manpower planning stage was emphasised by commentators as *critical*, requiring firms to inform the chapel about

their future plans, thereby facilitating an 'important extension of collective bargaining into the issue of how a company utilises its resources' (Gennard, 1987; Gennard, 1990).

As Gennard (1990) notes, the RTRA got off to a less than auspicious start. Concern over the agreement was expressed at both the 1986 and 1988 Delegate Meetings, which concluded 'that the main problem with the agreement was that it was simply being ignored by a large number of employers, whilst chapels did not make sure the agreement was complied with' (Gennard, 1990: 463). Indeed, a JTC report published in 1987 revealed that only 614 companies had registered trainees. Such criticisms prompted a promotional campaign entitled 'training for change', launched by the NGA, Sogat and the BPIF in November 1988. Research by Stuart (1994) identified four main areas of concern. Firstly, only a third of print firms are affiliated to the BPIF. The GPMU has to negotiate, therefore, in many instances on a company by company basis and push for all formal training to follow the module system. This has achieved some success in large print groups and companies, for example, Bowaters, Jarrolds and BPC.

The second problem relates to the manpower plans and is more of a cause for concern. According to Gennard (1987, 1990), the manpower plans could only be devised by the company providing information to the chapel on its future investment and market strategies, thus allowing the trainee intakes and retraining provision for the forthcoming year to be determined. In practice, this proved problematic with few plans completed. Essentially, management regarded the necessary information disclosure underpinning the plans to be an encroachment on managerial prerogative, and chapels were reluctant to insist that the system should be adhered to. This is essentially a corollary of the third and fourth failings of the agreement: the lack of a strategic approach to training by employers; and a less than favourable view by chapel representatives of the initial traineeships as compared to the old apprenticeships. The latter point is of particular significance when considering union responses to the agreement at various levels of hierarchy.

Since the RTRA was instigated by the union at the national level it is perhaps unsurprising that national officers consistently extol the virtues of the agreement. Moreover, to 'reject the concept of training to standards would be seen to be supporting outdated practices' (Rainbird, 1990:29). Nevertheless, it was accepted by national union officials that the agreement had certain weaknesses and, in this regard, the need for some element of time-serving within the module system was often suggested. It was also recognised by national officers that workplace representatives did not hold the agreement in quite such high esteem. It appeared that for many F/MOCs[10], traditional apprenticeships provided a more comprehensive grounding in printing techniques, thereby equipping trainees with more transferable skills and the ability to make more confident workplace decisions. In this context, the RTRA was considered to provide nothing more than the basic skill levels for the job. This, in turn, related to the more contentious concern over the transition to adult pay rates, and whether this should be determined by competency assessment or by a customary length of training.

The RTRA proved, therefore, relatively ineffective in protecting training levels through recession and in significantly increasing the intake of trainees across the industry, with the number of registered trainees dropping significantly throughout the 1980s and early 1990s. By 1992 the number of trainees fell to the lowest level on record, just 100 compared to the peak in 1979 of 3,000. However, this would not be a true reflection of the total number of trainees in the industry because trainees in non-BPIF companies are not included. It is also likely that many companies carry out training on an informal basis, with unlogged trainees. In such instances companies will make selective use of the relevant training modules and trainees may even be monitored through the logbook system, although it is unlikely they would follow a college course, a pre-requisite for initial trainees under the RTRA. In such cases, then, unlogged trainees will be unlikely to achieve any accredited training, or receive the uniform trainee wage-rate. The union

[10] Union representatives in the printing industry are referred to as either the Father of the Chapel (FOC) or Mother of the Chapel (MOC).

argues that such trainees will, therefore, be unrecognised by the industry and hence may find it difficult to move to other companies, particularly the larger unionised ones.

The nature of off-the job training emerged as a key area of debate. Many companies, particularly the smaller ones, regarded the City and Guilds requirement as either irrelevant to the needs of the company or were simply not prepared to send trainees on the block release courses offered by most of the printing colleges. This line of argument received a further degree of support from a number of BPIF sponsored consultancy reports, although, in general, a high percentage of companies using print training colleges regarded the provision as of high quality.

3.4.2 Towards the Recruitment, Training, Development and Apprenticeship Agreement.

The prime concern for the Joint Training Council during 1992 was the development of NVQs throughout the industry, when the BPIF was invited to become the awarding body for the industry. In undertaking the role of the awarding body, however, it was recognised by the BPIF that there would have to be a separation of training from the assessment roles of the organisation. It was noted that the JTC had been established to supervise a trade agreement between the BPIF and GPMU. It was thus important that the JTC maintain this role, and that trainees meeting the NVQ standard (under the RTRA) were able to gain an NVQ accreditation. Whilst the GPMU had no problem with the designation of the BPIF as the awarding body, it was keen that the constitution of the body and the allocation of seats to the union were on a similar basis to the JTC. That is an equal number of seats. In return, the BPIF argued that this would require an acceptance by the union of the philosophy of NVQs, 'including the principle of open access to all trainees and qualifications based on achievement of standards irrespective of the *mode* of learning' (JTC minutes 2/9/92).

Whilst the GPMU was sceptical of NVQs, and had serious doubts over their likely success, it nonetheless felt it had to get involved and shape the introduction of the qualifications in the industry. The introduction of NVQs did not proceed particularly smoothly however. While NVQs would seem to fit logically into the modular training system established under the RTRA a number of problems surfaced. For example, the GPMU expected members operating large printing presses to be accredited at NVQ level 3, but the National Council for Vocational Qualifications (NCVQ) were only prepared to sanction an NVQ at level 2. It was also felt, by both the union and the BPIF, that the NCVQ kept moving the goalposts for the requirements of each NVQ level for the industry. No agreement was reached over NVQ level 3 until 1995.

The initial preparations for the introduction of NVQs also took place during a time of increased uncertainty for the training infrastructure throughout the industry. More specifically, following the breakdown of the industry's wage agreement in 1993, the JTC was briefly terminated on a unilateral basis by the BPIF. As far as the GPMU was concerned the situation in respect of the national wage negotiations did not merit the cancellation of scheduled JTC meetings. It urged the BPIF to reconsider the situation pointing out that it was supposed to be a '*Joint* Training Council' (details taken from unpublished correspondence between the GPMU and BPIF during May 1993). Nevertheless, representatives from the BPIF failed to turn up at the scheduled meetings during the course of the dispute.

With the resolution of a new agreement in 1994 a number of additional clauses were added which opened up the opportunity for a re-assessment of training arrangements in the industry. Firstly, a new clause incorporated into the agreement concerning integrated press-rooms, provided for a fully skilled and flexible workforce in press-rooms and contained safeguards to protect employment and ensure proper training. These aspects of the agreement were to be left to local negotiation. Secondly, it was decided that there was a need to review the RTRA in light of the 'significant

developments' taking place in the field of vocational training (GPMU report 1995b), most notably in terms of the introduction of the Modern Apprenticeship scheme, but also because of concerns expressed by both the GPMU and BPIF over the low level of new entrants and young people into the industry. As a number of BPIF commissioned surveys at the time documented, the main beneficiaries of training were existing employees, and not new entrants.

As a result of the above developments, and as a consequence of negotiations with the BPIF, a working party was established to review the RTRA. To help improve the intake of trainees into the industry it was agreed that the JTC would examine the current and future skill requirements of the industry through an annual assessment of the supply of skilled labour. This would be considered in terms of changing trends in the economy, industry and technological developments. As part of the process, the BPIF would be expected to distribute questionnaires to all its member companies each January in order to gauge their intentions with regard to trainee intake for the forthcoming twelve months. This would allow both the intake level and the gender mix to be monitored. GPMU branches were also required to conduct a similar procedure through their respective chapel officers

The GPMU recognised that, because of its desire to incorporate NVQs and the Modern Apprenticeship into the agreement, the union would need to develop further links with the TECs, despite the anti-union attitude displayed by some of them. In this regard, a survey (94/95) of branch representatives revealed a number of potential problems for the union, not least of which was the number of TECs that could exist within the boundaries of a GPMU branch. Nevertheless, there was evidence to suggest that a number of branches had been successful in persuading TECs to support local initiatives and courses. The Three Shires and Leeds branches were held up as exemplary cases.

The new agreement, the *Recruitment, Training, Development and Apprenticeship Agreement,* was formally introduced into the industry as part of the 1995/96 national GPMU/BPIF agreement. As the following objectives of the agreement make clear, training arrangements within the industry were to be modified to accommodate recent changes in the national training system:

'This agreement covers the recruitment, training and potential for development of GPMU printing production process workers. It provides the framework within which skills can be developed, under a cost effective and efficient system of training centred on the achievement of NVQs and tailored to suit the needs of the employee and the company. The agreement commits the parties to contribute to the achievement of national education and training targets and any sector targets. The parties recognise the importance of Modern Apprenticeships and the value of the Investors in People programme' (1995/96 GPMU/BPIF Agreement).

Under the new agreement the aegis of the Joint Training Council remains the same, although there have been a number of developments in light of the changes identified above. In order to ensure that companies are able to meet their skill requirements, the agreement asserts that not only will 'a regular intake of new entrants into the industry be essential', but also important will be the 'training and development of existing adult GPMU members and also adults seeking career changes from other industries'. Companies are thus encouraged to offer existing employees the opportunity to acquire NVQs. The agreement identifies the need to establish a 25% increase in new entrant trainees to craft occupations, with the figure adjusted on an annual basis in line with the JTC survey into the supply of and demand for skills in the industry.

In order to promote a strategic approach to future skill requirements the agreement also notes that 'companies will be encouraged to plan their future skill requirements in consultation with chapels. Plans should be flexible and open to review to ensure that the recruitment and training of GPMU members accords with the company's need to provide a speedy and flexible response to customer demands' (GPMU Research, 1995: 27). Essentially, then, the need for staff planning remains in the new agreement, but in

a more neutralised form. Companies are now encouraged rather than expected to develop such plans, and where they are not introduced there is no stipulation that a trainee quota should be enforced.

The requirements for the actual monitoring and assessment of training received is similar to the previous agreement. Trainees are expected to sign a personal development plan with the company and union, forming part of a skills portfolio, and all training received is to be geared towards NVQ accreditation. The duration of the training period will be dependent upon the 'ability of the trainee to achieve the required competence'. Unlike the RTRA, however, there is no compulsion for new entrant trainees to follow a college course.

As noted, whilst doubts were expressed by the GPMU over NVQs the union nonetheless recognised that it was important to help shape their introduction into the industry. Thus, the union launched a campaign aimed at educating branch officials and chapel representatives with regard to the nature of NVQs and the possible opportunities they afforded the union. In this respect, it was argued that the creation of a system of NVQs provides every chapel with the opportunity to raise the issue of training with their employer. More specifically, it was noted that:

'Far too many employers do not have a planned programme of training and have not identified the future skill needs of their company. Chapel officials should, therefore, press management for a 'training audit' to establish the training needs of their members and to develop a systematic training plan based on members working towards, and acquiring, the appropriate NVQ. Chapel officials and the individuals concerned must be involved in drawing up the plan and consideration should be given to establishing a **union/management training committee** to initiate and oversee training developments, and to monitor aspects such as equal opps and the intake of young trainees/ apprentices' (GPMU Research, 1995:13).

Despite these optimistic sentiments two major problems were identified by the union. Firstly, early indications pointed to a lack of awareness of NVQs and a reluctance to

find out about them by printing companies. A study by the London College of Printing in 1992 found that only 2% of companies clearly understood the various levels of NVQs even though 80% had heard of the qualification (Coxhead, 1992). Similarly, a BPIF advertisement outlining the standards and asking companies to write to them for more information only generated 300 responses. In response, the union argued that it was up to GPMU officials at all levels to overcome 'employer apathy' through raising the training issue and by pushing companies to contact the local TEC in order to get more information about NVQs and the funding opportunities available.

The second problem identified by the union may prove to be more intractable. As part of the NVQ process companies are expected to train workplace assessors and internal verifiers, yet companies may be reluctant to do so on the grounds that the processes are 'time-consuming, expensive and unnecessary' (GPMU Research, 1995:14). Whilst the agreement stresses that companies and chapels should seek to appoint appropriately trained GPMU members as assessors, the union nonetheless recognised that as 'the potential benefits of the training system will be more difficult to quantify than the initial costs' (GPMU Research, 1995:14) the uptake of NVQs across the industry would remain limited until concrete examples of the benefits that can accrue from such a system became available.

3.4.3 Postscript: establishing skill targets for the industry.

Throughout 1997 and early 1998 a range of studies were undertaken by the BPIF and GPMU in order to establish a 'baseline' for skill targets in the industry. As a result, a set of proposed skill targets for printing companies (see Appendix 3) were unveiled in early 1998, and a consultation exercise on their appropriateness set in train. It is anticipated that a final set of skill targets for the year 2000 will be in place by October 1998. The estimated figures presented during the consultation exercise revealed a limited take-up of NVQs and Investors in People throughout the industry and noted that 'smaller firms seem more motivated by concepts of skills or training, rather than

qualifications' (BPIF, 1998b). Some concern was also expressed over the age profile in print, recognising the need to 'recruit young people into administration and production' (*ibid*). By the end of July 1997, just 1,103 Modern Apprenticeships had been registered across the industry (Gospel, 1998:446)[11]. Given this poor performance, the initial set of skill targets proposed by the BPIF/GPMU has been the subject of heated debate, with participants at consultation seminars suggesting they are over ambitious and unrealistic.

3.5 Conclusions.

This chapter has provided a brief account of the nature of industrial restructuring in the UK printing industry. It was noted that aggregate employment in the industry remained relatively stable between 1980-1992, suggesting that printing was subject to less severe processes of restructuring than other manufacturing industries. Such aggregate statistics mask, however, a number of apparent trends during this period. Firstly, employment in the industry declined during the recessions of the early and late eighties and early nineties, with the fall-out being particularly severe and enduring with regard to the former. Secondly, the decline in employment in the newspaper sector was particularly marked, whilst employment in the other printing and publishing sector rose consistently from the mid 1980s. Thirdly, the actual composition of employment changed, with a large decline in the number of operatives, particularly in terms of semi/unskilled workers, and an increase in the number of administrative, technical and clerical staff.

The changing nature of the printing process and the technology employed proved to be highly influential during this period. As the chapter demonstrated, investment in new equipment was considerable in all sectors of the industry. But it has been the way in which large employers have introduced such technology, specifically in newspapers,

[11] The figures for Modern Apprenticeships cannot be compared directly to the trend traineeship statistics, as there would be no requirement for companies to tie any Modern Apprenticeships to the industry training agreement. The most recent GPMU figures record a rise in traineeships from 100 in 1991 to 500 in 1997 (GPMU, 1998).

that has attracted most attention (Gall, 1998). Thus, in both the national and provincial newspaper sector, technological change has been inextricably linked to mass redundancies, 'the disappearance of long established craft production modes' (Leisink, 1993:6), union derecognition and the deterioration of terms and conditions of employment. At the other end of the spectrum, there has been a large increase in very small instant print shops which employ young, cheap, non-union labour (Goss, 1987). Whilst the introduction of new technology has been just as widespread in the remainder of the industry -what commentators refer to as the general printing industry- evidence suggests that industrial relations may have exhibited greater continuity. Most explicitly, those companies affiliated to the British Printing Industries Federation are still subject to a national agreement over pay, working conditions and training arrangements, and union density in these companies also remains high. There is also evidence to suggest that a considerable number of non-affiliated, but unionised, companies shadow this agreement.

The maintenance of the agreement, it has been argued (Roe, 1996), relies to a large extent on employer uncertainty over the power of the union, who proved highly effective in achieving their terms during the impasse of the agreement in 1993. Furthermore, as Arrowsmith and Sisson (1998:24) indicate, for the large number of very small firms in the sector 'a shift from formal sector arrangements would involve sizeable transaction costs'. The existence of the agreement has ensured, therefore, the continuation of the strong tradition of union dialogue in the industry. In terms of skill formation, the union has been influential in shaping the training arrangements throughout the sector and has sought to ensure a significant role for workplace representatives in terms of monitoring training quantity and quality. In this respect, the agreement represents one of the few cases of social partnership over training taking place across British industry. Nevertheless, the changing terms of the agreement are a powerful indicator of the contested terrain in which it operates.

As our account highlighted, the re-instatement of the national agreement in 1994 was on terms more favourable to employers thereby 'accelerating the increasing "flexibility" of the agreement to meet individual employers' needs. As far as the specifics of the training agreement are concerned, this has manifested itself by replacing any notions of compulsion with voluntary choice. For example, whilst the provision for manpower planning had always proved problematic, it was at least, in theory, a compulsory part of the RTRA and where no plans were secured a trainee quota was to be effected. Under the new agreement, by contrast, companies are merely encouraged to engage in dialogue with the union over such planning. Similarly, there is no longer any requirement under the agreement for new entrant trainees to follow an appropriate college course, although where companies take on Modern Apprentices it will be a condition of TEC funding and support.

Whether these changes will lead to a large increase in training activity is open to debate. As the decline in formal traineeships demonstrates, printing companies have been reluctant in recent years to invest in long, structured periods of training, preferring instead to retrain existing staff. The development of a system of NVQs for the industry is in part expected to support this, and under the new training agreement companies are encouraged to relate all training activity to NVQs modules. Recent BPIF and GPMU research suggests, however, that companies remain woefully ignorant of such qualifications. As the GPMU recognise, stimulating interest in NVQs requires pressure from the union not just at the workplace level but also at the branch level. More specifically, there is a need for the union to understand in more detail what local Training and Enterprise Councils can offer the industry, and to develop links with TECs in order to shape their local sectoral strategies. Equally it is incumbent upon union representatives to push employers to contact their local TEC to find out more about funding opportunities (GPMU Research, 1995). The ability of TECs and other local economic agencies to develop local training strategies for the printing industry are explored in more detail in the following chapter.

Chapter 4: Printing Within a Local Economy

This chapter attempts to situate the printing industry within the dynamics of a local economy, in this case the Metropolitan district of Leeds. As the previous chapter noted, two of the key structural characteristics of the printing industry are the size of the establishments and the 'localness' of their product markets. The fortunes of such companies are, therefore, inextricably tied to the health of the local and regional economy (Policy Research Unit, 1992). In this regard, the strategies of local economic development agencies may have a crucial 'mediating' role to play in terms of identifying and servicing the skill requirements of the industry.

In section 4.1 the printing industry is positioned within the the changing sectoral characteristics of the Leeds economy during the 1980s and early 1990s. During this period, an ongoing process of deindustrialisation continued to transform the industrial composition of the district, with a vast increase in service sector employment taking placing against a backdrop of continued decline in the manufacturing base. The fact that employment in printing has declined less markedly than manufacturing as a whole has meant that the industry has remained a major source of employment within the city. Against this backdrop, section 4.2 explores the attempts by key development agencies to set up a number of print related advisory bodies intent on promoting the long-term interests of, and tackling the challenges facing, the industry. Such concerns are further developed in Section 4.3 through an examination of the strategies of the local training college and an assessment of their ability to meet the skill demands of the local industry. Section 4.4 presents a summary of the key themes to emerge throughout the chapter.

4.1. **Labour market assessment of the Metroplitan District of Leeds.**

4.1.1: The structure of the Leeds economy.

Leeds is the largest of the five metropolitan districts in West Yorkshire, with a geographical spread of 562 square kilometres and an adult population (aged 16+), in 1996, estimated at 564,417 (Leeds City Council, 1997). The composition of employment has changed markedly over the last 40 years. In the 1950s, Leeds was an industrial city, with three-quarters of all employment concentrated in the manufacturing, particularly clothing and textiles, engineering and printing industries. Since that period, the city has witnessed a radical transformation in its structural characteristics. By the early 1990s the balance of employment between services and manufacturing had been reversed, with the service sector providing 72.8% of the city's employees and manufacturing 22.8%. This trend decline in manufacturing activity is clearly discernible in Table 4.1, which provides a more detailed breakdown of changes in sectoral employment in the district between 1981 and 1991. All but one of the ten largest falls in employment occurred in the manufacturing industry, with the city's traditional manufacturing sectors of engineering and clothing, in particular, registering heavy losses. The contraction of employment in public administration is testament to the public restructuring process of the 1980s, a consequence of the capping and redistribution of financial resources to the more politically sensitive public services (employment in education rose by 5800 during the period) and also processes of contracting out (note that sanitary services is one of the gainers in employment). By contrast, nearly all the gains in employment during the period were in service type industries, with both the broad business service sector and banking and finance performing particularly well.

Table 4.1: *Employment changes in Leeds 1981-1991: top ten largest gainers and losers* (numbers of gains/losses in employment)

Gainers		**Losers**	
Business services	11 100	Public administration	7 800
Medical services	7 600	Clothing and footwear	5 700
Education	5 800	Mech engineering	5 300
Community services	5 200	Coal extraction	3 400
Banking and finace	5 100	Textile industry	2 500
Retail distribution	5 000	Metal manufacturing	2 000
Sanitary services	2 800	Metal goods	1 700
Wholsesale distribution	1 700	Construction	1 700
Insurance	1 100	Food and drink man	1 600
Postal services/telecom	800	Printing and publishing	1 300
Total gain/loss	**46 200**		**33 000**

Source : *Leeds Economic Development Strategy 1995.*

It should be noted, however, that for much of the 1980s this trend in service sector growth was less spectacular when compared to the rest of England[1]. Indeed, Tickell (1997: 14) argues that until the late eighties the rapid growth of financial services had largely passed by Northern Britain. This changed considerably during the latter part of the decade. Between early 1989 and the end of 1990, financial and business services employment increased by 14% in Yorkshire and Humberside (Leigh and Robbins, 1993: 8); at a time when employment in the sector was contracting in the UK as a whole (see Tickell, 1997). Leeds was the prime beneficiary of much of this employment growth,

[1] Tickell (1997:15), for example, calculates that the percentage change in employment in financial services in Yorkshire and Humberside between 1981-1989 was 17%, compared to 63.7% in East Anglia and 59.8% for the South West). Whilst the rate for Leeds would be much higher, Leigh and Robbins (1993) calculate a growth rate for West Yorkshire during this period of 30% and noted that Leeds was one of the three main recipients (the others being Bradford and Calderdale), it would still be much less than the growth rate for the South East of England.

indicating the spatial specific nature of much of the increased concentration of financial employment in Yorkshire and Humberside[2]. In particular, the concentration of head offices; the restructuring of banks, building societies and insurance companies; and the increase in 'call centres' (accounting for 10,000 jobs by 1996) have all had a beneficial impact on service sector employment in the city (Tickell, 1997: 16; Leigh and Robbins, 1993:10). Thus, as Table 4.2 reveals, by 1993 the finance and business services sectors had become major employers in the city, accounting for 19% of total employment.

Table 4.2: *Sectoral employment in Leeds TTWA in 1993 (*Number of employees)

Sector	**Employees**	**% of total employment**
Mining	900	0.3
Manufacturing	51,600	16.7
Utilities	4,000	1.3
Construction	13,400	4.3
Wholesale/Retail	55,300	17.9
Hotels and Catering	15,800	5.1
Transport and Communication	18,300	5.9
Finance	17,800	5.8
Business Services	40,600	13.1
Public Services	15,300	5.0
Education	21,400	6.9
Health and Social Work	41,100	13.3
Other Community and Personal Services	13,800	4.5
	309,300	

Source: *NOMIS* (numbers rounded to nearest 100)

[2] Between 1989 and 1991 Leeds enjoyed the fastest growth rate (68%) of employment in finance and professional services of any regional financial centre. The rate was almost twice the British average of 35% (Leeds TEC 1994).

To some extent this growth in service sector employment helped 'shelter' Leeds from the severity of the early nineties recession. Consequently, the unemployment rate, for both men and women, remained consistently lower than both the regional and national averages during this period (Leeds TEC 1994). Nevertheless, these statistics, in accordance with broader regional and national trends, mask significant differences between the male and female unemployment rates. Male unemployment peaked in January 1993 at 13.1% (25,877) compared to a peak in the female rate of 4.9% (8,000) in July 1993. This suggests that the fall out of manufacturing jobs is not simply being mopped up by new service sector employment.

As Table 4.2 shows, despite the vast increase in service sector employment, manufacturing remains a major source of employment in Leeds, with a strong emphasis towards skilled engineering, printing and publishing, and clothing and textiles. Thus, according to Leeds City Council (1997), the growth of the financial and business services sector has obscured the fact that Leeds remains one of the UK's principal manufacturing centres, with 1,800 manufacturing firms registered for VAT in 1996, a figure exceeded in the UK only by London, Birmingham and Leicester.

As the labour demand forecasts in Table 4.3 make clear, however, employment in manufacturing is expected to contract even further over the next ten years. Heavy losses are forecast for the textiles, clothing and mechanical engineering industries. Paper and printing is the only manufacturing industry projected to grow between 1996 and 2005. The growth of the service sector is expected to continue, particularly in the retailing, hotels and catering and business services sectors. The overall growth of jobs between 1996 and 2005 is forecast at around 25,500 with a corresponding projected growth in labour supply of 14,500 (Leeds City Council, 1997).

Table 4.3: *Labour demand forecasts for the Leeds District 1996-2005*

Key Industries	Total Employment 1996	% change 96-99	% change 99-2005
Textiles	2 100	-4.5	2.5
Clothing	4 400	-6.2	-2.4
Paper and printing	9 500	0.6	3.7
Base metals and goods	9 100	-4.1	-12.5
Mechanical engineering	8 700	-5.8	-10.3
Electrical engineering	3 000	-0.8	-5.3
Retailing	35 066	5	9.9
Wholesale and agents	29 600	0.5	-0.1
Hotels and catering	15 500	6	20.1
Banking and finance	11 800	3	2.6
Insurance	5 400	3.3	9.3
Professional services	17 600	7.5	11
Other business services	27 500	9.7	23.6
Total (all industries)	**343 800**	**2.4**	**4.9**

Source: *Leeds City Council* (1997). (many of these figures are based on estimates by Leeds City Council)

4.1.2 The printing industry in Leeds[3]

Leeds is regarded as the most important provincial print centre in the UK, 'not only in terms of output, employment and innovation but also due to the national and international reputation of some of the companies represented' (Leeds TEC, 1994: 56). A number of large printing equipment manufacturing suppliers are also located within the city which has one of the largest concentrations of printing machinery and platemaking suppliers in Britain. Printing is thus

[3] For a detailed account of the economic histroy of printing in Leeds see Rimmer (1958 a, b), who traces the beginnings of printing in the city to the introduction of the *Leeds Mercury*, a small weekly newspaper, in May 1718.

regarded as one of the traditional sectors of employment in the local economy. Already well established by the late nineteenth century, the industry accounted for 2% of the city's employed population by 1881 (Rimmer, 1958b). By 1911, the industry employed over 8,100 workers, about 4% of the local population. Thereafter the industry experienced a period of subsequent decline (falling to 6,000 by the mid 1950s) before employment started to pick up again in the 1960s (Rimmer, 1958b).

Establishing an accurate up-to-date picture of the scale of print employment in the locality is problematic. Recently published figures by the City Council (eg. Table 4.3) rely to a large extent on 'guesstimates' or utilise a variety of different SIC codes. More reliable figures are presented below, drawing from a study by the Policy Research Unit (PRU, 1992) which shows data from 1981-1989, and also from recent Census of Employment data between 1991 and 1995. Changes in the definition and coverage of SIC codes prevent an exact, detailed comparison, but the figures do represent the most reliable picture of trends in printing employment in the City.

As Table 4.4 indicates, 11,141 people were employed in paper, printing and publishing in 1989, representing approximately 29% of the regional total for Yorkshire and Humberside (PRU, 1992). Of this total, about three quarters of employment is located in printing and publishing. The number of jobs in the printing and publishing sector as a whole increased by 13% between 1981 and 1989, with significant increases in both the other printing and publishing and periodicals category, although employment levels fell in the newspaper category. Of the 8,429 employed in the printing and publishing sector in 1989, 67% were male and 32% were female. The data shows that women were more likely to be employed in the newspaper and periodicals categories.

Table 4.4: *Changes in employment in paper, printing and publishing in Leeds 1981-1989.*

Sector	1981	1989	Male	% of total	Female	% of total
Pulp, paper and board	565	300	253	3.4	47	1.2
Conversion of paper and board	2264	2412	1470	19.8	942	25.3
Printing and Publishing						
Newspapers	1439	1180	544	7.3	636	17.1
Periodicals	30	144	72	1.0	72	1.9
Books	9	nil				
Other printing and publishing	5974	7105	5075	68.5	2030	54.5
Total	7452	8429	5691	76.8	2738	73.5
TOTAL	**10281**	**11141**	**7413**	**100.0**	**3726**	**100.0**

Source: *Census of Employment: Nomis*
Table adapted from Print Sector Study, Policy Research Unit, December 1992.

As we can see from Table 4.5, whilst there was a decline of 4.5% in total employment between 1989 and 1991 this appears to be confined to the pulp, paper and board sector. The main picture to emerge from the aggregated print and publishing sector is one of year on year growth, with a 14.4% increase in total employment between 1989 and 1995. Nonetheless, the figures suggest that this does not necessarily connote a period of relative employment security within the sector. Employment in the 'printing not elsewhere classified' and 'composition and platemaking' categories fluctuated markedly between 1991-1993 and 1993-95. These changes can to some extent be corroborated by the

closure and set-up of a number of large companies in the district, but perhaps also reflect the relative economic fragility of small companies more generally (see Dunne and Hughes 1990).

Table 4.5: *Detailed intra-industry breakdown of changes in employment in paper, printing and publishing in Leeds 1991-1995.*

1992 SIC classification	**1991**	**1993**	**1995**	**% change 91-95**
Manufacture of paper, pulp				
and board (combined measure)	1942	1823	2208	13.70
Print and Publishing				
Publishing of books	69	62	366	530.43
Publishing of newspapers	1298	1407	1186	(8.60)
Publishing of journals and periodicals	138	234	343	248.60
Publishing of sound recordings	11	1	0	
Other publishing	201	31	301	48.80
Printing of newspapers	32	0	20	(37.5)
Printing not elsewhere classified	4665	6048	4967	6.48
Bookbinding and finishing	167	342	434	260.00
Composition and platemaking	1999	955	1605	(19.71)
Other printing related activities	115	189	420	365.22
Total	8695	9269	9642	10.90
TOTAL	**10637**	**11092**	**11850**	**11.40**

Source: *Annual Employment Survey/Census of Employment : Nomis*

The study undertaken by the PRU for the Leeds Development Agency (LDA)

and Leeds TEC in 1992 provides a number of insights into recent 'factors affecting the industry and their specific implications for local firms' (PRU, 1992: 1). The study, based on a postal questionnaire of 608 firms in the Leeds Metropolitan District, elicited information on 286 companies. Of these, 246 (86%) were in the printing and publishing sector with 40 located in the paper and board products sector. Examining the printing and publishing category more closely, it is apparent that small scale production units predominate. 94.4% of respondents employed less than 100 people, with a significant majority (77.3%) having less than 20 employees. Only 5.6% (14 firms) of the firms responding had a workforce of over 100 employees. These findings are broadly consistent with the national situation[4].

The survey found that the printing and publishing firms tend to supply mainly local, regional or national markets, with about 91% of respondents supplying customers within Leeds, over three quarters within the region and 69.4% within the UK (PRU, 1992: 11). Only 15% of respondents supplied markets within the rest of the EU, and only 7.5% sold their products outside Europe. These findings reveal starkly the reliance of printing firms on developments within the local economy. Indeed, employment levels and working conditions within the sector are likely to be heavily influenced by the broader processes of labour market restructuring within the local economy. A report from the Yorkshire and Humberside Regional Research Observatory (1990) found that the nature of consumer demand changed significantly during the 1980s, with significant increases in demand from retailers for promotional literature and specialist labelling, and also from banks, building societies and companies in general for financial reports and documents.

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[4] A national study by the Institute of Manpower Studies, commissioned by the BPIF in 1989, found that 95% of respondents (out of a sample of 964) employed less than 100 employees (see Leighton *et al*, 1991).

Approximately a third of respondents indicated no change in the size of the workforce in the year preceding the research. Where a change had taken place, it was most likely to have been about 5%, with 28.7% reporting an increase of 5% and 21.3% a decrease of 5%. Taking a longer term perspective, the survey found that 18.9% of firms had increased their workforce by more than 10% in the last 5 years, while only 5.4% recorded a commensurate decrease during the period.

Despite being undertaken during a period of economic recession the questionnaire elicited a significant feeling of optimism (60%) amongst firms with regard to their future business prospects. 39.4% expected to increase their workforce slightly over the subsequent five years, and a further 8.8% expected any further increases to be substantial. Nevertheless, at the time of the survey, few companies were experiencing any recruitment, retention or training difficulties. The exception was for the recruitment of skilled operatives, for whom 16.9% of firms reported difficulties. Yet, this did not seem to have any knock-on effects with regard to the retention and training of such workers, with firms indicating difficulties in only 3.5% and 4.1% of cases respectively.

In terms of actual training activity, only 22.5% of printing and publishing firms made use of external sources of training. Thus, in-house forms of training provision predominated, of which, 72.5% of firms had engaged in some form of on-the-job training and 32.6% of firms reported providing induction training. There was, however, a clear size effect at work for the sample as a whole. As Table 4.6 reveals, training activity was most widespread in those firms employing more than 200 employees. Whilst there was no difference between on-the-job training broadly defined, it is clear that larger companies were far more likely to engage in more formal types of off-the-job training and management training.

Table 4.6: Forms of in-house training by company size (%).

	1-19 employees	20-199 employees	200+ employees	All companies
On-the-job training	70.0	87.9	87.5	73.3
Induction training	28.2	51.5	75.0	34.2
Computer/IT training	22.7	42.4	50.0	27.3
Formal off-the-job	13.6	30.3	75.0	20.5
Management training	5.4	30.3	62.5	13.7
Other training	0.9	15.2	0	3.7

Source: PRU (1992:17)

Unfortunately, the study did not probe any of these areas in more detail to discern, for example, the extent to which companies were taking on new trainees under the RTRA, or the extent to which companies had specific training policies or individual training plans for their employees. Two broader findings suggest such activity would be limited however. Firstly, even though induction training was undertaken by a third of all respondents very few companies reported using the local print college and formal traineeships/apprenticeships were virtually non-existent. Secondly, evidence from a similar and comparable study of the printing industry in Bradford in 1993 found that individual training plans were present in only about a third of companies[5].

The survey found that the main problem experienced by companies related to investments in new technology or renewal of equipment, primarily influenced by factors affecting financial liquidity, such as business conditions, low profit

5 Although the Bradford study was based on interviews with 100 companies, the sample is very similar to the Leeds study. The size distribution is virtually identical and questions relating to recruitment, retention and training difficulties elicited almost identical responses.

margins, high interest rates and bad debts. It is no surprise, therefore, that a quarter of the printing and publishing firms identified technology as the key area where they required assistance (PRU, 1992: 17/18).

4.2 The evolution of the Leeds Printing Initiative

A recognition of the important and traditional position of the printing industry in Leeds has led to the introduction of a number of sector support groups in recent years. This section explores the evolution of the Leeds Training and Enteprise Council's *Printing Advisory Group* and the Leeds Development Agency's *Printing Industries Working Group*. Each group is considered in turn through an examination of their respective policies and initiatives.

4.2.1 The Printing Advisory Group (PAG).

It is common for Training and Enterprise Councils (TECs) to establish a sub-structure of sector groups from particular industries (Crowley-Bainton, 1993), primarily as a forum for employers to generate ideas to influence training provision in their locality, but also as a mechanism for providing the TEC with labour market information on skill shortages and possible strategies for overcoming them. Thus, while sector groups usually have access to some 'Local Initiative Funding', their prime motive is to encourage employers to develop intra-sectoral co-operation and to create their own initiatives.

The Printing Advisory Group (PAG) was set up on the inception of the TEC in 1990, along with other sector groups in engineering, construction, finance and the retail services sector. As the PAG representive elaborated, the advisory groups were set up:

'..... to be an industry's mouth-piece within the TEC, so the industry indicates what the key issues for the industry are. This affords the TEC greater flexibility in tailoring existing initiatives to fit particular industries.

In order to generate support from the industry the TEC wrote to around 100 companies in the area, notifying them about the role of the TEC and inviting them to take part in the evolution of the sector body. The key focus, according to the TEC, was to forge long-term relationships with the industry which would be capable of generating and identifying current and future issues of need for the sector. As a consequence, some 50 people attended the first meeting of the PAG, which subsequently dropped off to between 12-14 regular attendees. The group held two meetings a year, with 'on-going relations and liason' between the TEC and the secretary of the group (the personnel manager of a large print firm). The composition of the PAG included representatives from the GPMU, BPIF, Leeds Printing College, the TEC, the Yorkshire Post and a number of large print organisations.

A number of initiatives were subsequently funded by the TEC under the auspices of the printing group. The first major project involved a financial contribution by the TEC towards a consortium purchasing a web simulator to be housed at Leeds College of Technology. The consortium included the TEC, LDA, the college and eight companies whose contribution was taken as a subscription to use the equipment for a set period each year. If other companies wanted to use the equipment they would be expected to pay for a particular period of time.

The PAG also worked very closely with the local branch of the GPMU and, in this regard, funded a number of GPMU and GPMU/BPIF inspired courses based on upskilling current employees in colour print work. Furthermore, the TEC also contributed to the purchase of a computer training suite, with Apple Macs and Desk Top Publishing, based at the local GPMU offices. For the TEC representative, this initiative epitomised the 'proactive view taken by the union towards new technology and training', as the training suite enabled 'recently

unemployed printers to book time on the equipment to upgrade their skills and get back into work'. Although no formally accredited courses can be undertaken, the GPMU issues every participant undertaking a training module at the centre with a certificate and the facility has proved very popular (about eighty people were regularly using the equipment at the time of the research). Moreover, the working relationship developed between the union and the TEC has attracted the attention of other TECs and union branches around the country seeking information on how they can put similar arrangements into place.

Nevertheless, it seems a certain degree of antipathy towards the TEC hampered the nascent development of the group. As the TEC representative noted,

' ...the PAG became well known for the level of moaning that went on in it. Printers were very negative about TEC help. Primarily because whilst there are a lot of large organisations involved in print the financial mechanisms operated by the TEC often prevents such organisations accessing what we have to offer. And this has always been a bug-bear across the city'.

In response to such criticism, and in order to increase the credibility of the group, the chief executive running the group on the TECs behalf at the time argued that a 'pot' of money should be allocated to the industry. Consequently, a sum of £100,000 was dedicated by the TEC for the printing industry, and a marketing campaign advertising the fact set in train. The view of the TEC was that this commitment would settle any complaints that it had not given any money to the industry.

Despite sending out leaflets to every print related company in Leeds informing them of the funding the initiative generated few valid enquires. Three key reasons can be identified for the relative failure of the initiative. Firstly, the majority of enquiries were made by small firms seeking financial help to purchase capital equipment. Their prime concerns did not, therefore, fall within the remit of the TEC, which had to repeatedly stress it was a '*Training* and

Enterprise council and not a venture capitalist'. In other words, the TEC had to stress that 'the pot of money had certain criteria attached to it'. Thus, it could only be used to help organisations develop a formal training strategy; or to help organisations with training that led to recognised qualifications.

The latter criteria was deemed particularly troublesome and represents the second reason affecting the take-up of the initiative. Traditionally, the only recognised qualifications achieved by print employees would be as part of an apprenticeship programme. Yet, the decline of such traineeships, and as the next section will detail a poor image within the industry of the local print college, has led to an increased emphasis on non-accredited, in-house retraining provision. While such training could fall within the remit of competency based NVQ qualifications, at the time of the initiative the industry had yet to introduce a comprehensive system of NVQs. As the TEC representative noted:

'There were no NVQs in the industry at the time and this represented a major stumbling block. So the money was waiting there to be taken but there was really nothing that it could be used for in terms of what people actually wanted. There was not very much information around as far as we were concerned about training courses that were available.

Consequently, the need for TECs to tie their initiatives to the achievement of measurable training outputs (ie. NVQs) militated against the take-up of grants by many companies. In recognition of this, however, the TEC was prepared to adopt a more flexible approach towards what constituted an acceptable training 'outcome'. One possible alternative would have been for firms to follow the training modules designed and sold by the BPIF as part of the GPMU/BPIF training agreement, and the BPIF as the Industry's Training Organisation also offers a wide range of other training modules. But this possibility, according to the TEC, was often resisted by many grant applicants who, as predominantly small companies, were confused about the training offered and often

mistakingly thought they would have to subscribe to BPIF membership as part of the process.

In recognition of its commitment to training, the prime beneficiaries of the money turned out to be the GPMU. To fund the computer suite and other union organised courses held at the local print college the TEC had to relax a strict interpretation of its funding restrictions in order to accept the union issued certificates and also a sample of work from the trainees as a 'legitimation that some new skills had been learnt'. Out of the £100,000 pot, only £10,000 was ever claimed by the industry, 60% of which went to the union with the remainder shared between a dozen companies.

Thirdly, for the TEC, the failure of the initiative was indicative of a 'general apathy pervading the industry' and, perhaps most tellingly, a reluctance by firms to invest any money in training. Crucially, whilst the TEC was prepared to put up money for the industry it was not able to furnish grants unless a comparable figure was promised by the companies in question. As a respondent from the TEC explained :

'The issue is that the TEC is not able to give money and pay for something 100%. We look at leverage, by offering 50% of the cost of a programme. The problem was that the employers wouldn't chip in the 50% that they were not doing before ....they basically saw it as free money and were not prepared to put their hands in their pockets. Whereas the union put in its own money as well as getting some money from the larger companies. If our offer was matched we didn't care who the organisation was as long as the individual was not charged'.

Unsurprisingly, therefore, the TEC identified the main factor constraining its effectiveness as its inability to get small firms involved in the PAG. Firstly, it appears there was a great deal of confusion amongst small business over the purpose of the TEC, indeed, it was common for such firms to confuse the TEC

with the local printing college. Secondly, the TEC considered small firms uncatered for in the industry, as many of them were introducing high-tech equipment without support from local training providers.

It also appears that the dominance of directors from large companies on the PAG hampered the success of the group. As the TEC representative noted:

'We want an effective mouthpiece, but we also want an active group that we can work with and not against. The advisory group that we now have tends to be like an *old boys club,* it's aimed at its own agendas that they are not letting us know about'.

It was thus decided to re-launch, and hopefully revive, the orginal aims of the group through a merger with a similar print working body run by the Leeds Development Agency. In this respect, the fact that the LDA group was comprised of more 'hands on' personnel and production mangers rather than company chairmen was considered a distinct advantage. It was also anticipated that the merger would allow the TEC to pursue and direct resources towards more long-term provision for the industry. Indeed, research by the TEC had found a number of common target areas in the industry, such as supervisory training, upskilling on colour machines and the up-skilling of print assistants to actual qualified print staff, 'where there was a great need for effective local provision for what companies want'.

4.2.2 The Leeds Printing Industries Working Group (LPIWG).

Established in 1991, the Leeds Development Agency (LDA), the economic development arm of Leeds City Council, provides support to existing and new start businesses. In association with industry and other support agencies, needs and opportunities for growth are identified and promoted. The City Council has a number of business development grants and other finance available to assist this. In addition, business development grants are also funded through the

Single Regeneration Budget: these include grants of up to £3000 (again, the company must contribute at least 50% of the cost to obtain the grant).

In recognition of the 'major presence of printing in the local economy', the "Leeds Printing Industries Working Group" (LPIWG) was set up by the LDA in 1993, with the aim of promoting Leeds as a print sector both nationally and internationally (see Leeds in Print, spring 1993). Comprising 11 company managers and seven representatives from supporting organisations such as the GPMU, BPIF, and local training providers, the group held meetings every six weeks, although as in the case of the TEC group attendance was patchy. Prior to the formation of the group, the LDA held in-depth discussions with 50 companies and various supporting organisations. The five issues raised during this research informed the programme of activity for the working body.

1. There was a need to promote the local printing industry in Britain and Europe.

2. In oder to promote the industry locally, it was felt that the image of the industry with local schools would have to be improved. This was to be achieved through building links between schools and companies in conjuction with the Education Business Partnership and the British Printing Industries Federation. Despite evidence to the contrary[6], the first meeting of the group put much emphasis on the poor image of the industry. Outside of the strong family connections with the industry, it was felt that most people regarded printing in terms of 'overalls and inky fingers' oblivious to the 'technological advances which have transformed the industry in recent years'. A programme of action seeking to rectify this situation included: teacher placements; school visits by company personnel; work experience schemes; company open days; circulation of industry literature to schools (to be financed by companies). Coinciding with national print week a series of placements involving 10 companies and 20 schools was undertaken.

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[6] A survey of careers advisors in the south east undertaken by the Beacon Press in 1992 found that the industry was regarded as old fashioned, dirty and technically backward. This poor image was taken as responsible for the problems the industry faced with attracting new recruits (see Stuart, 1994). Influenced by this research, the LDA undertook a similar survey of career officers and careers teachers in late 1992. In contrast to the previous study, the LDA findings 'were extremely positive and encouraging'. The problem areas identified were the lack of printing careers material in schools (25%), and the limited attendance by careers teachers at a printing careers seminar (38%) (LDA, 1992: 27).

3. There was a need to encourage and improve communications between local colleges and printing companies.

4. The production of a newsletter -*Leeds in Print*- was started and distributed to all printing and packaging companies in Leeds in order to maintain and reinforce contacts with the industry, as well as to foster a greater 'spirit of co-operation' between the industry and the bodies which seek to serve it.

5. Environmental issues were to be promoted within the industry.

Most of the subsequent initiatives developed by the LPIWG were, therefore, based on either promoting the industry in some way or developing links between the industry and educational establishments. Again, the success of the various inititiatives was heavily dependent upon the level of support and interest forthcoming from the industry. In this regard, the school placement schemes were generally regarded as a success, not only in terms of enabling school teachers to visit printing companies but, also, by setting up a series of work placements for female college students the group sought to engage with the more contentious gender issues permeating the industry. The fact that the schemes have become an annual event suggests that concrete links were forged between the industry and educational establishments. Yet, it was the same, few companies which got involved in the placements each year.

Efforts to generate broader interest and involvement from the industry proved less successful. A series of seminars on quality management and manufacturing efficiency elicited such a poor response that only two out of four planned events actually took place. As the LPIWG representative at the time noted:

'Even the attendance at the two seminars actually conducted was extremely poor. For example, the seminar on total quality management was attended by only four people, which was especially embarrassing as a senior consultant from the BPIF had come up from London to conduct the presentation.'

The low attendance was regarded as particularly surprising given the aim of the seminar series which was not only to present pertinent issues to the industry, but to do so at a low price - in this case just £15 compared to the hundreds of pounds charged by the BPIF for similar presentations.

Whilst the LPWIG organiser felt that the group had raised the image of the industry locally, it was also apparent that it faced the same difficulties as the TECs printing advisory group in terms of generating active commitment and interest from local printing companies. Again, this was partly put down to apathy and myopia, but it was also admitted that 'too many firms are busy just keeping their heads above water'. In particular, the rapid pace of technological change in the industry was making it very difficult for many firms to keep up during the recession and, accordingly, investments in both human and physical capital had been drastically curtailed. As a consequence, reductions in capacity wiped out the employment gains of the 1980s, leaving aggregate employment for the industry commensurate with the position a decade earlier.

According to the group organiser, much of the labour shedding taking place at the time was directed at unskilled positions. In was anticipated, therefore, that this, accompanied by a corresponding lack of investment in new entrant trainees, would in the event of an economic upturn leave firms facing or experiencing chronic skill shortages. The need for some sort of local printing body to identify and tackle the problems facing the industry would thus remain important. In this context, it was anticipated that a merger between the LPIWG and the PAG, based upon a 'recognition of joint interests and the desire to broaden the constituency amenable to discussion', would prove beneficial.

Nonetheless, whilst both printing groups were able to articulate a strong rationale for merger, it seems that the actual impetus for change may have come

from the local branch of the BPIF. As far as the BPIF's training representative was concerned, membership of both groups was somewhat repetitive and onerous. She, therefore, encouraged the LDA and TEC represenatives to look towards some sort of merger, because:

'it was the same old meetings with the same old people. I'd been encouraging our members to attend, but I was starting to think I couldn't justify them giving up their time for this. So, I got the idea of a merger onto the agenda of both groups. I couldn't afford to go to both of them, not when they are saying the same things. And for those employers involved time is valuable. So, if you want to have an impact do it in a regimented way.

It was also clear, however, that the BPIF was concerned by some of the activities and intentions of the initiatives. As the BPIF training representative noted, 'some of the things that the LDA were attempting to do directly cross with the BPIF and we weren't happy about that'.

4.2.3 The Leeds Print Initiative.

The two working groups merged in 1994 to form the Leeds Print Initiative, with the intention that the operations of the group should fit within the broader remit of the *Leeds Initiative*, set up in 1990 to 'promote the city as a major European centre' and 'to ensure the economic vitality of the city' (see The Leeds Initiative Annual Report, 1995-96, Leeds City Council). The merged group invited the previous private sector constituents to get involved and then drafted an initital plan, which detailed the goals of the initiative as:

'..the promotion of Leeds as a centre of printing excellence, (and) to encourage printing companies to develop a better trained and more highly qualified workforce and to promote the industry to young people as an interesting and rewarding career' (Leeds City Council, 1995/6: 13).

The structure of the group was consequently broadly similar to the previous groups, with representatives drawn from print companies and support

organisations. It was jointly coordinated by representatives from the LDA and TEC, with the previous chair of the LWIPG taking up the chairmanship of the initiative. The prime concern for both the LDA and TEC co-ordinators was private sector involvement, 'as they are the people who know what is going on in the industry'. The initiative was thus to be run as an 'autonomous organisation in itself, linked to the Leeds initiative and private sector led' (LDA co-ordinator: field notes). In this respect, both co-ordinators were disappointed that a number of participants from the previous groups used the merger as an opportunity to pull out. Similarly, the fact that the initiative sought to keep a very strict view on attendance -if people missed three meetings they were off the group- also led to a reduction in membership, with the number of companies participating falling from an initial 18 companies to 10 regular attendees.

Aiming to meet every 3/4 months it was decided at the outset that the group would have to be realistic about what it could actually achieve. With no dedicated budget at its disposal, the group agreed that its activities should be underpinned by two basic objectives. Firstly, it should seek to change the industry's image and peoples attitudes and opinions towards printing, primarily to increase the attraction of the industry to young people. Secondly, it should raise awareness amongst print companies about training provision and the need for training and retraining. The group also initially attempted to sign up to the national training targets, but that objective only remained in place for the first year before being dropped. As the TEC co-ordinator explained:

'To a large extent we dropped the national targets because companies did not want to commit to Investors in People or go down the road to targets. I did wonder at times what some of them were involved for. Certainly, I knew from the days of the Printing Advisory Group that some companies saw it as a way of getting closer links to the TEC to secure money. But that was not really an issue or option as the group became the printing initiative. That was not what we were about'.

Primarily, then, the print initiative sought to position itself as an awareness group, with its objectives set against a brief seeking to promote printing as a high skill industry and an industry for life. Indeed, at the inception of the group, both the TEC and LDA argued that there was a need to develop long term strategies to tackle the issue of labour retention, despite a certain amount of 'downsizing' taking place in the industry at the time. The need for companies to develop more coherent strategies towards recruitment, up-skilling and multi-skilling was articulated most forceably by the TEC, who were concerned that the workforce in print would become increasingly segmented by age. As the TEC co-ordinator detailed:

'.....(w)e knew that in the main the industry was fairly stable in terms of employment prospects although there was a definite age range gap. If you look at the age range of an average print company workforce, there are usually a group in their mid-fifties and then a gap to a group in their thirties. We do not want that gap to be replicated in 10 years time, so we try to emphasise the need to keep recruiting and as they upskill and multi-skill they back this up in the job with links to various training programmes. Print was always seen as a good opportunity for a career, but locally it was not attracting the level of recruits and, in particular, the quality of recruits'.

In this regard, both the LDA and the TEC sought to advertise the wide range of training opportunities available to print companies in the locality, from BTEC courses, workplace learning right through to graduate provision.

The actual initiatives undertaken in pursuit of these objectives were essentially a continuation of the old LWIPG approach. Thus, the central focus of activity was on teacher and students' placement schemes, the 'adoption' of local schools by print companies and an international womens day event. Although this approach was driven by the LDA, both the TEC and LDA co-ordinators felt that such activities had been successful, raising the profile of the industry amongst school leavers and also developing more open relationships between print

companies and local schools. The publication of the 'Leeds in Print' newsletter also continued, with short notices on 'what is going on in the sector, who has got what contract or what new piece of kit, along with general good news stories'. It is clear, however, that disagreements emerged over the content of the newsletter. For the LDA and TEC, the newsletter represents an ideal forum for raising specific problems and issues facing the industry, yet this has been resisted by the chair and vice chair (both managing directors of large companies) of the initiative who maintain a tight editorial control over the newsletter. As the TEC co-ordinator noted:

> 'It's seen as the groups newsletter rather than the TEC or the LDA flagging up issues or problems that are on the horizon, so we've not had the opportunity that we thought we would have. We have used it to promote our initiatives but with little take up. The reluctance of the printing industry to have anything to do with training continues, and we are still banging our heads against a brick wall'.

The issue of constituents' interests is worth developing. For it is clear that both the TEC and the LDA, whilst recognising the purpose of the initiative as an awareness group, have specific agendas of their own to promote. As the LDA co-ordinator admitted, whilst the initiative itself offers no financial assistance both agencies obviously do. Indeed, both agencies regard printing as a target area for grant assistance. In this context, the LDA offer grants for investment in new technology and product development of up to £5000 and £17000 respectively, subject to an equal contribution by the company and some evidence of job creation, with the probability of obtaining a grant dependent upon the unemployment level within the post-code area that the company is located. The funding offered by the TEC is also outcome related, with grants available for training linked to NVQs and the modern apprenticeship. Both agencies felt, however, that the demand from the industry for their services had been poor. This was particularly acute in the case of the TEC, who had received no approaches from printing companies wishing to introduce NVQs for the

shopfloor. The uptake of modern apprenticeships (MAs) has also been much lower than expected[7]. The lack of interest in NVQs can partly be explained by the delays over implementation of such a system within the industry. But, for the TEC respondent, there generally appears to be little knowledge and interest in NVQs and MAs amongst printing companies. Essentially, it is those companies who have always trained who continue to do so and who are more predisposed to new initiatives such as MAs.

It could be argued that the position of the printing initiative as solely an awareness group could conflict with the business functions of the two agencies. In other words, printing companies may view with some cynicism an initiative which for them, and despite the best intentions of the initiative, represents little more than an attempt by the LDA and TEC to market their services to the industry. Such a position was rebutted by the LDA co-ordinator, who stressed that the initiative existed to 'allow large companies to try to put something back into the industy'. Furthermore, such companies will either be ineligible for grant assistance, which is targeted at SMEs with less than 250 employees, or will consider the amount of money offered as irrelevant for their needs. Yet, both agencies identified the main factor hindering the effectiveness of the initiative as being 'that not enough companies are prepared to get involved', particularly the small companies who dominate the industry. Such a position was elaborated further by the TEC co-ordinator:

'We've done a fair bit of work with a very few companies who've seen it work, but they are few and far between. Most of the work in the larger companies is generally linked to Investors in People, which most of the larger companies are working towards very slowly[8]. But the smaller ones we've had very little at all, although they might take off soon with some of our smaller business programmes'.

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[7] The TEC had 20 contracts registered with Leeds College of Technology for print MAs in September 1997 (private correspondence with Leeds TEC).

[8] No Leeds print companies have yet achieved the IiP standard.

Promoting the initiative as essentially separate from the interests of the LDA and TEC should not, therefore, be the major point of concern. Indeed, the *sine qua non* of the original printing advisory groups was to develop a forum where the services and expertise of both economic agencies could be directed towards developing upgrading strategies for the printing industry locally. This of course proved problematic, yet the merged initiative has not sought to tackle these problems. Indeed, the fact that only large companies and support institutions are involved, and the narrow 'awareness' agenda of the group, only served to distance the initiative even further from the concerns of most companies in the industry. Consequently, it is perhaps no surprise, as the following chapter will explore, that doubts are expressed by certain quarters of the industry that the initiative represents essentially an 'old boys club' where the major companies in the locality seek to promote themselves in a positive light. Overcoming such scepticism has proved difficult. Mail-shots of all companies in the area by the LDA asking them to identify what they thought was needed in the industry and requesting them to get involved in and shape the initiative have tended to elicit virtually no response. Thus, the initiative has proved unsuccessful in identifying, let alone meeting, the needs of the industry.

Whilst there are clearly problems with the composition of the group and the relatively narrow agenda of the initiative, both agencies identify a lack of resources as the main impediment to the future development of the group. Although the initiative had no dedicated funding at its inception, the TEC and LDA each donated £7000 per year for 1995/96/97. This funding has subsequently come to an end, however, with both agencies suggesting that the other was reluctant to invest. Determining the accuracy of such criticism is difficult, but, certaintly, the TEC felt that short-term funding imperatives hamper the impetus it can give to such initiatives. Despite this, both agencies are in agreement over how the group should progress in the future. As the LDA

co-ordinator explained:

'What we've found is that the group as it is now is not going to progress any further without significant resources, and the resource that we need is somebody working on it full time....ideally with a print background'.

In this context, the set-up of the Leeds engineering initiative has proved influential. Designed as the first sector group of the Leeds initiative, the engineering initiative appointed a full-time chief executive funded by both the local industry and the Leeds initiative. The chief executives remit has been 'to work full-time with local engineering companies, setting up a structure of schemes with clear output and outcomes'. A similar set-up for the printing initiative has been ruled out, however, as the whole structure of sectoral sub-groups within the Leeds initiative is currently under review. As a consequence of this restructuring process, it is expected that the printing initiative will be subsumed under a new, broader Leeds manufacturing initiative. The exact structure of the new group is currently unclear, but it has been backed by all the constituents of the print initiative and the expectation is that it will be headed up by the previous chief-executive of the engineering initiative with possibly an assistant drawn from the printing industry. The issue of involvement and funding is, nevertheless, likely to remain a perennial problem. Whilst funds have been forthcoming from engineering companies it appears that, at present, no printing companies are prepared to sponsor the new initiative.

4.3. Print education and training: the role of Leeds College of Technology.

Leeds College of Technology is the only training provider in Yorkshire and Humberside which offers courses in print and print production techniques and, in particular, the traditional craft skills encompassing pre-press, printing and print finishing and other specialised courses for the printing industry. The college's catchment area has expanded considerably in recent years as it has

sought to take advantage of a trend reduction and concentration in the number of print colleges in the UK. In the late 1960/70s there were nearly 100 colleges across the UK offering print or print related training courses. by the early 1990s this had declined to less than 20. Anticipating a further downward trend towards a select number of regional print training institutions, the college has in recent years sought to establish itself as the print college of the north of England. Thus, the college currently attracts students from as as far a field as Newcastle, Liverpool, Wales, Gretna Green and Milton Keynes.

The training provision offered by the college has changed significantly during the 1990s, partly as a response to changing funding criteria and partly as a response to changing industry demand. Under recent further education public funding strictures a premium has been placed upon full-time student numbers, to which the college initially responded by developing those courses most likely to attract full-time students. This development generated a hostile response from the local industry, most clearly articulated in a discussion document commissioned by the north eastern region of the BPIF. By providing courses that were purely 'funding driven', it was argued that the college was failing to identify and meet the requirements and changing needs and demands of the industry. Indeed, by prioritising full-time student provision the college shut-down the traditional day-release courses preferred by small and medium sized companies. Furthermore, the expansion of 'popular' courses, such as art and design, appeared to contrast with the demands from the industry for the upgrading of existing skills in relation to technological developments (BPIF, 1994).

Despite this criticism, it is the issue of funding that has forced the college to introduce alternative forms of training provision that are more sensitive to the needs of the industry. As the college's recently appointed business development

co-ordinator explained:

> If you're talking about financial resources then like all further education establishments we are top-sliced each year. I believe that over the three years ending this year (1994-97) we would have been top-sliced by a million pounds as a further education college, but at the same time we are also under pressure to increase numbers each year from the government. ....(s)o like all colleges we've seen an increase in class sizes and more people around equipment.

This financial deficit has had to be made up from other sources. The college has, therefore, since late 1995, become far more industry-led, not only through the introduction of short college-based courses but also via the development of bespoke training provision whereby college tutors go to individual companies and deliver training on-site.

The development of industry specific training provision has been underpinned by a major strategic re-profiling of the college. The key driving force behind this has been the appointment of a new principal, who was previously the head of the London School of Printing, intent on establishing the institution as the premier print college in the UK. In order to achieve this, efforts have been made to set-up a range of new initiatives directed at improving and fostering closer links between the college and printing companies and improving the image of the college. Three key developments are worth exploring. Firstly, an external relations unit (ERA) has been set up with the brief of building a data-base of printing companies. This allows the college to advertise their provision through targeted mail-shots. The business development officer then visits potential clients to discern their specific need and subsequently designs an appropriate course of training. The ERA has also been responsible for identifying and putting together bids for alternative sources of funding and, in this regard, the college has been successful in obtaining grants from European and UK government funding schemes.

Secondly, in September 1997 the college launched a new print and media skills unit, funded partly from the sources identified above but also through the sponsorship of a number of print equipment suppliers. More specifically, three up-to-date printing presses have been donated free of charge by the machine makers Heidelberg, and two large computer suites have been sponsored by a number of local printing companies. It should be noted, however, that such support has, to a certain extent, long been forthcoming from local companies who have been acutely aware of the financial constraints upon the college's activities. Indeed, against a back-drop of ever tigher financial resources the college has been increasingly reliant on local companies donating excess or waste resources such as paper and inks as well as recently out-dated print technologies. Nevertheless, whilst local companies have not been insensitive to the college's recent predicaments they have been concerned about the ability of the college to cater for, and keep up with, the increasing pace of technological advancement within the industry (BPIF, 1994). The new print and media skills unit thus represents an attempt to meet and overcome such concerns by establishing a suite of resources 'in-tune' with recent developments in print.

Thirdly, and relatedly, the college has developed a new portfolio of courses. In addition to traditional craft provision, the college now offers, in conjuction with Leeds Metroplitan University, a post-graduate degree in publishing and a number of degrees in print management. Moreover, as noted above, the college has also sought to move away from the traditional full-time course structures by offering provision that is increasingly led by the current demand of print companies. This includes not only on-site bespoke provision but also a series of short, day release courses focusing on a range of printing activities (eg. appreciation of printing processes, production management, print sales). Such courses are marketed in an aggressive and business orientated fashion, flexibility of provision is stressed and the college also offers aid to firms in

constructing applications for financial assistance from the local TEC.

Given these recent developments, those interviewed were far more sanguine about the position of the college than they had been a few years earlier. In particular, initiatives targeted at forging on-going links with the industry were recognised as crucial to the long-term success of the college. As the business development co-ordinator explained:

'We see ourselves as a college which is going to work alongside industry and which is led by demand. Ultimately, what we are going to set up here, in the broadest sense of the word, is a club. What we intend is that companies will pay a membership fee, possibly of about a £100. They will then get a a £100 training voucher to offset against any future training they want to do. This club will then drive the college along with where they should be moving and how they should be moving'.

This re-focusing towards business-led provision appears to have taken place very smoothly, with teaching staff identifying no tensions between the college's traditional academic focus and the new courses. Overall, tutors claimed to enjoy teaching such courses and pragmatically accepted that 'full cost' provision was essential to cover the financial deficit imposed on the college from their traditional sources of funding.

The major area of concern for the college appears to revolve around their increasingly contentious relationship with the BPIF over training issues. Firstly, as the lead body for the industry's structure of NVQs, the BPIF has a powerful influence over what modules trainees should pursue at the college or need to obtain to achieve NVQ accreditation. In this regard, many printing colleges are unhappy about the way the BPIF alter the syllabus at very short notice, thus making it difficult for colleges to plan courses in advance. Secondly, by offering more business-led provision the college are now directly competing

with the services undertaken by the BPIF. Again, problems over information disclosure can make it difficult for the college to design and monitor programmes of NVQ certification through on-site provision. Thirdly, and relatedly, the BPIF are taking an increasingly aggressive attitude towards the college's activities and also towards the marketing of their own services. This is manifest not only in their exhortations to print companies that college provision is unnecessary, as the BPIF can deliver the training instead. But also in terms of the fees they pay the college for trainees on BPIF schemes. The problems that have arisen with MAs, for example, are clearly explained by the print training manager:

> If you've got a TEC agreement it probably brings in about £6500 per modern apprentice (MA). The BPIF also get this per MA. Last year they paid the college £950 per student per year, this year they are down to just £500, all the rest goes to the BPIF. So we've now got to play the 'bad boy' and invoice the company for the £450 balance. The BPIF claim they're not receiving the same level of funding, but our Principal has found out that they are.

Such problems aside, the introduction of the modern apprenticeship was regarded as a positive development for the college more generally, with contracts secured thus far with 6 TECs, resulting in 62 first and second year trainees currently undertaking courses at the college. Nonethless, this was not taken as indicative of a large-scale expansion in apprentice level training investment. For whilst the introduction of MAs may have had a slight effect, the major reasons triggering such training for most companies was simply that they hadn't taken on any apprentices for a number of years. In this context, members of the college regarded the current proclivity for retraining amongst print companies as detrimental to longer-term strategies of apprentice level investment.

In summary, it is clear that a number of positive initiatives have taken place at

the college in recent years. In response to severe funding constraints and criticism from the local industry the college has re-profiled itself as primarily a business-led centre of training provision. This has enabled it to offer short, on-the-job courses tailored to the retraining requirements of specific companies, whilst at the same time raising significant revenues towards the establishment of a print and media skills unit housing the latest, sophisticated print technologies. Despite these achievements, the business development co-ordinator argued that trends toward training with no college or qualification obligation, ran contrary to the situation in countries like Germany or Belgium where print colleges were far more generously funded by the state. In this regard, it was felt that the break-up of the old Print Industry Training Board, whereby a levy encouraged companies to train, represented a major loss to the industry.

4.4. Summary.

This chapter has sought to locate the printing industry within a local economy perspective. Focusing on the Metropolitan district of Leeds, we have noted how the industry has been restructured within the locality. Against a backdrop of manufacturing decline, the growth of the financial services sector has created a series of new market opportunities for the printing industry.

The large concentration of printing employment in the locality has prompted a number of sectoral initiatives by the Leeds Trainining and Enterprise Council and Leeds Development Agency. Representatives of both agencies argued that such initiatives were necessary to raise the profile of the industry locally, to identify and tackle the future skill requirements of the industry and to generate a more locally participative industry network. At the same time, of course, it was also anticipated that the creation of such forums would provide the TEC and LDA with opportunities to market their own services to the industry. So, for example, a key concern for the TEC was to promote the need to link training

investment to systems of accreditation such as NVQs and IiP, and to encourage firms to set training targets. As the case studies demonstrated, however, this didn't happen. None of the printing groups ever gained any real momentum. The one attempt at a major initiative for the industry, the £100,000 put up by the Printing Advisory Group, turned out to be an embarrasing failure for the TEC, with most of the money unclaimed. Subsequent initiatives tended to be directed towards lower profile concerns and were undertaken on a small scale basis. Thus, rather than tackling major issues, such as identifying and meeting the skill demands of the industry, the respective groups became talking shops for a small number of key players in the industry, and operated as little more than awareness groups.

What explanatory factors, then, can be identified to account for the relative failure of the printing initiatives? Firstly, representatives from both the TEC and LDA openly labelled the industry as 'apathetic'. Not only were printing firms unwilling to get involved with the sectoral initiatives, but, more generally, they were perceived as reluctant to invest in stuctured approaches to training. This was particularly noticeable with regard those initiatives requiring 'match funding'. Secondly, it is also apparent that certain structural impediments militated against a high take-up of training opportunties by local print firms. The target driven approach of the TECs has proved particularly problematic here. As relative latecomers to the NVQ revolution, there exists a disjuncture between the current demands of the printing industry and the services and priorities offered by the TEC. For the TEC, the problem was further compounded 'by the lack of infrastructure locally for NVQs...and a college that until recently was more more focused on 'bums on seats' courses and who've not had the ability or resources to drive the uptake of NVQs in the industry' (Printing industry co-ordinator: field notes).

Thirdly, the printing groups were unrepresentative of the local industry. The membership of the various groups were comprised primarily of representatives from supporting agencies, be they state (as in the case of the LDA and TEC) or industry (GPMU, BPIF and the local printing college), and directors of a few large companies. The lack of representation from small companies meant that not only did the remit of the group become biased towards the objectives of the larger employers, but it also prevented the TEC and LDA from acquiring first hand information about the skill and training requirements of smaller firms. The corollary was that many small print firms were confused about the role of the various print groups and also the services on offer from the TEC and LDA.

Fourthly, the potential of the various printing groups were, to a certain extent, stymied by sectional interests. Both the TEC and LDA suggested that the relationship between the two agencies was 'very co-operative', although it was admitted that there were areas of overlapping interests. Other conflicts of interest were more clearly defined. At one level, both the TEC and LDA were keen to espouse the importance of the groups being industry led. At another level, they were disappointed that for the printing firms involved this meant resisting attempts by the TEC and LDA to promote their own services and initiatives. The role of the employers association also proved somewhat problematic, and they were instrumental in the merger of the original TEC and LDA printing groups. Whilst it was suggested that any tensions between the BPIF and the LDA and TEC had largely been resolved with the merger, as the LDA co-ordinator noted:

'The major issue for print is still the relationship between the BPIF and the other bodies. They are very active and there is potentially some conflict between the BPIF and the Leeds printing initiative. I think this has been resolved to a certain extent, as we've managed to convince them that we're fighting the same battle. But the major conflict of interest is likely to come between the BPIF, as a training provider, and the printing college.'

Ironically, therefore, the recent developments by the college, and its objective of becoming more business led, may have heightened further longstanding tensions between itself and the BPIF. For while the BPIF had been highly critical of the college provision in the area, the response by, and relaunch of, the college meant it was now in direct competition with the BPIF over NVQs and other workplace training provision.

The preceding two chapters have examined the training infrastructure within the industry in terms of the national training framework and specific initiatives for skill upgrading taking place at the local labour market level. The next two chapters seek to move beyond this institutional perspective to explore in more detail actual developments within individual printing firms. In particular, what are the key factors prompting training investment within printing firms and what types of skills and training requirements are currently most in demand?

Chapter 5 : Management Strategy and Training Policy in Three Printing Firms

Thus far we have considered how patterns of skill formation in the printing industry are mediated by the industrial and institutional structure of the industry and specific 'local' labour market (LLM) and economic configurations. The next two chapters seek to adopt a more disaggregated level of analysis by looking more closely at the linkages between training provision and *enterprise restructuring* at the level of the workplace. This chapter presents a case study analysis of three Leeds based printing firms. The research was undertaken during 1994 and, therefore, the experiences of each company reflect the prevailing economic and relevant environmental conditions at the time. The aim is not to portray the case study evidence as reflecting a broader generalisable picture of HRM trends and training practices in the UK economy, but rather to document the experiences of three very different printing companies, and to unravel the issues that *drive* and *sustain* training practices and broader HRM initiatives at the respective workplaces. All three firms employ less than 200 employees and can therefore be classified as either small or medium sized enterprises.

Research suggests that a large degree of informality surrounds training practices in such firms: for example, it has been noted by Hendry (1991: 86:87) that smaller firms 'often have a clear sense of their competitive strengths within their particular niche and their need to secure adequate manpower'. Furthermore, Bacon *et al* (1996) point out that informality should not be conflated with either a lack of knowledge about 'best practice' HRM techniques or an unsophisticated management style. Indeed, Bacon *et al* suggest that a certain degree of informality (present in SMEs) may be highly congruent with particular HRM practices.

Research by Hendry (see Hendry, 1991; Pettigrew *et al,* 1989) suggests it is possible to distinguish between a set of variables that can trigger training (competitive environment) and those that sustain training (internal and external factors).

Accordingly, this chapter considers each firm in turn paying attention to four broad issues: the competitive environment; technological change; training activities and HRM initiatives; and the relationships with local labour market agencies and training providers. The final section of the chapter presents a comparative discussion of the emergent training practices and HRM strategies of the three companies.

5.1 Storey Evans: the print/packaging company

5.1.1 Company characteristics and the competitive environment.

Storey Evans is an independent, family controlled business founded in 1906 by the grandfather of the current managing director. The company originally specialised in general printing, but after the second world war started to take on a small amount of carton printing and an increasing amount of packaging print work. For many years it undertook packaging work alongside general printing, before a decision was made to specialise in packaging printing, particularly, cartons (75% of business) and self adhesive labels (25% of business).

At the time of the research, Storey Evans had a workforce of 195 employees, slightly down from a maximum reached a few years previous of 205 employees. This small reduction had been achieved through natural shrinkage, the company indicating that it has a no-redundancy policy. The workforce is male dominated with approximately 40 per cent classified as skilled and 60 per cent classified as semi-skilled. The 39 female employees are all located in the semi-skilled positions.

Although the company has a wide customer base, about 65% of its output is supplied to large pharmaceutical companies such as Smith-Kleine Beecham and Glaxo. The company also serves a number of other 'blue chip' concerns such as Ilford and McCormick and Cadbury's[1], and at the time of the research had just signed a major,

[1] Storey Evans had previously been named as McCormick's 'supplier of the year' (for the packaging of their Schwartz herbs and spices range), with a quality and performance described as 'close to perfect' (*Leeds in Print*, Spring/Summer 1993).

prestigious five year deal with the automotive products distributor Lucas. This success was based upon supplying their packaging requirements as part of a 'comakership' deal, a concept inspired by Japanese business practice whereby the supplier has long term stability whilst the customer benefits from agreed targets and continuous improvements in performance.

Such customers tend to export a fair amount of Storey Evans' products, but the company is not a direct exporter itself, instead serving predominantly local and national markets. The managing director felt that the competitive environment had become more intensive in recent years, with a shift of emphasis from *just* quality imperatives to quality *and* price imperatives. As the managing director (MD) elaborated :

'It is very intensive, we compete on everything. A few years ago you would have said it was mainly quality intensive, but now quality is assumed and it's service, price, competitive deals, contractual arrangements, all sorts of things. We are constantly audited and our performance is checked all the time, on all kinds of counts, and we are told what we are scoring and unless we remain at a very high level, on all counts, we would not keep our customers'.

This re-emphasis by customers to both quality and price, and the increased auditing and presence of customer representatives, observing production processes and product quality, on the shopfloor has had clear ramifications for the company's investment policy. In terms of technical innovation, the rapidly changing nature of the industry has meant that investment in new technology has become essential to keep up with competitors and to retain customers. As the MD put it, '[O]ne does not innovate for the sake of it, but the fact is it's a very fast changing and capital intensive industry and, you know, to use a jargon phrase, unless your kit is right you'll fall behind'. This combination of market imperatives and the related investment requirements in new technology have necessitated, according to the MD, a need to be constantly prepared to 'change, educate and train'.

5.1.2 Company policy towards new technology.

As noted, for Storey Evans, investment in new technology is essential to keep up with its competitors in a rapidly changing industry. All the current technology in the factory has been introduced within the couple of years prior to the research, with an increased proportion of the various printing and packaging processes now controlled by computer systems. For example, the drawing out of carton shapes by hand, the cutting of dye shapes and platemaking are now all computer controlled, with the actual printing presses also increasingly subject to additional computerised refinements. The prime imperative underpinning all the technological developments is increased certainty and consistency in production. As the MD remarked:

'The basic aim of all the new equipment is the reducing of down time, so that machines are running more and making ready less, ... , you make money out of running rather than getting ready to run'.

In printing, the make ready stage has traditionally been a time consuming process reliant upon highly skilled workers. On a litho printing press, for example, getting the right colour mix on a particular job requires constant adjustments and refinements to each individual colour before the run on the press is approved as productive work[2]. As far as Storey Evans is concerned, therefore, the more automation the better; furthermore, it was recognised that this had implications for both manning levels and skill requirements.

Essentially, advances in automated controls and the changing economic and political climate has allowed the company increased flexibility in the management of its labour process. For the MD, technological change and the current competitive climate meant that traditional union dictated manning levels were no longer acceptable, with 'less

[2] The production manager claimed that it could take up to 3/4 of an hour to get each colour right on a litho machine producing six colour work. The make ready stage will thus be costly, not only in terms of unproductive labour but also in terms of spoilt work.

people needed to do a great deal more work'. The implications for skill levels appeared less clear cut. Automated control panels, according to the MD, have had a deskilling effect on traditional technical skills, which, accompanied by the concomitant reduction in manning levels, had major ramifications for the shopfloor division of labour:

'And you can have systems whereby for example the old divisions of labour between skilled and semi-skilled will breakdown and everybody will do everything, everybody will be paid a higher rate accordingly but it is quite an efficient way of running things. So there are great advances taking place in the breakdown of this division of those who can never rise above the semi-skilled and those who have been through the mill and counted themselves as skilled, this is all to the good really in the industry...'.

How such possibilities have been addressed in the company's human resource management strategy and training policy will be explored more fully in the next section; however, it should be stressed that any changes in working practices were less radical that the above statement suggests. Certainly, it is doubtful whether there has been any move towards a *technological* levelling of skills within the factory. Whilst automation has had a deskilling effect technically the higher quality expectations of the company's customers has placed a premium on traditional printing knowledge.

5.1.3 Human resource management strategies and training policy.

Storey Evans has no specialised personnel manager. Training decisions have, therefore, usually been formulated unilaterally by the MD with subsequent approval from the three other company directors[3]. In this respect, the MD openly conceded that the company had historically taken a relatively unstructured approach towards its training investment policy. A modest training budget of £15,000 was factored into the overall business strategy but this would always be exceeded in practice[4]. Similarly, little consideration was given to appraising the costs and benefits of any training investments undertaken. It appeared, however, that a more structured approach would become an increasing 'obligation' in the future, partly due to increased levels of training

[3] These are directors of sales, finance and production.
[4] Company turnover was just under £10 million.

investment but also because of a commitment to pursue, over the next couple of years, Investors in People accreditation.

Problems of labour supply are not an issue for the company at present. Whilst this is a reflection of a period of natural labour force shrinkage rather than real recruitment difficulties, the location of the company on the outskirts of Leeds is also considered advantageous. Situated in an 'old industrial site', considered a 'good catchment area for labour', according to senior management the company has a reputation in the locality as a 'good, caring employer who pay good wages, particularly among the semi-skilled grades'. Indeed, for the MD, semi-skilled employees 'probably get paid too much' relative to skilled rates due to 'union negotiations over many years', nonetheless, he conceded that the existence of larger local competitors (eg. Waddingtons cartons) means the company cannot be seen to be a 'low payer'. Vacancies are filled wherever possible internally, although this is less the product of a formally structured internal labour market and more of an unstructured, ad-hoc approach. As the MD explained, 'if a vacancy arises of some interest, we would open it up to people and just see who comes forward and then choose if we think there is someone capable of doing it'.

The main focus of recent training activity in Storey Evans has been primarily directed at a 'management for change' programme, which has basically entailed upgrading its supervisory staff to take on more of a 'team leader' type role. It is an expectation that team leaders will have more authority and autonomy than the previous supervisory roles, taking on increased disciplinary authority as well as a small amount of budgetary authority. The central task of the team leaders, however, will be to 'motivate and lead a group of people and to get better performance out of them'. In this regard, the 'management for change' programme has certain 'cultural' expectations. Furthermore, in principle, it also affords an opportunity for the company to adopt a more structured approach towards the identification of training needs and delivery of training provision.

As the MD elaborated, 'we will expect team leaders to come forward and say "look we think such and such an area needs some work", then we will act on it'.

Whilst the company recognise that an effective, structured approach to training would probably need to be underpinned by a plant wide appraisal system there were no plans at the time of the research to move in this direction. Rather, Storey Evans is likely to retain a pragmatic approach to its long term and short term training requirements. With regard to its longer term skill requirements, the management team tend to pinpoint one or two people who they think could, and should, take on a more responsible role and they are gradually developed. Shorter term skill requirements are more likely to arise in relation to labour performance problems on certain machinery or within certain teams or departments. It is this scenario which the company would expect the team leaders to identify and then resolve on a 'short term, fairly rapid basis'.

Aside from the 'management for change' programme, the company had no other major training initiatives taking place in the factory, although the company had stated, as a matter of policy, a commitment to take on board NVQs as soon as they were available in the industry. Overall, for the majority of workers the training they receive will depend upon their position in the shopfloor division of labour and will be restricted to the skills deemed necessary for the particular job. Skilled workers would, therefore, be apprentice trained, whilst those in semi-skilled positions would have had a few days initial, on-the-job training. Although the company had not taken on any new apprentices for a couple of years, such trainees would follow the module system set out in the national training agreement and attend a block release course at Leeds College of Technology. The MD was, however, scathing about the quality of education such trainees would receive at the college, arguing that

'...the level of training that people are getting, it's rather rudimentary. I sometimes suspect that it does not compare with the best of continental Europe'.

'The traineeship now is very short indeed, it's only 2 years. What you can say with certainty is that just because somebody has been to (the college) over 2 years it's not going to make them a printer, they are going to have to go through quite a long period of further learning to get up to the company's standards'.

So, as a consequence of the allegedly poor quality of provision at the college, a large amount of training is undertaken in-house.

The company uses a variety of approaches for the actual conduct of on-the-job training. Again, one of the responsibilities of the team leaders is to identify any particular skill deficiencies people may have and then attempt to make up those deficiencies. This would either involve training people up themselves or asking a machine manufacturer to come on site to run a short training session. In this respect, the company periodically holds 'Saturday training sessions' where a specialist from a machine manufacturer would spend time 'stripping' a machine down or explaining in detail the ideal way to run particular work routines. Storey Evans also rely to a certain extent on operatives training themselves through cross-fertilisation of knowledge: as the MD explained, 'we will switch people around so that the less skilled people are with more skilled people, so that they can learn through hands on watching, and that is probably as good a way as any'.

Any further training activities would be individually initiated, and the MD suggested that management is prepared to consider any requests for further training or development. For example, the company is currently in the process of training a warehouse employee to become a printer. Nevertheless, the extent of such training is limited, dependent solely upon the company's business needs and skill requirements in particular areas. Even though the company attempts wherever possible to fill job vacancies internally, it is clear that promotional advancement within the company is limited. Indeed, the production manager admitted that for the majority of shopfloor

workers (whether printers, gluers or cutters etc) progress beyond their current position is not an option, the only available route for advancement in such cases would be to find an elevated position at another company.

It also appears that the role of the team leaders does not underpin or augment any broader changes in working practices based around teamworking. In other words, whilst certain areas of authority have been devolved to the team leaders, the organisation of work remains essentially unchanged. In this context, each team usually corresponds to a shift which each team leader is expected to manage as a resource unit. There is no expectation that team members should rotate between jobs, although the MD acknowledged that the company would want to be in a position where a degree of *exchangeability* was possible. Taking the printing section as an example, the MD identified no surfeit of skills as such and pointed out that you could identify about a third of the group who needed to improve their skills. The ideal situation for Storey Evans would thus be where:

'..any printer could operate any of the printing presses that you have, you would want that exchangeability, to train people up so they can fill in the gaps, primarily, when there are sickness or holiday problems'.

5.1.4 Relationships with local agencies and training providers.

The company has strong links with the Leeds Training and Enterprise Council. The MD was involved with the TECs printing advisory group and the Leeds printing initiative, and the 'management for change' programme had been run as a management development initiative in conjunction with the TEC. The MD was rather sceptical, however, about the potential of the printing groups fostering increased co-operation between printing companies in the locality. Crucially, the nature of many printing firms seems to militate against the development of strategic training initiatives for the industry. The problem was clearly articulated by the MD:

'Printers are not very good as an industry at thinking strategically. There is a huge

amount of technical change going on, enormous changes in the market place, enormous programmes of supplier reduction, there are fewer and fewer people getting larger and larger chunks of work, and it is only going to the very best companies. Yet there are an awful lot of smaller printing companies for whom an organisation like the TEC are just an irritation really'.

In terms of local training courses, as the previous section noted, Storey Evans regarded the level of provision offered by the printing college as inadequate. It was recognised that the dearth of 'good quality' technical training courses locally could be an impediment to skills upgrading within the company. As far as Storey Evans is concerned, it is willing to send any bright and competent employee who had proved themselves on further training courses, yet it was not clear what the individual (or the company) would benefit from being sent to the technical college in those circumstances.

5.1.5 Summary.

Storey Evans appears to be in the process of adopting a range of HRM type techniques. Central here has been the 'management for change' programme aimed at training a cadre of line managers so that they could develop a team leader role. It is anticipated that the team leaders will, in the future, allow the company to pursue a more strategic approach to the management of its human resources, principally through their perceived ability to identify the future skill needs of the organisation and training needs of employees. The company has also been able to maintain a commitment to a policy of no compulsory redundancies and, in this respect, has trained a number of employees into alternative positions. Yet this policy was relatively fragile and, according to the MD, would be revoked in the case of severe economic difficulties.

The key point to emerge from the case study is the identification of two main drivers with regard to changing working practices and training investment. Firstly, the needs of the customer are paramount. Thus in order to be meet the price and quality expectations of customers, investments in new technology are essential. New technology

necessitates, in turn, a certain degree of training. In practice, however, this tends to be fairly low level familiarisation type training. Indeed, part of the team leaders' job description involves identifying the *existing* skills shortfall in the workforce with regard new technology -suggesting more of a reactive, responsive role for the team leaders rather than a proactive role based around the longer term development of the company's human resources. The second key driver is the prime decision making role of the managing director/owner with regard to investments in technical and human capital. Whilst the MD tends to conceptualise training policy and practices purely in terms of the company's existing production imperatives, his major role on the local printing groups may shape an alternative longer term, and strategic, training response. Indeed, the company's espoused commitment to pursue IiP accreditation was, in part, prompted by the MDs formal position on the printing advisory group, and subsequently the Leeds print initiative. The achievement of IiP status will require the introduction of more formal administrative structures and coherent policies towards training and development.

5.2 Gilchrist Brothers: the graphic reproduction house

5.2.1 Company characteristics and the competitive environment.

Gilchrist Brothers was set up as an independent private company in 1896, but is now owned by a major multi-national conglomeration. However, the company retains discretion over the management of its human resources and the development of its training policy. The company has approximately 90 employees, with all the 55 production employees classified as skilled (of whom just 3 are women)[5].

The company specialises in graphic reproduction and, in that respect, still regards itself

[5] In terms of an occupational breakdown, there are 20 people in sales, 7 clerical staff and 55 in production, with 4 directors and 15 managers (some of whom would also be included in the sales, clerical and production figures).

as one of the largest companies of its type in the UK[6]. Gilchrist Brothers serve two main product markets: design work for large supermarket chains and food manufacturers; and A4 magazine formats. With regard to the former, the company tries to hold onto two or three products per customer with designs that constantly require small alterations - a good example would be the 10% extra or 10p off flashes added to the packaging of a particular product. With regard to the latter, the company situates itself at the quality end of the magazine market and claims not to compete on price, as the financial director (FD) elaborated '(E)veryone of our customers says that they can get it done cheaper elsewhere -fine - but what they are getting from us is a level of service and support that none of our rivals can really..., they pay lip service to it, but when things get difficult they will bale out''

Thus, for Gilchrist Brothers, competitive advantage lies not just in the quality of the product but in the level of support and after-sales service provided by the company. Yet, this is an area which is becoming increasingly competitive, and the company claims it is often difficult to match the level of service that can be offered by the very small companies who tend to concentrate on one job at a time providing a 'complete project management service'. As the FD noted, Gilchrist's work is often regarded as more consistent and reliable that their competitors:

'Quality is expected, and consistency is probably of equal ranking to quality. But where I think we have got an edge is that what we produce prints well and prints without heartache. A lot of other people produce stuff, and it may look beautiful, but it doesn't print properly and the printers have to go through all sorts of problems to get the job right'.

Nevertheless, the company's output has been affected by the nature of technical change in the industry and the recessionary conditions of the economy in the early to mid-1990s, with output falling by about 20% between 1990 and 1994. Gilchrist Brothers

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6 It is very rare for graphic reproduction houses to employ over 50 employees. The company claimed there were only about 3 other specialised repro-houses of a comparable size in the UK.

responded to this drastic fall in turnover with two redundancy programmes. The first, conducted in 1991, reduced the workforce from 180 to 120, with a second round in 1994 cutting the workforce from 120 to 90. As noted above, all the remaining 55 production employees are classified as skilled since the semi-skilled assistant grades were eliminated following the second round of redundancies. It is clear from these measures that the decline in the labour force has been dis-proportionately higher than the decline in output.

5.2.2 Company policy towards new technology.

As far as Gilchrist Brothers is concerned, the advent of digital electronics has had a significant impact on the industry. More specifically, the move away from conventional hand based work to computer system based work is regarded as a major explanatory variable affecting labour requirements in the industry. The FD argued that two broad trends for printing companies could be discerned against this backdrop of technical change. Firstly, there are those companies that are divesting any repro work they might have undertaken internally, either through selling off or closing the operation, and instead purchasing such work on the open market. Secondly, the reduced labour requirements and increased sophistication of much of the technology is prompting other printers to bring all their repro requirements in-house. Whichever strategy is pursued will largely be dependent upon the nature of the business of each printer, but, as the FD suggested, complex areas of work are more likely to be the province of specialised graphic reproduction houses, such as Gilchrist Brothers, or for the few very large printing companies that can undertake such work internally.

Even though Gilchrist Brothers is thought of internally as a specialist reproduction house, the nature of new computer technology has made it far more common for customers to 'design and set up' part of the job themselves which they then pass on to Gilchrist Brothers for completion. Such an approach has proved problematic however.

As the FD explained,

'The advent of desktop publishing means more and more people want to do some of it themselves. They tend to give you the ubiquitous disk, which usually contains...well at least one mystery. It may be usable, it may be great, but a lot of the time it is completely unusable'.

Initially, Gilchrist Brothers attempted to overcome this problem by advising and, in some cases, training its clients on how to set up particular types of jobs. For the FD, such advice was tantamount to 'giving away our professional expertise', so the service was curtailed and two employees now 'screen' incoming disks and evaluate whether the company can use them or not. Ultimately, it appears that many of the problems stem from customers attempting to do too much themselves, without thinking through the consequences this may have for the actual printing of the job. For Gilchrist Brothers, the basic yardstick seems to be that pre-loading text onto a disk can be beneficial whilst the scanning of pictures is less so, since the sophistication of the scanning equipment used allows far more refinements and adjustments to be made and ensures the job will actually print off at a high quality level.

Computerised technology has also affected the delivery expectations of customers. As the FD explained:

'Everybody wants everything yesterday. They seem to be under the impression that, yes, just because you can drag something about and click it on your Apple Mac and have done it in half an hour that a business this size operates like that. They seem to think that the instant it lands on your letterbox it's going to go on the system and everything else is dropped'.

Not only do such expectations assume that Gilchrist Brothers only take on one job at a time, they can also have implications for the quality of work. Whilst many customers demand a job to be turned-around in just 24 hours, this margin is considered too narrow as '24 hours is where mistakes get made'. The company, therefore, endeavours to limit the minimum turnaround time to 48 hours. This is not just a matter of creating more

time to fit each job into the company's production schedule, it is also a recognition that, despite the increasing potential of new technology, in many instances the finessing of a particular job still relies on human judgement and expertise. More specifically, in order to ensure and examine the correct colour alignment, the job has to be output to film, any subsequent fine-tuning by the operator will significantly affect the quality of the plates made for printing but, crucially, will not be visible on the computer screen.

5.2.3. Human resource management strategies and training policy.

Gilchrist Brothers has no designated personnel/human resource manager. The financial director is responsible for all major decisions regarding the company's human resources. Similarly, the company has no formal written training plan or training policy and no dedicated annual training budget. Nevertheless, the FD claims the company is committed to training, even though this is not incorporated in a formal, written training policy or plan, regarding such an investment as an 'on-going project'. In this respect, the research suggests that training activity in the company in recent years has been extensive and, to a certain degree, has underpinned and accompanied broader human resource management initiatives.

Production activities and the organisation of work have been restructured to accommodate a team-working approach and, according to the FD, multi-skilling is pervasive. Furthermore, the company also professes to have experimented with employee involvement schemes, although this does not appear to have cut very deep or proved long lasting. Initially, a range of workplace committees were introduced to cover specific concerns, but, according to the FD and the union representative, they generated little interest on the shopfloor, lost their impetus and thus stopped functioning. The one remaining group, the finance steering committee, originally involved management presentations on sales and possible, forthcoming contracts, unfortunately, some of the information leaked out to rival companies so the company

now use the forum to inform employees after the event. These investments in the company's human resources do not correspond, therefore, with the more benign, 'developmental humanism' prescribed by advocates of soft HRM (see Legge, 1995a). With regard training investments, decisions are primarily determined by immediate production and business imperatives. In the case of Gilchrist Brothers this has largely been driven by technical change and, perhaps more importantly, the aftermath of the large scale redundancy programme.

Most of the company's recent training activity has been targeted towards the production areas. With computer technology rendering some skills moribund whilst elevating others, Gilchrist Brothers claim continuous investment in training is a necessity to retain its competitive position in the market. Most of this training is undertaken internally and, according to the FD, represents a major cost for the company:

'If we take last year....there was a period of some 4 months or so when we probably had 20% of our workforce on full-time training. This represents a huge drain on your productive capacity, a significant cost because you are paying out wages, and probably overtime in other areas, you can't buy it in'.

With computer software being almost continuously upgraded the built in obsolescence of any investment in new technology is about two years. It is, therefore, imperative that operators are kept up-to-date with the software. Furthermore, the rapid changes in software almost precludes the position of having operatives skilled in just one area, thus management claimed to have made major strides towards multi-skilling. All the system operatives can now operate several pieces of new equipment as well as being craft trained in the conventional methods so they 'can step back and think things though'. In such circumstances any training that takes place will be initially undertaken by the manufacturer and then imparted more broadly by an employee who learns how to master the machine. Any potential conflicts that could surface over information disclosure are, according to the FD and confirmed by the shop steward, ameliorated by

the emphasis on multi-skilling.

Operating on the basis of multi-skilling has also appeared to have brought the principle of team-working to the fore. Whilst management readily concedes that, to a certain extent, employees have always worked in teams, the increased emphasis on multi-skilling is claimed to have broken with previously long standing demarcations and departmentalised concerns. As the FD elaborated:

'Previously, it was more departmentalised, for example, that's a flexo team, that's a litho team. That no longer exists. Yes, some guys (sic) may be more experienced at flexo but you'll all do it. You can't run a business with some working all the time and others sitting down doing nothing. So the multi-skilling is a practical day to day thing, people who can help out and assist others get on with the work. People need to work in teams'.

Nevertheless, the company recognised that there may be limits to the flexibility afforded by a multi-skilling approach. Indeed, the FD noted that perhaps in a number of areas the company had drifted too far towards a 'flexible multi-skilling approach', the corollary of which had been an overall reduction in expertise and quality of products. Thus, having established a multi-disciplinary way of working the company is currently considering ways of 're-instilling teams with certain areas of expertise'.

The recent retrenchment of the workforce has meant that recruitment has not been a major concern, although the company claims it is always interested in individuals who possess particular skills that are 'rare'. Difficulties have surfaced, however, in the recruitment of sales people, an area that the FD regards as a particularly important part of the company's business. For recruitment purposes, three requirements are essential for such staff: that they have a good working knowledge of the market; a personality that fits with the company; and a long-term commitment to the company. In order to ensure a greater degree of certainty with regard to the latter two points, Gilchrist Brothers embarked on an internal training programme -taking employees from

production to sales- rather than recruiting from the external labour market. Such workers would, of course, be well acquainted with the products, process and policy of the company, so they were then sent on a number of sales skills training courses to 'basically groom them into a sales mould'. Further training at the workplace was undertaken by an external trainer and the sales director.

Historically, the company recruited around five apprentices per year but this commitment has lapsed against the backdrop of an increasingly harsh economic environment and the recent cut-backs in the workforce. As the shop steward noted, the last cohort of trainees were taken on five years ago. Basically, as the FD pointed out, the recent surplus of labour in the market place was preventing any longer term training investments by companies, despite a recognition in some cases that this may prove damaging in the future:

'There is a surplus of labour in the marketplace, therefore, people haven't trained. We are going to pay the penalty for that like everybody else no doubt. It's going to come...in five or ten years time'.

This breakdown in the apprenticeship intake was, however, regretted by both the union and management as it was claimed that the company had something of a reputation in the local labour market for training good quality apprentices. In the past, each intake of apprentices took place with the full consultation of the union, the apprentices all undertook block release courses at the print college and the company employed a craftsman whose sole responsibility was to train and supervise the apprentices. Given this reputation, the company frequently had its trained employees poached by local rivals. This was not, however, cited as a major factor affecting the neglect of the traineeships in recent years: it was the competitive environment facing the company at the time of the research. Nevertheless, it appears unlikely that normal service will resume with more favourable economic conditions. Changes in technology and the

concomitant methods of working, the FD suggested, would require the company to take on and utilise trainees more in line with the direct production needs of the business. The intakes would be less, external training would be on a more sporadic 'needs must' basis, and there would be no dedicated craftsman with responsibility for training.

Despite a professed interest in training and quality issues the company's senior management are opposed to the increased emphasis nationally on accreditation initiatives. Both Investors in People (IiP) and the BS5750 accreditation procedures have been started and then rejected. The FD was a particularly virulent critic of such processes, arguing that they were overly bureaucratic offering little tangible gain to the company:

'The ideas are great (IiP), the practicalities of how it's going to be implemented almost defy belief. It's like NVQ, how many firms have got a significant number, not just one or two, people doing NVQs? How many firms will put significant numbers through IiP. It's big money and it's nebulous what we get at the end. In this industry I don't think it will make much difference. As far as the men downstairs are concerned it makes no impact'.

A consultant from Leeds TEC was invited to visit the company and talk to employees about IiP and quality improvements, but the company decided not to go any further with the process. Similarly, with BS5750 Gilchrist Brothers considered the heavy administration burden required for accreditation deleterious and instead have set up their own 'internal system doing it electronically rather than on mountains of paper'.

5.2.4 Relationships with local agencies and training providers.

The FD represented the company on the original LDA printing industries group, but has played no role in the new Leeds printing initiative. This non-participation is primarily due to what the company regarded as the relatively insular nature of many printing companies. As in the previous case study, the FD saw little potential for the printing groups fostering increased co-operation between printing companies in the locality. It

appears that at an early meeting of the LDA group a suggestion was made regarding cross company visits with regard to training, a proposal which elicited incredulity among the majority of printing company representatives present. Such attitudes, it seems, are strongly influenced by the family orientation of many companies who were resistant to outside agencies advising them on ways to adopt new training policies and company strategies. The implication, for the FD, was that many companies would be adopting new technology without clearly evaluating the potential of the equipment or the skills required to utilise its full potential.

5.2.5 Summary.

In response to adverse economic conditions and an environment of rapid technological progress, the company undertook a major cost reduction programme. Hence, despite a fall in the company's output of approximately 20% between 1990 and 1994 there was a corresponding reduction of the workforce by 50%. This major retrenchment in labour capacity, accompanied by the increased sophistication in new computerised technology, has led to a number of changes in working practices. The central feature of which is increased labour flexibility through teamworking, multi-skilling and new working time arrangements[7]. While an obvious outcome of this process of restructuring has been an intensification of work, the shop steward pointed out that the remaining employees had also achieved a number of favourable gains in terms of job grading, earnings and discretionary control over their work.

It is also clear that the demands placed upon employees' deployment of skills have risen, although it is debatable whether this actually constitutes multi-skilling since much of the training effort has centred on equipping the remaining workforce with the skills of the displaced employees. Nevertheless, it is apparent that the constant process of change in computer software has necessitated an on-going commitment to training

[7] The new equipment in the factory is worked on a double-day shift or 3 shift system compared to conventional work which was restricted to a single day shift.

provision, and when talking about the need to keep ahead of customers requirements the FD did allude to a certain level of investment in 'redundant' human capacities[8]. The level of training activity in the company was also geared towards underpinning broader initiatives such as team working and there was some evidence of other HRM type initiatives such as employee involvement schemes. Yet, there was no long term coherency or strategy shaping such practices, beyond the base response to technical and business necessity, and the FD was antipathetic towards the more formalised structures that IiP and BS5750 would impose.

5.3 Technoprint: the small general printing company

5.3.1 Company characteristics and the competitive environment.

Technoprint is a general printing company formed in 1984 as a one man business. In 1991, the company bought the assets of a failed four colour printing company and moved into its premises for a year until the lease ran out when a freehold site was purchased on the outskirts of the city centre. The company currently has just seven employees, of which four are skilled craftsmen. Company turnover at the time of the research was approximately £300,000.

The company serves two main markets. The first is the education sector, and particularly work for student unions in the London area. The company originally entered this market by capitalising on the price differentials that existed between Yorkshire and London[9]. Even though this differential was eroded during the recession -with the south east more severely affected than Leeds- the company has maintained most of its customers. Second, the printing of leaflets and programmes for the theatrical and leisure services industries. Overall, the company has managed to establish a core of customers who they have supplied for a number of years.

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[8] Redundant capacities are taken by Streeck (1989, 1992) to denote an investment in skills whose future needs are essentialy unforseen.

[9] The large number of printing companies in Leeds means that materials can be acquired relatively cheaply along with certain equipment, plus rent and labour costs are lower than in the capital.

As far as the managing director (MD) is concerned, the company's business policy is relatively simple and clear cut. By keeping overhead costs to a minimum and by not employing salespeople the prices quoted by the company will be very competitive; this, accompanied by good quality work, is aimed at 'locking in loyal, credit worthy customers' thereby ensuring a frequent supply of work. Thus, by eschewing an approach based around quoting for a large number of jobs with a higher turnover of customers, Technoprint is able to secure a certain amount of stability and certainty for future business planning and growth.

5.3.2 Company policy towards new technology.

As a general printer the company undertakes various aspects of print work and is able to take on, in-house, most of the print processes common to jobbing print work. This includes reprographic work, litho printing and a variety of finishing work (including book and magazine binding). Technoprint, therefore, has a wide range of pre-press, press and finishing equipment.

In order to keep up with technological developments, the MD attends a number of exhibitions to get an over-view of current changes in the market. He will then 'trailblaze the equipment at a fairly low level' to ascertain its potential for the business before introducing it into the factory. At the time of the research, the only service that the company had to buy in from local specialists was new technology colour scanning (ie. graphic reproduction work). The MD was, therefore, planning to implement such equipment in the near future in order to bring such work in-house.

5.3.3 Human resource management strategies and training policy.

Taken at face value the very small size of the company would seem to militate against coherent, sophisticated HRM policies and, indeed, a large degree of informality seems to underpin both the company's training and working practices. Yet, this is not to

gainsay the important driving force of the MD in this area. As this section will demonstrate, the company has a reasonably clear 'skill supply' strategy (Knell, 1996). Furthermore, as we will discuss in the next section, the MD has been an outspoken critic of the role of educational providers and economic support agencies in the industry locally.

In the early days of the business, recruitment was a major difficulty for the company and the turnover of staff was high. According to the MD, this was influenced mainly by the need to find the right personality to fit the company[10]. A selection criteria which, although remaining important, has diminished slightly as the company has increased in size. The recruitment pattern that has subsequently evolved focuses on taking in recruits who have been educated to 'A' level standard and then training them over a two year period at the workplace. Only one of the shopfloor workers has previous experience of the printing industry having trained as a print finisher in a fairly major Leeds company. The MD has sought to develop this employee's previous print experience by giving him 'free reign to run the machine room and to learn, run and manage the printing processes'.

The philosophy underpinning the company's recruitment policy is clear cut, with an overarching emphasis on level of remuneration and employee commitment. Essentially, the wage expectations of a 17/18 year old new recruit are far lower than, for example, somebody older with previous experience of the industry or with a university degree. Yet it is likely that the level of workplace training necessary for the 'A' level intake would be the same as any older cohort. The salient feature of the shopfloor is thus summed up by the MD :

The shopfloor people are all young, the oldest is 21. And this creates a situation where

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[10] Basically, with only a few people in the company it would be essential for any new recruit to 'fit in and get along with the existing staff', representing perhaps an extreme example of the 'good bloke syndrome' (Oliver and Turnton, 1984).

we've got a very young, keen, ambitious workforce who are all fairly well up the ladder intellectually, they're all 'A' level people, and they all work together well. You know, the ambition that you find in younger people is helping us to drive the company and achieve our objectives'.

The MD openly characterised the company's skill supply strategy as a low wage policy, but rejected any notion that this corresponds with a cheap training strategy. Arguing that any comprehensive period of workplace training can prove costly in terms of management support time, wasted raw materials and low productivity during the training period. Moreover, a low salary base allows the company to make fairly sizeable percentage increases in remuneration in line with improvements in competence. So, somewhat paradoxically, the low wage strategy is seem by the MD as a long term motivational aspect of the company's training policy.

As far as training activities are concerned, on-the-job training and informality predominate. Most training is undertaken by the MD, who learns how to use any new equipment during the purchasing and implementation stage and then passes it on. In this context, all the shopfloor employees have been trained to understand, although do not necessarily operate, all the printing processes in the factory, an emphasis driven by the need to liaise with and answer to customer demands. As the MD explained, '..they all speak to customers on the phone. Therefore, they need to explain what is happening to a particular job, where it is in the factory and if something has gone wrong why'. Technoprint also occasionally hold in-house training sessions where experienced engineers spend a couple of days at the company 'stripping down' specific machines and 'running through all the principles of how to set it up'.

The fact that none of the company's employees have attended any formally accredited courses at the printing college does not represent any fundamental opposition *per se* to external forms of training. Rather, as far as the MD is concerned, the major training problem facing Technoprint is finding any courses that are suitable for the needs of the

company. Indeed, as we shall elaborate in the next section, the MD has been a trenchant critic of local college provision for the industry.

Similarly, without being opposed in principle, the MD perceived both NVQs and IiP as offering little tangible benefit to the company. As far as NVQs are concerned, the framework for the printing industry is regarded as too compressed, with any advance beyond level 2, which signifies skill craft status, requiring a fairly significant amount of supervisory and management training. These are skills that are not currently required in such a small company. Likewise, the administrative burden of IiP is deemed too time consuming and expensive for the company to pursue in any committed way. The greatest concern for the MD, however, was the fact that such processes were 'inherently supply led' with little demand for either NVQs or IiP from the shopfloor.

5.3.4 Relationships with local agencies and training providers.

The MD has played a significant contribution to ongoing debates about training provision in the industry locally. Following a highly critical report he co-authored on the state of college provision in the area for the BPIF's regional training committee (BPIF, 1994), the MD was invited to join the TECs Printing Advisory Group. His major point of concern is an overemphasis on 'supply led' rather than 'demand led' initiatives. With reference to college provision, the focus on block release courses is considered inapplicable to all but a few major large firms. As the MD elaborated:

'Certainly, a company like Technoprint cannot consider block release, it is impossible and I think that applies to the majority of small firms. You can't hope to take somebody on, pay them and then not see them for twenty weeks. If you are a big company with 100 plus employees of course you can afford to take the longer term view, and you'll probably have the resources to do so....(A) small company can't hope to do something like that'.

Moreover, as far as the MD is concerned, this type of longer term training provision is encouraged by the funding criteria of Further Education colleges, whereby part-time

day release and evening courses attract only a third and a tenth respectively of the funding for a full-time equivalent. The corollary is that it is not in the college's interest to offer the type of training which the majority of the industry may demand. The MD has, therefore, felt unable to spare the time to send any employees on block release training courses and as result all training has had to be held in-house. The only exception has been a series of print evening courses organised by the GPMU (with TEC funding) which was attended by one of the company's employees. Even though Technoprint is a non-union firm, the MD was able to get a trainee onto the course due to his contacts with the TEC. Nevertheless, the union are praised for 'recognising and responding to what it perceives to be the needs of its members in terms of training, and pushing the college to accommodate such courses'.

Despite the cogency of these criticisms, the MD recognised that there could be danger in generating too much momentum against the Leeds printing college. The college authorities may decide to stop running any printing courses at all. Such a scenario would be deeply regretted, and the MD pointed out 'that whilst things are far from satisfactory I would be sorry to see that provision totally disappear'. Indeed, in many respects he was less critical of the technological provision at the college than other companies in the area, the main point of contention was the actual *form* of delivery rather than the *content* of delivery.

Notwithstanding his involvement with the Printing Advisory Group, the MD was equally scathing about the support offered to the industry by both the TEC and the LDA. Again, with regard to the TEC, the need for funding to link with recognised qualifications has led to Technoprint being refused several applications for grants to fund recent, small scale training activities. Similarly, the MD felt that none of the sectoral initiatives had anything tangible to offer the industry. In response to a recent visit by an LDA representative looking for ways Leeds City Council could help the

printing industry, the MD delivered the following epitaph

'They could fulfil its statutory obligations to the highest level of quality, in terms of education, infrastructure and social services and it can leave the industry to run itself as it has done perfectly satisfactorily for many years. Basically, we don't need the LDAs print group, it's just public money down the pan. I'd rather see a reduction in the rates bill and I would invest it in training more people'.

5.3.5 Summary.

Technoprint was by far the smallest of the three firms under investigation. And, reflecting this, informality predominates in both working practices and training provision, with all training undertaken on-the-job by either the MD or less often representatives from print manufacturers. There was also a reliance on trainees 'learning by doing' and the MD spoke enthusiastically about 'throwing them in at the deep end and letting them get on with it, as soon as they are able to produce productive work'. Despite this informality, the company has developed a reasonably coherent business policy and skill supply strategy, seeking to maintain a long term reliable client base rather than continuously estimating for new work. Similarly, there is a clear emphasis on a low wage recruitment policy, taking on 'A' level educated school leavers who are then trained on the job and motivated by increased wage increments in line with competence and performance improvements.

5.4 Discussion.

The three case studies are indicative of the variation that defines the industrial structure of the general print sector. They all operate in essentially different competitive markets and have large variations in the size of their workforces. Yet, at the same time, they all appear to be subject to similar economic and technological pressures. All the firms operate in intensely competitive markets and they have all had to invest substantially in new technology to maintain their market positions. Similarly, they have all played a role in the sector sub-groups administered by the Leeds TEC and Leeds Development

Agency and, in this respect, offer useful insights into the problems that may hamper the relative success of such local labour market initiatives.

As we noted in the introduction, it has been suggested by Bacon *et al* (1996: 98) that small to medium sized enterprises (SMEs) may represent an 'ideal site for the development of a HRM approach'. Firstly, they suggest that such companies have to engage in more flexible working practices; have narrower managerial spans of control, thus facilitating more direct channels of communication; and also greater economic insecurity necessitates a responsive approach to changing customer requirements. Secondly, and relatedly, the informality and organic nature of change in such organisations is likely to 'carry greater meaning' and authenticity. Drawing from survey and case study evidence of firms in Leicestershire,[11] their research suggests that certain HRM practices, particularly teamworking, flexibility and team briefing, are widespread in small firms (see similar findings by Duberley and Walley, 1995). They, therefore, reject any characterisation of SMEs as representing a hotbed of 'bleak-house' employment practices. This line of argument, it should be noted, is not entirely convincing. The acceptance or rejection of a 'bleak house' scenario, in this instance, is predicated on the *number* of legitimate HRM techniques identified at a particular workplace rather than the *material* conditions of the workforce employed. Nevertheless, the work of Bacon *et al* (1996) is useful in identifying the dynamics of change and the adoption of new management agendas in small firms, suggesting that the nature of ownership, the introduction of professional management standards and pressures from customers are all important factors shaping the up-take of HRM practices.

Duberly and Walley (1995) caution against a cause-effect linkage between increased levels of competition and the take-up of HRM initiatives, sensibly pointing out that

[11] Bacon *et al* (1996) differentiated their survey evidence into those companies that employed 15-24 employees and those than employed between 25 and 199 employees.

firms respond to changing environmental factors in different ways (ie. the response could be cost minimisation rather than a strategic HRM or skill upgrading approach). Hendry (1991: 79) errs along similar lines, suggesting that while 'competitive pressure is a necessary driving force' it is not sufficient in itself to promote a 'training response'. Instead, Hendry identifies the principal triggers for training activity as the way a company responds to competitive pressure in terms of technical change and product development. Furthermore, in order to sustain this initial training impetus a combination of other factors must also be present or addressed in order to embed training within a broader commitment to human resource development: such factors include: the availability of skills in the external labour market; internal labour market features; internal actors and systems (eg. management commitment, union pressure and involvement); and external support for training.

Are such variables relevant to the current case studies? The chapter concludes by exploring the implications for skill formation in terms of the various responses to increased competitive pressures. Have the companies augmented their initial training responses with other HRD initiatives? Has there been a notable trade union response? And have external economic agencies shaped the various training responses and practices of the case study firms?

5.4.1 Responses to environmental pressures.

Each of the companies has been subject to an environment of intense competitive pressure. Yet the nature of customer demand and the respective company responses have been varied. All three companies are now expected to meet their customer requirements of both quality and price, but Storey Evans has been pushed to follow a route whereby its production processes are underpinned by a total quality approach and BS5750 accreditation. It has also been expected to meet the specific industry standards of a number of its key customers, particularly those in the chemicals sector. The

ramifications for the company have been profound, enabling it to achieve a number of long term, dedicated supplier contracts with large 'blue-chip' organisations which affords the company a certain degree of market stability and certainty.

In contrast, Gilchrist has attempted to carve a market niche for itself through the after sales service and level of support it provides rather than through the quality of the product itself. Such an emphasis reflects the severe competitive environment under which the company now operates. Against the back-drop of economic recession and major technological advancements, which have increased the sophistication but reduced the price of equipment, the company has significantly reduced its operating costs and its labour force by 50%. Technoprint, while also having to meet quality expectations, is the only one of the companies to be primarily operating on a 'low-cost' basis. Its business strategy has thus concentrated on slow growth with low overhead costs (ie. a cheap, young labour force, no sales representatives).

Is it possible to discern from this any clear implications for the pattern of technological investment and training response? Certainly, all of the companies have invested in new equipment. For both Gilchrist and Storey Evans this was driven by the changing nature of the market, with the MD from Storey Evans remarking that 'unless the kit is right you will fall behind'. Similarly, at Gilchrist it was a fundamental business requirement to keep up with the constant advances in computerised systems and software. This investment, by its very nature, prompted a *basic* training response in each company. Typically, the equipment manufacturers provided some introductory training, with the requisite skills then imparted more broadly by 'key operators' (Raper *et al*, 1997). At Technoprint, the MD experimented with the applicability and potential of new equipment before passing on the relevant information to the workforce.

The de-skilling potential of new technology was clearly recognised, but it is unlikely to

have been the determining factor behind investment decisions. At Gilchrist, deteriorating economic conditions and the advent of digital electronics had led to a significant reduction in human resources, but, as a consequence, the skills of the remaining workforce increased in significance. As the MD noted, 'it is still craft based, still down to how much knowledge the man (sic) has between his head, and the skill really comes not in knowing what to do but how he uses his judgement....it is still at the eye of the beholder at the end of the day that we are at the mercy of'. A similar position pertained at Storey Evans, where reductions in staffing levels on machines were attributed more to the changing industrial relations environment than advances in technology *per se*, and whilst automated machine controls were recognised as having 'technically' deskilled elements of work the increased customer emphasis on quality placed a premium on traditional printing skills. In this regard, a key aspect of training activity in each case was focused on meeting any immediate skills 'gap' that had arisen with the introduction of new technology.

5.4.2 The policies and practices of training and HRD.

In line with previous research into the training practices of SMEs (Hendry *et al*, 1990; Hendry, 1991) all the case study firms adopted a 'targeted' approach to training provision rather than a systematic one. Despite paying lip service to the importance of a more developmental approach towards the management of their human resources, training in all cases appeared to constitute largely a pragmatic response to immediate organisational needs and short-term business goals. While Storey Evans suggested that a training needs evaluation scheme may be introduced at some time in the future, at the time of the research there was no evidence of formal appraisal processes and employee training plans were non-existent. None of the companies had a dedicated training plan or formal structures in place for appraising the costs and benefits of any training undertaken.

Nonetheless, each company responded in a reasonably rationalistic way to very specific technological triggers favourable to training (see Hendry, 1991: 97). Thus at Storey Evans, the training effort was focused on familiarisation training for the new technology introduced, building on the existing craft competencies of many of the skilled workers. At Gilchrist, the redundancy process led to an increase in the skills and tasks demanded of the remaining workers. The retraining effort was thus focused on covering those roles that had been displaced through a certain amount of cross-skilling. The important issue, however, is the extent to which the companies have put in place mechanisms that can *sustain* and *embed* the initial training effort that has taken place with regard to the changes in technology. The neglect of any formally identified long-term training strategies does not augur well. Yet, as many commentators have suggested (eg. Hendry, 1991; Procter *et al*, 1994; Mintzberg, 1978), a rationalistic planning perspective can be rather analytically restrictive, as the absence of a written, formal HRM plan does not in itself imply the lack of strategy. As Mintzberg (1978:935) notes, strategies may be realised that were never intended, evolving and *emerging* as a 'pattern in a stream of decisions', formed through consistency in decision sequences and practices over time. Of particular interest, here, is the various approaches taken by the companies towards recruitment, internal development and work organisation.

Due to the prevailing economic conditions at the time of the research, and in the case of Gilchrist the extensive programme of retrenchment that had taken place, recruitment was not a major issue for any of the companies. Indeed, for both Gilchrist and Storey Evans retraining activity appeared to be at the expense of any recruitment effort, although it is seems unlikely that this was prompted through differentiating between the cost of training as opposed to recruitment. Similarly, neither company was able to articulate a coherent approach to its recruitment actions, or possible areas where recruitment would concentrate. One exception was the decision by Gilchrist to

consciously distinguish between training existing staff into sales positions rather than recruiting from the external labour market. This was deemed a specific and suitable response at a particular time in the company's business cycle rather than being a long-term approach adopted by the company. In both companies the area of recruitment traditionally conforming to a longer term human resource planning approach -namely apprenticeships- had fallen into neglect. Neither company, therefore, had taken the opportunity to change and develop their recruitment practices to meet the longer term skill requirements created by the new technology which they were implementing. In contrast, the skills supply strategy at Technoprint was more tightly knitted to the company's business strategy. In relation to the company's plans for growth, the MD had a clear view of when to recruit and the necessary skills required -ie. 'A' level school leavers who could be trained up over a two year period. Of course, given the small size of the company the more coherent approach to recruitment is, perhaps, unsurprising.

There was evidence to suggest that the companies may be setting in place mechanisms that could frame future training provision within a broader HRD framework. Certainly, the move towards training up team leaders in Storey Evans was geared at devolving more HR issues to the line, and the identification of training needs would be a central part of this. Yet, this programme of management development did not seem to be underpinned by, or relate to, any broader changes in HR processes or work organisation. The introduction of appraisals to formally identify skill deficits and training needs appeared nothing more than a future possibility; and the teams themselves seemed to exist in name only rather than as (multi)-functional entities. Any training within the teams was thus directed at *cover* rather than multi-skilling or long term development. It is difficult to escape the conclusion that the team leaders in Storey Evans would basically perpetuate the company's *responsive* approach towards training provision.

In both Gilchrist and Technoprint teamworking seemed more entrenched and cross-skilling more pervasive. Unlike Storey Evans, however, neither company had dedicated and trained team leaders to identify the training requirements of the various teams. Indeed, at Gilchrist certain rigidities had crept into its flexible team approach, as the emphasis on broad but *narrow* skills had led to a neglect of specialised functionalisms. As Bacon *et al* (1996) argue, HRM initiatives such as teamworking often build on, or correspond to, the traditional informal ways of working in SMEs, the problem appears to lie in formalising such methods of working within a more coherent HRD approach.

In terms of the methods of (re)training, on-the-job training predominates. This primarily equated with a sitting-next-to-nellie approach, although it was also relatively common for the companies to use equipment suppliers to provide some initial training with any new technology implemented or to provide detailed demonstrations of how the machinery worked. There was little attention in the case study firms devoted to off-the-job training or forms of skills accreditation. In the case of Storey Evans and Technoprint this was articulated in terms of the poor provision of training at the local printing college. But for both Gilchrist and Technoprint there also seemed to be some antipathy towards forms of accreditation such as NVQs *per se.*

Moreover, both the management at Technoprint and Gilchrist were opposed to accreditation initiatives such as IiP, arguing that the process was far too bureaucratic and the award of little relevance to their respective companies. Storey Evans, by contrast had pledged a commitment to both achieving IiP status and to recognising NVQs. In many ways this was a surprise. Research into SMEs has suggested that those staffed with professional managers, who have previously worked in larger companies, tend to take a more systematic approach to training than those run by 'entrepreneurial' types. Yet in this instance the FD of Gilchrist, a professional manager who has wide experience of a number of industries and who lambasted the quality of management in

the printing industry, was the most virulent critic of initiatives like IiP and BS5750 whose *raison d'être* is to introduce a more systematic approach to companies training practices.

5.4.3 Trade unions and Industrial Relations.

Of the three companies, management at Gilchrist and Storey Evans recognise the GPMU and have in effect a *de-facto* closed shop, while Technoprint has no union representation. Where the union is recognised, management claim that the union has had little involvement in negotiating over issues around training and new working practices, with their main interest being directed towards pay. At Storey Evans, the MD argued this was because it had always had 'good' industrial relations and had always complied with the national unions pay demands, entering into negotiating procedures even though it regarded them as 'tedious'.

The large scale redundancies at Gilchrist had led to a more confrontational relationship with the GPMU, where the management was more inclined to be hostile towards the union, which the FD argued had 'a certain ostrich like attitude'. Nevertheless, the company have never broken a union agreement and consultation does take place with the FOC over any recruitment and training plans. The FD argued that this was undertaken as a common decency, noting that the 'union only really pay lip service to training as they do not offer any concessions to train'. Whilst confirming the consultation procedures, the FOC pointed out that the company undertake little formally, accredited training anyway and the nature of the on-the-job training means that 'union members are training other union members'.

Despite being a non-union company, the MD of Technoprint was the most charitable with regard to union efforts towards training. In the main this was because the union organised course at the local printing college was the only course deemed to have any

relevance to the company, but the MD also commended the union effort locally to train its unemployed members. The local branch official had also been 'jokingly' asked to try to recruit at Technoprint, an offer which was refused but which the MD asserted would have been fruitless anyhow as none of the workforce have an interest in joining the union.

5.4.4 Relationships with local agencies.

Senior management at all three companies have played a major role in the printing groups run by the LDA and Leeds TEC. Nevertheless, all have been critical of whether the initiatives have anything tangible to offer the industry, with the MD of Technoprint the most scathing, accusing the groups of essentially trying to 'dictate to the industry rather than listening to the needs of the industry'. It is not surprising that the company subsequently gave up its position on the group. Of the three, only the MD of Storey Evans retained an on-going commitment to the local sectoral initiatives, chairing the Leeds print initiative until its demise.

The following chapter explores more systematically some of concerns raised by this chapter, and considers in more detail the impact of skill formation strategies on the shopfloor division of labour.

Chapter 6: HRM, training and the shopfloor division of labour: a case study of a direct mail printing firm.

This chapter seeks to expand on a number of the themes emerging from the previous chapter through a detailed, case study investigation of a single print company. In this regard, the chapter will continue to develop an analysis that distinguishes between those factors that trigger and those that sustain investments in training and development. This picture will be developed, however, by situating training concerns within the broader context of changing working practices and work methods and the associated outcomes for the shopfloor division of labour.

The data for this chapter were gathered between August 1994 and January 1995 at a medium sized printing company called 'Mailprint'[1]. Empirically, the case study material was drawn from 20 semi-structured interviews with management, union representatives and shopfloor workers; a period of direct observation; and a workforce questionnaire. The latter involved the distribution of 200 questionnaires, covering both operatives and ATC staff, and generated 44 usable responses. In section 6.1 the context of the company is described with reference to the competitive environment, technological investment, company training policy and the company's relationship with local economic agencies and training providers. Employee attitudes towards, and experiences of, training at the company are documented in sections 6.2 and 6.3, initially through survey evidence, followed by an examination of different groups of shopfloor workers. Section 6.4 summarises the key findings of the case study.

6.1 Contextualising Mailprint.

6.1.1 Company characteristics and the competitive environment.

Mailprint is a private, family controlled company established in 1886 by the great grandfather of the current chief executive. The company started out as a commercial printers and stationers, until it started to encounter some demand for direct mail related

[1] Mailprint is a pseudonym.

print work in the mid 1970s. Identifying a potential gap in this market for a single product service combining print and direct-mail production, the company invested heavily in this area and by the mid 1980s had become dedicated direct-mail producers. In this respect, its current production capabilities encompass printing, envelope manufacture, data processing, laser printing, mailing, design and data-base management.

The company has a workforce of 300 employees, slightly down from a peak of 330 in 1986. The occupational breakdown of the workforce is presented in Table 6.1. Of the total workforce 96 are women, located primarily in administrative or unskilled positions. The 50 craftsmen employed by the company are, in contrast, all men.

Table 6.1: Occupational breakdown of employees at Mailprint. (numbers employed)

	Total	Male	Female
Managers and administrators	45	27	18
Professional occupations	1	1	
Technicians	5	5	
Supervisors	12	8	4
Clerical and secretarial	6		6
Sales occupations	10	7	3
Skilled craftsmen	50	50	
Semi-skilled/unskilled	167	92	75
Trainees/apprentices	4	4	

It was anticipated that the main growth markets for direct-mail would be mail order and direct marketing. As it turned out it was the financial services market that experienced the most explosive growth during the 1980s. Mailprint was well placed to take advantage of this, but, as a consequence, its mail order operations were closed in 1986 making 60 people redundant. Nevertheless, the growth in direct-mail for the financial services industry was such that there was virtually no pricing pressure on the company's products. With few other organisations offering a comparable service it was a time of significant growth, and the company's output increased year-on-year by an

average of 30-40% in real terms for five years.

By the late 1980s, however, competition started to intensify as other companies entered the market and the economic downturn started to take effect. According to the customer service director, as competition increased the market became increasingly fragmented:

'Our view of ourselves as total direct-mail producers is more or less a self contained view. The market splits in all sorts of directions, including anybody who cares to be an intermediary....basically, every printer who ever printed something that ended up in an envelope has become a direct-mail specialist over night. The computer bureaux have come into the production market place from the opposite end that we did, so you have 2 or 3 organisations who claim that they too offer the one stop shop service. Then you have countless thousands of printers, small mailing houses, computer bureaux, envelope manufacturers, middle men and advertising agencies'.

The changing competitive environment had a major impact on production, with lead times declining from an average of 6 weeks to 3 weeks. Similarly, price has become a major competitive issue, although the company claim that it has been cushioned from this slightly by its concentration on product differentiation and the delivery of an added value product. This, coupled with extensive investment in new technology, has enabled the company to operate in the top 20% of the market, producing products that other companies cannot directly replicate.

At the time of the research, therefore, the company was a dedicated supplier to the financial services industry, selling 95% of its output within the UK. As far as the customer service director was concerned, the emergence of a truly international direct-mail market was an unlikely prospect:

'Until you get an awful long way down a Federal Europe road, there will be no international market. I'm not sure there ever will be. If a major insurer or a major bank owns or operates subsidiaries in other countries I suspect that they would still find it more effective to trade in the name of the subsidiary rather than set up an international brand'.

In this respect, whilst the company sell 5% of its products on the European market, it is produced directly by a small subsidiary, employing just 12 people, based in Paris.

6.1.2 Plant, machinery and the production process.

As noted, the change of product market specialisation prompted a period of rapid growth for the company. This was accompanied by a widespread programme of investment in new technology across all stages of the printing process. The company's operations were housed, however, in a number of geographically close, but separate production facilities, each of which was recognised as a distinct business with its own specific management structures and working practices. With the shift in focus throughout the 1980s to dedicated direct-mail providers, operating from split-sites proved increasingly problematic. As the production manager explained:

'Of the various buildings, the two main production sites were located on opposite sides of a busy main road. It was commonplace for jobs to get lost or spoilt moving from one side of the road to the other. Similarly, operators would tell you they were nipping across the road to check up on a job and disappear for the rest of the day'.

In order to overcome these disruptions to production, as well as to house further investments in new technology, the company relocated its entire operation to a new greenfield site just outside Leeds city centre in February 1992. According to a profile on Mailprint in the local industry news-sheet *Leeds in Print,* 'the £6.8 million development was carefully planned to ensure minimum disruption to employees, and won an architectural award'.

The new factory integrates all stages of the direct-mail production process, including origination, printing, folding and enclosing. A range of new equipment was also introduced at the new site, significantly enhancing the company's production capacity. The largest investment in this regard was a £2 million web press, capable of producing three times the output of the company's extant sheet-fed printing presses, although it

operates on exactly the same lithographic printing principles and has a similar computerised instruction panel[2]. To complement this investment, the company also introduced three electropress machines. These machines, which at the time of the research were the only three in England, allow the company to add specialised personalisation formats, drawn from comprehensive computer databases, to the printed documents coming off the web press. In contrast to the web and sheet-fed presses, the electropress operates via reel fed laser printing rather than lithography[3]. Taken together, the company's management assert that these investments significantly enhance its competitive position. As the customer services manager explained:

'We are now the only direct mail production company able to personalise on both sides, or in two colours, in just one machine pass. Database information can now be utilised to its fullest extent. For example, if the age of the addressee is know, it is possible to laser print (onto the printed forms coming off the web) the actual individual premiums for an insurance policy'.

The increased product complexity afforded by the new print machines has had a knock on effect upon the remaining printing processes. More specialist print runs have demanded more sophisticated finishing systems. The company has achieved this by modifying many of its finishing machines, with innovations developed by a small, dedicated research and development department. For example, the company has built, and subsequently patented, a process whereby they can stick plastic cards onto personalised material using Optical Character Recognition (OCR) technology to match the two. Over time, the company has, therefore, accumulated a wide range of folding and enclosing machines that are capable of producing numerous unusual formats.

A rough layout of the shopfloor at Mailprint is presented in Fig 6.1. In simple terms,

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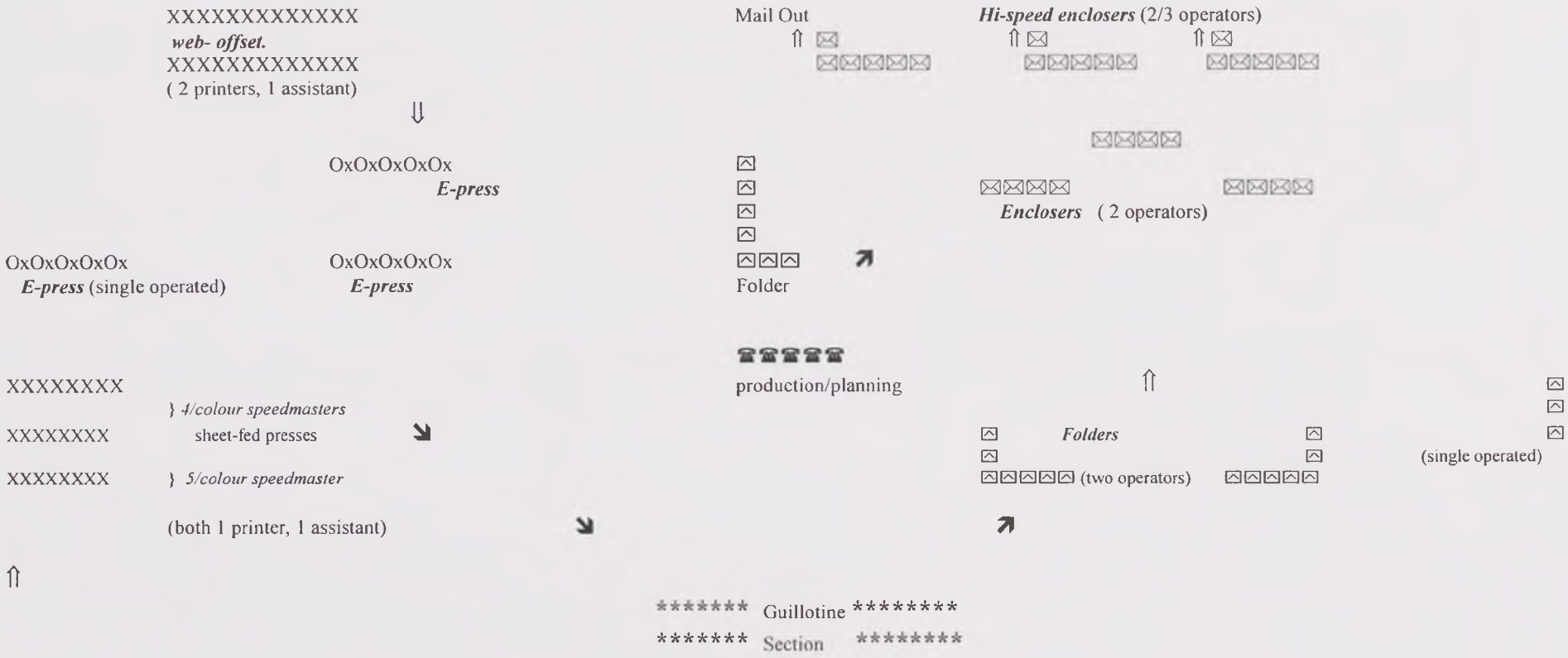
[2] As the name suggests, sheet-fed printing machines print on individual sheets of paper. Web presses, in contrast, print from continuous rolls of paper.

[3] This type of printing is far more common in the USA. Indeed, according to Scott (1987), the fact that such machines do not rely on traditional printing techniques means they have been directly responsible for the increasing feminsation of the industry and the subsequent decline of skilled, union labour.

Figure 6.1: The shopfloor division of labour at Mailprint.



the final printed formats move to the guillotine section where they are trimmed to the requisite size before being passed to the finishing section. The first stage in the finishing section is folding, which can range from basically folding a single sheet of paper in three to more complex folds which create internal pockets. From folding, the product moves to the enclosing section where it is inserted into an envelope, sorted by post code and then mailed out. The mail is sent directly to the relevant post-code sorting office rather than a central town office. Unsurprisingly, therefore, Mailprint has very close links with the Post Office and post goes out continuously throughout the day until 9pm. The nature of the work means that the actual planning of jobs is prioritised by mail dates. The output per week varies from an average of 700,000 packs up to a maximum of 2.5 million packs.

According to senior management, the physical capacity of the company affords it a significant competitive advantage. In particular, the electropresses are 'the biggest and fastest laser printers you can get' and this, complemented with the variety of finishing equipment, has enabled them to produce 'all sorts of unusual formats and special products'. Nevertheless, it was noted that this technical advantage was underpinned and sustained by a *customer service* advantage. As the customer services director explained at length :

'We get a lot of feedback from our clients that we provide an unusual level of service in this business. And that is why we charge higher prices than other people. Our lead point for selling, therefore, *isn't* special products. Generally speaking we try not just to answer our customers questions, we try to add to those questions. That may even involve suggesting to people that they go elsewhere; for example, if someone wanted us to make five of these on that very expensive kit when they could get it done around the corner at their local Sprintprint. Overall, we have established a reputation for service and the ability to deliver the goods. Sometimes that means we get really nasty, messy, crappy, work that they daren't get done somewhere else, and this often has nothing to do with physical process advantage and everything to do with service, advice, guidance and control of what goes on. To be honest we get less plain bread and butter work than we would like. But it was accepted as part of our mission statement many years ago that it was in our interest to do unreasonable things for unreasonable people and, of course, we command a premium price for that'.

6.1.3 Human resource management strategies and company training policy.

The move to the greenfield site provided Mailprint with a unique opportunity to implement new working practices and methods and to establish a coherent set of human resource management practices. A key aspect of the company's strategy prior to the move was, therefore, the 'management of change'. Firstly, the company hired a group of management consultants to investigate its management structure, with the brief that whilst Mailprint wanted to preserve its existing advantages of being a small, informally managed business it did not want to limit the capacity for growth. The consultants recommended only one minor change. Noting that the company had a professional approach to both production management and sales, they posed the question '*who* is responsible for making sure it all happens?'. In response, the company set up a group services department, headed by a new customer services director, with responsibility for client services, health and safety, quality, and as an advisory function for personnel and training. In overall terms, the company has a two tier management structure with line managers generally reporting directly to various executive directors, although on the shopfloor a production manager also acts as an intermediary.

Secondly, whilst the company has no formal, written human resource or training strategy as such, human resource issues were identified as central to the management change process at the new site. This was articulated by senior management as part of a cultural change process towards the development of a definitive Mailprint *philosophy* or *personality*. This process of cultural change was considered essential to overcome the entrenched working and production problems that had pervaded the split site operation, whereby the separation of finishing and printing operations had led each group of workers to regard the other as working for a separate firm. The two production operations were also managed in very different ways by two production directors. In the finishing section, supervision and operational control was tighter and more visible, broadly equating to a management strategy of direct control; whilst in the printing section the management strategy was more one of responsible autonomy

(Friedman, 1977, 1990). These differences in management style were, however, to be instantly swept aside with the move to the new site, as only one production director was required. The production director of the old finishing operation was, therefore, offered a new managerial remit (basically the customer service position), which he subsequently turned down, moving instead, with a number of operatives, to a rival company.

The concern with cultural change underpinned the official opening ceremony of the new site. As the production manager explained:

'Shortly after moving, we had a family day and invited all the staff and all their friends, relatives and acquaintances to come. We had a marquee outside and the building was open and some of the larger machinery was run by volunteers, and I think that was a great ice breaker. And indeed from a social club where originally about 20% were involved, we got like 90% within the next few weeks. So there was a bit of unification at work'.

In order to create a more integrated and committed workforce, it was claimed that an increased emphasis was being placed on quality awareness and training and development. With regard to the former, as part of a BS5750 accreditation programme the company undertook a quality audit whereby each operating procedure was formally specified in writing, which in turn acted as a training checklist. Quality standards could thus be formalised, and operators were encouraged to take quality issues more seriously by checking standards and passing defective work back to the worker responsible.

As far as training is concerned, management claimed the company has been particularly active. Most notably, prior to the move a certain amount of new technology familiarisation training was undertaken in all departments. The most intensive period of training was undertaken in the finishing section, where, over an 18 month period, operatives were cross-trained to operate at least one other machine. As the customer services director explained, this not only facilitated new working practices at the plant,

it was also indicative of the company's approach to employee development:

'Corporately, we believe very much in training. The training philosophy encompasses a belief in internal development and training in order to create some sort of career progression. One of the things that we have been doing, and it helps us with workloads, is to ensure multi-skilling.....and here there is a contradiction in terms of a multi-skilled, unskilled workforce. Multiskilling as such is more likely within the finishing department, where workers have the opportunity to progress from one machine to another'.

In terms of the detailed division of labour in the finishing section, this suggests that opportunities exist to progress through a clearly defined hierarchy of functional activities. Thus, a number of senior managers proposed that, in theory, a worker could progress from the most basic mailing job (such as filling and labelling mailbags) to overseeing and running the most sophisticated folding machines.

More broadly, in recognition of the fact that labour turnover is low (<3%) and management opportunities scarce, management claimed to continually train their productive labour to do as much as possible. Career progression and internal development is thus understood more in terms of personal development rather than actual promotion. Nevertheless, a concern with internal development opened up an internal labour market (ILM) of sorts, based around selective opportunities for skill upgrading rather than an established system of seniority. In particular, a number of unskilled operatives were trained up for 3 months internally to take up positions as electropress operators. Furthermore, the company has in recent years sought to fill print apprenticeship vacancies with internal, adult trainees.

In terms of recent training activity, in addition to the general technology training and 'multi-skilling' identified above, the company are part of a seven strong consortium that invested in a web-offset simulator housed at Leeds College of Technology. Basically, the company's investment allows it a month's training on the machine's software each year, which enables it to simulate a range of printing exercises and

problems. The initial response from the workforce was highly favourable, with the company sending a range of administrative, technical and clerical staff to use the machine as well as the printers. As the customer service director noted, 'the simulator has been superb for background familiarity for account handlers, sales people and such like, [we] have all been down to give us greater sympathy and understanding for what is going on'.

Historically, the company recruited a couple of apprentices each year, although this had fallen in abeyance in recent years. Indeed, the three new print finishing apprentices who joined the company during the course of the research were the first for four years. In part this can be explained by the economic recession of the early 1990s, but, as noted above, the company has also changed its emphasis with regard to apprenticeships, specifically for press positions, away from recruitment to internal development. As far as the customer services director was concerned, this epitomised the company's approach to internal progression, as 'it demonstrates the opportunity for development, if somebody has gone through all the unskilled bits and they are now allowed to qualify as a craftsman', although, as we shall reveal, such a viewpoint was not so enthusiastically endorsed on the shopfloor.

The company follows the BPIF/GPMU trainee modules but utilise them in a fairly liberal and flexible manner. As one of the print supervisors explained, 'we've always followed the module system and the log books, but we've always done our own thing as well. If something seems totally irrelevant to what we do as Mailprint, or if it is something that the lads are never going to come across, we just skip over that or alter it to suit us'. Furthermore, whilst apprentices would traditionally follow a block release course at Leeds College of Technology, it was unclear if this would remain the case. Certainly, adult print trainees were not expected, or required, to undertake a block-release course, and none of the print finishing apprentices expected to receive college based training. Nevertheless, management claimed to be 'quite strict with regard to

passing someone out of their time', referring to a recent print trainee who was kept on trainee status for two years longer than necessary. While the national agreement specifies a minimum training period of two years, at Mailprint it is unlikely to be less than two and a half years.

In general, the predominant method of training at the factory is on-the-job training, usually conducted initially by supervisors or the production director and then, if necessary, by specific workers thereafter. For example, when the electropresses were introduced, the production director and print supervisors received some initial training from the manufacturers and then subsequently developed their knowledge by working the machine. They then 'trained up' a specific group of operatives to work the machine over a period of three months. In the case of the flexibility training in the finishing section, the training was conducted on-the-job by a number of skilled operatives. To facilitate this approach to training, and to ensure a broad spread of people *able* to train, management hired a consultant to conduct a number of brief 'training the trainer' sessions.

Despite the widespread training effort and espoused commitment to employee development, the company has no regimented approach to evaluation and appraisal. An annual training needs appraisal is conducted with regard to staff and management employees, but, in general, informality prevails. For Mailprint, the effectiveness of any training undertaken is evaluated in terms of operational competence at work, or as the production manager puts it 'if someone is good at their job and continues to develop as we throw all sorts of spanners into the works then we assume our training is satisfactory'. Any emerging or identifiable training deficits are accordingly determined by technical deficiencies and the necessary corrective training conducted. This process has been further facilitated by the BS5750 accreditation procedure, for which the company compiled operating checklists for each machine and which can, in turn, act as identifiable training requirements. The identification of training needs is down to 'self

selection by employees' and, in this respect, management claimed to support requests from employees for personal development rather than just job-related training.

At the time of the research no employees had received NVQ's. Although given the slow diffusion of the training standards into the industry this should come as no surprise. It was stressed, however, that any employees interested in pursuing an NVQ would be encouraged to do so. Nonetheless, management was highly sceptical about the potential benefits to the company of such accreditation. The dilemma was eloquently articulated by the customer services director:

'The jury is out on NVQ's as far as I am concerned. Our concern is not about public consumption but about increased effectiveness. If I train somebody here to be highly competent in what we want to do, I really don't care whether they have a formal qualification or not. We have sufficient self confidence to form our own judgements about what constitutes competence....I would dearly like to see some proof that what you might call externally qualified training impacts on deliverable performance.....I guess there is also an element of the poaching question in this as NVQs would make skills more visible'.

It was admitted, that over the years, a number of Mailprint employees had been poached by local competitors. Indeed, two senior mangers who left to set up on their own poached a number of staff across the company. Nonetheless, it is claimed that such activity did not blunt the company's dedication to training. Different senior managers, however, held contradictory positions. Whilst the customer services director claimed that it had never occurred to him 'that you should *not* train your employees in transferable skills if you want them to develop and help your organisation', it was admitted that the production director held completely the opposite viewpoint and believed in training 'people for what you want them to do and what you want them to do next'. A number of managers argued that the change of production activity by the company and the subsequent growth necessitated a large investment in training. The company had chosen to develop a number of services and production techniques to keep ahead in the marketplace which, by definition, required investment in skill

formation and, in this regard, any competitors that choose to follow suit would almost certainly attempt to poach staff from Mailprint.

6.1.4 Industrial relations and union-management relations.

The company recognises the Graphical, Print and Media Union (GPMU) which has 100% membership on the shopfloor, and abides by the terms, conditions and pay scales set out in the industry's national agreement. Applied to the division of labour at Mailprint, this means that all the craft workers, that is those printers and finishers who have been apprentice trained, are designated as class 1 operatives (and are all men); whilst the remainder of the workforce, including the bulk of the finishing section and print assistants, are designated as unskilled, class 2 and 3 workers. Within each scale there are various gradations of pay and under the agreement a range of extra monies are awarded for particular types of machinery (see Arrowsmith and Sisson, 1998).

Nonetheless, union organisation at the factory is weak. Whilst there are two shopstewards (one ex-Sogat, one ex-NGA), they rarely meet, as they work on separate shifts, and by their own admission they never hold chapel meetings. Two reasons were given for this state of affairs. Firstly, the stewards suggested that members were generally indifferent to the role of the union; similarly, both stewards had only taken the position because 'nobody else would do it' and they had never attended local branch meetings. Secondly, the company was regarded by the stewards as 'relatively trouble free'. There was some concern, however, that no formal mechanisms existed at Mailprint for workplace bargaining and consultation. For management, this was deemed irrelevant as they complied with the nationally determined pay scales. Indeed, a reliance on the national agreement was considered an important device in displacing distributive workplace conflict and ensuring 'good' industrial relations. As the customer services director argued:

'We regard ourselves as 'model employers', who are neither big enough nor

troublesome enough for the union to be concerned about. We have always paid above the minimum rate, we've had no redundancies, we buy decent kit and we train people'.

Whilst the workplace representatives agreed that the company followed union wage rates and generally 'played things by the book', they nonetheless regretted the lack of consultation at the factory. As the NGA FOC noted:

'The only fault I find with this company is that we don't have a sort of collective agreement. We don't hold chapel meetings, or meet management on a regular basis, sometimes I think it would be good if we did. Sometimes things that they do or say causes problems on the shopfloor, which is only grumbles, but if they did have meetings it would be easier'.

The company used to be members of the BPIF but resigned during the national dispute in 1993 on the grounds that the BPIF had been 'unduly provocative' during the wage negotiations and had made a set of unreasonable offers. Exasperated at the limited progress during the dispute, management terminated the company's membership of the BPIF and followed the original union claim by settling a local chapel agreement. Subsequent to this, the company has concluded its own arrangements, based on the national union claim, by offering either a percentage increase or 'x pounds', with a workforce ballot deciding the outcome.

The picture of good industrial relations was not so clear cut for the workers on the shopfloor. Firstly, the recent ballot over the wage claim, as we shall explore later, had led to hostility from certain groups of workers. Secondly, a dispute with the local union office erupted in 1989 over new manning arrangements, when the company decided to break rank with industry practice at the time and reduce, by one, the number of printers operating each machine. The subsequent dispute that ensued with the local union office was concluded through a chapel agreement, with the new manning arrangements approved subject to an increased rate for the job. This move by the company pre-empted wider changes in staffing levels throughout the industry, indeed, the provisions

on flexible working embodied in the national agreement no longer specify manning arrangements for any equipment. Rather, manning levels are to be determined by individual companies (and chapels), as long as any changes are negotiated and no printers made redundant. While the printers at Mailprint were generally not opposed to the new staffing arrangements, they recognise that at those companies with stronger chapels such changes would either not be countenanced or would only be implemented after due process.

6.1.5 Relationships with local agencies and training providers.

As far as senior management is concerned, the local TEC, as well as other local economic agencies, have nothing to offer the company. The customer services director had met with local TEC representatives and Professor Amin Rajan of CREATE[4] to discuss the general role of TECs, and to identify possible areas of interest, but left them with the following unequivocal message:

'I told them that Mailprint don't want the TEC. I don't think they have a bat in hell's chance of teaching anybody to run electropresses or mailing machines. We don't need a TEC to tell us to train people to do what we have to do. We'll train them to do what we want. We do not look for shoulders to lean on, or shoulders to cry on, or pockets to scrounge coppers from. We believe very much in training, we do not believe very much in government sponsored training initiatives'.

The company has no interest in pursuing Investors in People status, claiming it doesn't need to make a public declaration of the fact that it is committed to training and development.

The customer service director noted that, on reflection, whilst the intentions behind some of the TEC initiatives were laudable enough, the decision to train rests ultimately in the hands of the employer. It was suggested that the old Industrial Training Boards levy was a more effective system: '[A]s without a bit of financial compulsion no

[4] CREATE was funded to study how to help TECs implement national policy.

amount of exhortation will help'. The demise of the ITBs was thus responsible, as far as the customer services director was concerned, for a significant decline in training activity throughout the industry.

In terms of external training providers, the company tend to rely primarily on equipment suppliers, private training consultants and the local printing college. With regard to the latter, the company has made use of the traditional apprentice provision as well as shorter courses on the principles of print estimating. Nevertheless, senior managers were highly critical of the provision available, noting that the college offered poor quality print training, delivered out of date courses, housed out of date technology and was not open to new course suggestions. The estimating course, in particular, was regarded as 'woefully out of touch with current practice' with large swathes of the course being 'concerned with estimating the costs of outdated letterpress type'. It was recognised that it was difficult, given financial constraints, for the college to cater for 'those companies operating with leading edge technology and practices'; yet, crucially, the lack of courses, and the poor quality of existing provision, were identified as major constraints on training provision.

6.2 Employees' experiences of training and development at Mailprint.

The following section sketches a general picture of Mailprint's employees' attitudes towards, and experiences of, training and development at the factory. The data is drawn from 44 questionnaires completed by workers from all parts of the factory. Of these, 24 were returned by administrative, technical and clerical staff (ATC), including sales, customer services and computer programming, and 20 were returned from shopfloor employees, including printers, finishers, envelope machine setters and sundry unskilled. 31 respondents were men and 13 female. Employment tenure ranges from a year to 16 years, with the average length of service 6.87 years.

It is important to note that whilst there is a clear bias towards ATC staff, the returns do

nonetheless cover a broad range of functional positions across the factory. Moreover, given the espoused commitment by the company to training and development, the responses allow us to delineate the extent to which 'equality of opportunity' extends across the site.

Table 6.2 Training experiences at Mailprint (no of respondents).

	Total responses	ATC	Production
Received training since joining	40	24	16
Currently receiving training	10	6	4
Received training in last 4 weeks	9	5	4
Received training in last year	29	21	8
Will you be expected to train further?	16	14	2
Does your employer encourage further training?	24	21	3
Opportunity to use new skills received	37	24	13
Are training opportunities available to all?	36	22	14
Has your training led to a qualification?	13	8	5
Did training received result in a pay rise?	11	3	8
Was training formally evaluated?	16	11	5
	n= 44	n= 24	n=20

Table 6.2 suggests that training activity was widespread. Nearly all respondents had received some form of training since joining the company, and close to two thirds had undertaken training in the twelve months prior to the questionnaire, although it should be noted that the latter was skewed in favour of ATC staff. The types of training received by ATC staff included customer service briefings, new equipment and computer software training, estimating skills, general on-the-job induction training and visits to other departments. With the exception of the induction training, which could

last for up to 14 days, the bulk of the training received was of very short duration, typically one or two days. In terms of the production workers, training provision included visits to the web simulator and a paper mill, electropress training and envelope adjusting. All the ATC staff indicated that they had utilised the new skills received, whilst seven of the production respondents replied that such an opportunity had not arisen.

The ATC respondents were also far more likely to expect further training, and to generally receive encouragement to undertake further training. Very few production employees, by contrast, were either expected, or encouraged, to undertake further training. Despite this, eight out of ten respondents regarded training opportunities as being available equally to all: only two ATC employees and six production workers suggesting otherwise. In these cases, management favouritism was cited as the most likely reason for inequality of access. Discussions with shopfloor workers shed further insights on these findings. A number of finishing operatives argued that younger workers and skilled workers were particularly favoured, and that also 'if your face fits you get the training'.

Whilst the majority of respondents had received some form of training since joining the company, in only a minority of cases had this led to the acquisition of a formal qualification or a pay rise. In this regard, production employees were more likely to have been financially rewarded for training received, in most cases as part of their apprenticeship programme. Just over a third of all respondents had gone through an evaluation procedure for training undertaken. This was far more likely to be the case for ATC staff. Although, given the fact that it was supposed to be company policy to formally review and appraise all ATC staff, we would expect this figure to be far higher. The fact that an evaluation procedure had only taken place for a quarter of the production employees suggests that the informal appraisal approach for such workers tends to result in hardly any feedback.

It appears that respondents are informed of training opportunities through a variety of means. For ATC staff, the predominant avenue was via management (21 responses), with word of mouth (8 responses) and asking (7 responses) the second and third most cited channels of information respectively. Such management influence was less observable for the production workers, who obtain information on training opportunities primarily through word of mouth (8 responses), asking (8 responses) or the factory notice board (6 responses). Only one production worker pointed to the union as a source of information. Nearly a third of the production workers (6 responses) received no information about training opportunities at all, compared to just two of the ATC respondents.

Table 6.3 : Anticipated impact of further training (no of respondents).

	Great	ATC	Prod	**Small**	ATC	Prod	**None**	ATC	Prod
Impact on pay	**5**	2	3	**21**	10	11	**18**	12	6
Promotion prospects	**5**	2	3	**23**	13	10	**16**	9	7
Job security	**18**	6	12	**15**	9	6	**11**	9	2
Qualifications	**16**	8	8	**18**	11	7	**10**	5	5
Personal satisfaction	**27**	12	15	**15**	11	4	**2**	1	1
Ability to do job	**27**	14	13	**14**	8	6	**3**	2	1
Future employment prospects	**29**	13	16	**10**	8	2	**6**	4	2
Motivation at work	**22**	8	14	**20**	15	5	**2**	1	1

Nearly all respondents (37) were interested in undertaking further training of some sort, even though few expected it to lead to positive material rewards. Indeed, just 5 of the 44 respondents expected any training received in the future to lead to a pay rise or an increase in promotion prospects. In total, 18 suggested there would be no impact on pay, and 16 felt their promotion prospects would not improve. The poor association

with pay was particularly marked amongst the sample of ATC staff, reflecting the fact that such staff are less likely to be financially rewarded for any training undertaken.

The anticipated impact of further training on job security and qualifications was more positive. Eighteen respondents identified a strong association between further training and job security, although this was significantly biased towards the responses of production workers. Once again, the ATC sample was more likely to state that the anticipated impact would be negligible. Just over a third of the sample indicated that the impact of future training on their qualifications would be great. The majority of the sample expected future training to make a great difference to their personal satisfaction, their ability to do the job, future employment prospects and motivation at work. The ATC sample was more likely to respond negatively. This was particularly noticeable with regard to the perceived impact of future training on motivation at work, whilst fourteen production workers felt future training would make a great difference to their motivation at work, only eight ATC staff responded likewise. The majority of ATC staff suggested the impact would be small.

6.3 Careers at work.

As numerous commentators note, different groups of workers are likely to experience, and respond to, changing working practices in a variety of ways. This will be conditioned by the type of worker (Sabel, 1982), the type of employment sub-system (Osterman, 1982) as well as the traditions that pervade specific departments. For example, Osterman (1982:50/51) argues that in order to understand the complexity of internal labour markets, we should examine the changing positions of, and relationships between, *industrial*, *craft* and *secondary* employment subsystems. Each of which has its own specific characteristics relating to skill, firm specific training, job ladders, freedom of deployment, quits and layoffs. Whilst this typology has a 'broad brush' appeal, for the present discussion its ability to discern distinctions within specific subsytems is considered limited. The following section will, therefore, explore the

responses of shopfloor workers to HRM practices in Mailprint by focusing on the various parts of the production process, namely: finishing work, electropress work and printing work.

6.3.1 The finishing section.

The finishing section basically involves a series of operations which transforms the output from the printing section (from the printing presses and the electropress) into the final product to be mailed. This involves three discrete operations. Initially, the printed material passes through the guillotine section where it is cut to size. From there, the product passes through the folding section which houses a variety of machines, some of which can produce highly specialised finishing, capable of presenting the final mail-out in a variety of formats. Finally, the mail moves to the enclosing section where it is inserted into an envelope, which can again include numerous specialised formats, before being put in the post bag. The majority of workers in the finishing section are classified as unskilled/semi-skilled, class 2/3 workers, whose general duties involve assisting on the folding and enclosing machines. By contrast, the guillotine workers and setter-upper/operators in the folding section have all undertaken an apprenticeship in print finishing and are accordingly classified as skilled/craft personnel. The latter account for approximately 10% of those employed in the whole finishing section.

According to senior management, it is within the finishing section that recent efforts to promote multi-skilling have been concentrated, enabling workers to progress from one machine to another. The prime motive underpinning such training activity was the need to integrate the previously disparate groups of workers into a single section. Training was thus integral to increased flexibility within the new section. Consequently, prior to the greenfield site relocation all the folding assistants spent a period of one month working in the enclosing section, and enclosing workers were trained to operate all the enclosing machines and a select number of folding machines. In terms of formal traineeships, two folding assistants were also given the opportunity

to take up traineeships in the guillotine section. Three young print finishing trainees were just starting at Mailprint during the period of research, the first for four years.

A certain amount of training effort had, therefore, taken place within the finishing section in preparation for the move to the new site and in anticipation of more flexible working routines. All of this training was conducted on-the-job, usually through an initial period of 'sitting next to nellie' followed by a period of 'learning by doing'. Prior to this activity, the main trigger for training had been the introduction of new technology, much of which was unique to the company. Hence, whenever a new machine is purchased, it is installed by an engineer who usually spends a week training the setter/operator, who will then pass on this acquired knowledge to the requisite assistants and other operators. Additional training also tends to be conducted during the periodical servicing of the machinery. As one of the folding operators explained, this can prove highly effective 'as you can be struggling with certain things for years and then the engineers come along. You then get somebody who knows the machine inside out rather than your manager who doesn't know it all, and they tend to show you other ideas as well'. Nonetheless, it was a common complaint that such training was infrequent.

Many of the workers in the finishing section were critical of the company's approach to training and development. For the skilled setter/operators and guillotine workers the principal target was the system of formal traineeships, which was considered limited in terms of both the breadth and length of training received. Thus, for the guillotine supervisor:

'The two trainees we have at the moment are from other parts of the factory and haven't done any college courses. The traineeships are not as good as they used to be, not now, not in this company. Because, they'll give a grade 1 to a print finisher just on the guillotine, our current trainees will get grade 1 status after two years training. When I did my apprenticeship, you didn't get grade 1 status until you'd done four to five different areas of print finishing. I would like to be able to say to them go down into

the folding area for five months and learn that, because everything that we cut has to go through folding, but they don't get the chance'.

Such sentiments are, of course, not unusual amongst apprentice trained workers who, having served longer and more rigorous periods of training themselves, also expect subsequent initiates to have 'done their time' before deserving the position and remuneration of grade 1 status. Nevertheless, it was also suggested that current trainees 'miss out' by not attending a formal period of college training. This was articulated not so much in terms of the technical training received, as much of this had little relevance with the technology at Mailprint, but more in terms of the benefits of learning 'good housekeeping' and the potential it offers for 'swapping experiences with trainees from other companies with different machinery and ways of working'.

There was some confusion as to whether the most recent trainees would attend a college course. Whilst the finishing line manager claimed they would attend college when the production manager had decided upon 'the most suitable course available', this was disputed by the setter/operators who insisted they would be trained on-the-job. In this regard, it was noted 'that the company train in a different way now, as the three new finishing trainees would not be going to college'. The three trainees were unable to confirm this one way or the other. Indeed, all three expressed a preference for learning on-the-job. Nonetheless, they were unable to explain exactly how the on-the-job training would be structured. The most likely scenario, however, is that they will spend a year assisting on various folding machines before being designated a machine of their own to run. In this context, as the finishing line manager intimated, the development of the trainees would be directed towards meeting a particular skills need of the company:

'The trainees will be classified as skilled after two years. They will then stay in the department that they are working at the moment and will be responsible for setting up the machinery more than actually running it. That is the complicated part of the job really, the actual getting the machine ready. If the department carries on growing as now we will need more people to move on and do the same sort of thing, we've got a lack of people if you like who can be trained to this level of knowledge. So, hopefully,

by hiring people at 16/17 we can build our skills levels from there'.

In terms of other training activity, most workers in the section confirmed that they had acquired new technical competencies in recent years, and were thus able to operate more machines than previously. Few of them, however, equated this 'cross training' with multi-skilling. Indeed, as the following exchange between two folder setter/operators reveals, the rhetoric behind the company's training activity had left many confused and disappointed:

'When the training consultant was here he held a few courses and that, basically, instead of training people up into supervisory positions they were talking about training people to use and understand more machines'. (Folding operator 1)

'Yeah,... they talked about multi-skilling a few years ago, there was talk of it, then it just fizzled out and nobody heard anymore of it'. (Folding operator 2)

'I went on one of these training the trainer courses that the consultant ran, they'd give you things to do, role plays and that, things to think about and they would set exercises for next time, but there never was a next time because we never saw him again'. (Folding operator 1)

'The training consultant .....what a fxxxxxx waste of space he was, basically, all the company is interested in is making sure that you can get the job out the door and making their money... all the training is done in-house by us, we just sort of train each other'. (Folding operator 2)

Essentially, then, whilst the company had undertaken a concerted programme of training activity prior to the move to the greenfield site this did not generate a more consistent and structured approach to training and development. Thus, it was frequently pointed out that for a period the appointment of a training consultant seemed to herald the emergence of a more formalistic attitude to training. The consultant ran a number of 'training the trainer' sessions and attempted to set 'learning exercises and tests', but when he left the company he was not replaced and much of the training impetus he had set in train dissipated. For the finishing line manager, 'a lot of training had gone by the wayside' at the new factory simply because they were so busy. It was admitted that this had led to unmet training demands amongst those finishing workers

requesting further development, but at the present juncture there were few opportunities to develop such employees as there 'was barely enough people to meet current production requirements'.

With an increasing amount of work from the new printing machines furnishing the finishing section, a key objective for management was to increase labour flexibility within the section. As noted, a programme of cross-training had been undertaken to facilitate this process, but from the observation it was clear that the actual flexibility of labour deployment between jobs was circumscribed. Clear patterns of working were discernible between different groups of workers and tended to be enacted within each sub-section rather than across the folding/enclosing divide. For example, within the folding section, all folding setter/operators were able to set up and operate all the folding machines, of which, the actual setting up process was regarded as the skilled part of the job - taking up to eight hours for sophisticated work. In order to introduce a more challenging element to their work operators would thus rotate between the different machines, allowing them the opportunity to tackle a number of set up options. In such circumstances, operators were prepared to divulge idiosyncratic information about each job as this, in turn, would be reciprocated. This job rotation should not, therefore, be seen as the product of managerial dictates for more flexible utilisation to meet operational demands, but a desire by workers to introduce challenges and variety into their working day and to distribute evenly 'good' and 'bad' jobs. In other words, mobility between machines was articulated in terms of a 'relative satisfaction' in order to alleviate the 'deprivations' inherent in their work (Baldamus, 1961)[5].

Similarly, although the folding assistants had undergone a period of training and working in the enclosing section they contrived as far as possible to remain within the

[5] In his analysis of work effort, Baldamus (1961) argues that workers will generate a number of relative satisfactions (inurement, traction and contentment) in order to overcome the deprivations inherent in their working realities (impairment, tedium and weariness). Through these relative satisfactions workers are able to maintain an acceptable level of effort, but the satisfactions are only temporary relief from the discomfort of certain work realities and the exploitative relationship within which they engage with capital.

folding section. Nevertheless, they recognised that technically they could be expected to assist on the enclosers :

'I can assist on all the folding machines, and I received training to work on the enclosers as well.....this involved working on the enclosers for a month ... but I don't really like working in that section. I consider myself a folder, but it just says finishing on my pay slip, so if they want me to work in the enclosing section I have no choice' (folding assistant).

The position of the folding assistants was legitimised, however, by the working patterns developed by the operators, who preferred to work with familiar assistants. The allocation of work within the section and the running speeds of particular jobs would be controlled as far as possible to ensure that operators were able to work with assistants of their choice. A similar position pertained in the guillotine section, where workers rotated between machines on a weekly basis 'so nobody got lumbered all the time with the more cumbersome and boring machines'. Similarly, enclosing assistants only tended to move between enclosing machines rather than between the folding and enclosing sections. Although such workers have less control over their work as the machines were set up by mechanics, they strived as far as possible to remain on the same machines as 'this was boring and repetitive so you can talk to your friends'.

In summary, then, workers in the finishing section were able to exert a significant degree of detailed control (Edwards, 1990) over their work, and whilst this varied between different operating functions in all cases the quality of the final product was left to worker discretion. Nonetheless, the move to the new site was also associated with an increased amount of management control. Firstly, the appointment of a dedicated finishing manager combined with the integration of the previously distinct operations, each of which had its own line manager, had led to an increased supervisory presence for workers in the section. Not only did they have their usual line manager checking up on them, but others as well, as work was co-ordinated and progressed through the system. Secondly, the system of planning work had become much tighter at

the new site. So, as a folding operator explained, 'instead of not knowing what's going on the machine next we sort of know weeks in advance'. The corollary was work intensification. As the same folding operator elaborated, once one job is finished another is ready and waiting:

'If you compare a printer to myself, if a printer has no work to do then he can just sit at the machine... I mean it has caused a lot of bitterness. As soon as you've finished your job you've got somebody looking over at you, well you think I've only just had a job out .....you know, look around'.

Yet, even though many workers in the finishing section were critical of management they still regarded Mailprint as a 'good company' to work for. For many, this was quantified in comparative terms with other companies they had worked for. The key explanatory variable here was overtime pay. As the production manager noted, 'with more work and capacity than labour at the moment they must be flexible and able to move around and overtime is plentiful'. Thus, while workers complained of the limited notice given before they were expected to work overtime, they nonetheless regarded it as the key benefit of working for Mailprint. In addition to overtime, the level of technological investment and the sophisticated nature of the machinery at the company was also considered a factor. This was epitomised by two high-speed enclosing assistants, who having followed the previous production director to his new company decided to return to Mailprint six months later. Quoting this as an example, the finishing line manager explained that:

'What we do have here is fairly specialised and anybody that has worked here a fairly long length of time knows that. This is probably the best company to work for that produces what we do, so for them to move on anywhere else would mean them stepping down if you like in terms of both wages and skill'.

For management, these factors were conducive to an environment of 'good industrial relations' on the shopfloor. Indeed, whilst all shopfloor workers were in the GPMU, according to the finishing line manager, the limited contact between the union representative and members was indicative of the fact that 'nobody seems to be

bothered with the union, they follow the company side of it more than the union's'. Yet, in reality the matter was more complex and workers in the section held contradictory views on the position of the union. Certainly, many wondered what they paid their subscriptions for, but, equally, union membership was taken to be necessary and all new recruits were given 'union forms' on their first day. In this regard, if there was a degree of apathy towards the union it was a reflection of the acknowledged weakness of the union at the site rather than a reflection of good industrial relations. This point was cogently illustrated with reference to the breakdown in the national agreement. Informed by the local GPMU office to push for the full union claim, the workforce eventually held an internal chapel ballot and accepted a reduced offer by the company which claimed that the full pay award would lead to redundancies. The failure to achieve the full claim was naturally attributed to the weaknesses of union organisation at the site and there was a degree of criticism of the local office for not negotiating on their behalf, but many workers also felt 'conned' by the company. As a guillotine operator explained:

'The reason why the company would not meet the union claim was that we didn't have enough work, so they'd have to let people go. Well, a couple of weeks after the dispute we were busier than we ever had been and they had to take more people on'.

6.3.2 The electropress section.

As noted, at the time of the research the electropress machines were the only three in the UK, and were situated in the press room between the large web press and the older sheet-fed printing presses. The electropress prints personalised details, such as name, address, and details of insurance premiums and options, onto forms pre-printed on the web press. The details for each run are written as a print programme in the computer/scanning department and saved on disk, this disk can then be fed into the computer on the electropress and the appropriate 'make ready' arranged. During the make ready stage, the machine prints off a dummy address and the settings are re-altered until the colour composition of the job is correct, the details on the form are

correctly aligned and the margins are aligned in the correct manner for the folding process. Once the settings are correct, a 'reader' is called in to check the quality of the print and to issue a 'press pass' for running productive work.

Given the uniqueness of the electropresses (EP), a group of operators were trained specifically to use the machines. This provided the company with the opportunity to develop a number of internal workers, and operators were typically taken from print assistant positions and the finishing section, although there were also a few appointments made directly from the external labour market. Consequently, none of the operators had served an apprenticeship in print. The training period for the machines lasted three months, with the operators initally observing the production director and print supervisors, who had taught themselves how to use the machine, before running the machines themselves under close supervision. After the three months period, the operators were given a number of test runs and if successful were deemed competent and graded as class 1 workers. Whilst all the EP operators regarded this period of training as sufficient, they suggested that 'the real learning starts when you get to run the machine on your own'. Further training opportunities for the EP operators appear to be limited. Whilst the manufacturers send the company 'updates' about the machine that 'could be used to improve the way they are run', these are sent to the maintenance department 'who file them away'. This generated a certain amount of conflict between the two groups of workers, particularly as the machines were prone to breakdowns.

Whilst the EP operators recognised that they would be unlikely to receive further training in their current positions many of them were keen to develop from the EP machines onto the printing presses. In this regard, lured by the superior occupational status and remuneration of such positions, the EP operators can be classified as 'would-be craftsmen' (Sabel, 1982). One of the EP operators, in particular, had attempted on a number of occasions to make the transition to litho printing, both prior to taking up an

EP position and after. Initially, as the operator explained, he was unsuccessful due to union regulations:

'I wanted to go into litho, colour printing, but, unfortunately, the unions at the time.....(management wanted me to move), but the unions couldn't agree. There was SOGAT and the NGA and they couldn't agree to let a print assistant train up and serve an adult apprenticeship. It was also decided at local level, so I don't know what happened. Only the union men knew. It left me with a certain bitterness towards the union, because everthing is related to money you see, and I could now be a No 1 printer earning a good bit of money. And since the unions amalgamated I could have done it now you see. But, now I have learnt the electropress .....it just guts me. We all became one union after that'.

Since taking up an EP position the operator had also sought to 'ease' himself into litho by requesting support from the company to attend a short union run course on printing techniques at Leeds College of Technology. The company turned down the request, however, as it was not related to his position. Whilst the operator admitted that 'it would probably never suit me for the machine I'm on', he would 'have liked to learn it anyway as it does help in all aspects of printing'. Reflecting on this failure to achieve company support, it was pointed out that whilst the company 'sort of encourage' further training and allow operators 'to observe other people elsewhere in the factory', off-the-job training 'which costs the company money' is unlikely to be forthcoming.

The 'would-be craftsmen' nature of the EP operators was strongly influenced by their position to the litho, apprentice trained press workers. Essentially, the EP operators held an intermediate position within the factory occupational hierarchy. Whilst they were graded as class 1, and thus as skilled, print workers they were acutely aware of the increased status and financial advantages enjoyed by those working on the printing presses. The key issue here, of course, is skill recognition. The fact that many EP operators had progressed from previous positions as press assistants meant that, to a certain extent, they were familiar with the principles of lithographic printing and sensitive to the methods of working the presses. In this respect, whilst they accepted that the EP machines worked on different principles to litho print, they argued that there

were, nonetheless, enough similarities to warrant a similar rate of pay. Yet, in this context, the uniqueness of the machines was claimed to undermine any possible narrowing of pay differentials. A typical complaint was that:

' ..there is nothing to compare it with. You can't compare it to litho printing because it's not litho printing, and there is nothing else like it in this country. So the ace up their (management) sleeve is that they can't be definite about what we should be earning as they don't know how to compare it to other machines. Yet, the view of the printers, who know the skill that it takes, is that we should be on the same sort of money as it's on a par with 4 colour printing'.

Whilst the problem of comparability is undoubtably true, it is highly unlikely that the operators on established printing presses would agree with the case for a leveling of pay differentials. Indeed, as the next section details, many printers regarded the EP machines as a possible threat to established traditions of occupational identity.

6.3.3 The print room

The print room comprises two types of lithographic printing press: four/five colour, sheet fed presses operated by a single printer and an assistant and the web-offset press operated by two printers and an assistant. All the printers are apprentice trained, class 1 skilled operators and can be regarded as the elite craft positions in the shopfloor divsion of labour. The No. 1 printer on the web press, in each shift, had since the move to the new site also doubled up as the print room supervisor. All the press assistants were classified as unskilled.

With the exception of apprenticeship training, most of the training activity in the press room had, in recent years, been driven by the introduction of new technology. Again, most of the inital training effort comes from the manufacturers. So, for example, prior to the introduction of the web press, all the No 1 printers along with the production manager attended a one week course at the manufacturer's, Heidleberg, headquarters in Germany, followed up by an additional month of on-the-job training when the press

was introduced. As one of the No 1 printers explained, this involves 'literally examing the press roller by roller, piece by piece, so that everybody knows exactly how it all works, what can go wrong and how to change it'. As further visits from the demonstrators are infrequent much of the 'real learning' again takes place through experience. Two of the No 1 printers have, however, sought to consolidate this learning process by writing their own manual for the web press. As one of them explained:

'There are only about 20 Heidleberg 8 page webs in England so they don't consider it worthwhile to write a manual for the press. Everything that you learn you either learn in the first month with the demonstrator or you learn yourself. So we wrote our own manual, and the highest accolade we have ever received was when one of their demonstrators came and took a copy of it. It's there for anyone that comes on the press after us and we also use it for training trainees'.

The No 1 printers were also trained to use the electropress machines and 'roadtested' them prior to training the EP operators, and they also act as demonstrators on the web simulator the company has a share in at the local college. Given their own training experiences and the fact that they act as trainers for the press room, the No 1 printers were enthusiastic advocates of continuing training and development. Such enthusiasm was less forthcoming from the remainder of the press room however. For a number of the older printers this was because they had little interest in receiving any further training, yet even among those who were keen to engage in further training there was uncertainy about the opportunities open to them. This was exemplified in a discussion between two web printers:

'The money is good here, but sometimes I wished I'd stayed in education a little longer. I mean it says in the company rule book that they are dedicated to personal development, but I'm not too sure whether that is the case or not' (No 2 web printer).

'If you want any training or whatever I think Mailprint will provide it for you, you know. I mean there was that simulator at the college. Also, if you wanted to go on a course or anything.....' (No 1 printer).

'I don't know. It would be job related wouldn't it, only to do with the job' (No 2 web printer).

Clearly, there is a tension here over how personal development is defined and progressed. Thus, for the No 2 printer the espoused commitment by the company towards personal development should equate to more than short bursts of job-related training. Furthermore, even requests for job-related training were not automatically forthcoming. In this context, it was the No 1 printer who noted that he'd had a number of requests and suggestions for press-room training turned down, principally because it did not relate to immediate *business needs*. Such requests were usually related to 'recent developments in technology, not housed by Mailprint', the refusal by the company to sanction such training was, therefore, regarded as 'short sighted'.

Such issues aside, the most contentious concern amongst printers was the relationship between company training policy, skill supply and the changing utilisation of labour, and the extent to which such changes were leading to *skill dilution*. This was manifest most explicitly in the changing approach towards apprenticeship training and the position of the EP operators.

While print trainees follow industry specified modules and the company are stricter than necessary regarding 'banging out' (see Cockburn, 1991: 18), many of the established printers were sceptical of the new traineeships. The only trainee at the time of the research was the product of internal development, having progressed from the finishing section to a print assistant position and then onto an adult traineeship . Much of the criticism, therefore, as was the case amongst craft print finishers, focused on the company's approach to internal development and the lack of college training for recent trainees[6]. Two main benefits were identified with regard to college training. Firstly,

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6 Two other printers who had recently come out of their time had also not undertaken a college course. In both cases, the printers had originally started their traineeships at other companies that had gone bust. After a request from the local union office, they completed their traineeships at Mailprint.

attendance at college enables trainees to 'experiment and make mistakes' running machines far earlier than they would on the shopfloor. Thus, as one of the No 1 printers explained, 'we are unable to simply let them loose with machinery on-the-job as this would be dangerous from the point of view of damaging the machine, damaging jobs or just losing time on the presses'. In other words, the need to run productive work at the same time as conducting on-the-job training means that trainees have to be 'gradually edged in, changing a plate here and a roller there'.

Secondly, and more importantly, an awareness and understanding of the *principles* of printing was more likely to be acquired through formally recognised college training. Without this knowledge new recruits were deemed unable to tackle unforeseen, yet basic printing problems. Thus, even though most printers accepted that technological advances had simplified the operating process, traditional printing skills were still regarded as necessary. As a No 1 printer elaborated:

'I guess modern technology allows the company to get away with less training. You know, they can get the trainees working the machines within a few months, but the training only allows them to become familiar with the modern machinery and computers. They take to the computer side of it very well, but they come unstuck when more fundamental problems occur. Many of them lack a basic knowledge of the theory behind printing and we have to rescue them when problems occur. That's when the old skills come into play' (No. 1 printer).

The point is best illustrated with an example. With litho printing it is crucial to maintain the right balance between water, alcohol and ink, as an excess of alcohol can result in 'scumming', which leads to a burnt effect on the paper. Skilled printers are able to anticipate such an occurrence by periodically monitoring the mixture and print offcuts, thereby enabling them to take the pre-emptive corrections necessary to circumvent such problems. The ability to rectify problems early helps to maintain a steady flow of productive work. This, in turn, enables printers to avoid wherever possible having to spend time on the machine correcting or solving more complex problems or breakdowns. In this respect, many printers felt that the neglect of

traditional print 'theory' within the present traineeships posed a problem. By being less attuned to issues such as scumming it was more likely that problems could develop to such a stage where the press would have to be stopped and the job re-set. Such problems would, of course, have to be corrected by the more traditionally, apprentice trained printers, who thus felt that the current system of training was producing skilled printers 'who can't pull their weight'.

In addition to the neglect of college training, many printers were hostile to the company's skill supply strategy of developing from within. The No 1 printers articulated this in terms of a preference for school leavers who could be taught the 'correct way' rather than 'getting someone who is not experienced in the trade, but who has worked and may already have habits'. For the majority of printers, however, the key concern was skill dilution and the concomitant effect this may have on pay. For them, it was incomprehensible that the company should seek to upgrade finishing workers or print assistants, who may have lower reward expectations, when there were unemployed printers and union trainees. Nonetheless, it was recognised that the approach by Mailprint may be indicative of more flexible working practices emerging in the printing industry. Thus as one of the No 1 printers pointed out:

'For future reference, I know this is how it will be at Mailprint. Anyone who shows promise and enthusiasm and comes through as an assistant is always going to get the chance to train up, and I know a lot of other companies in Leeds are going that way. That works for us, because you can always get them to revert back to help out on the presses if anybody is sick, on leave, or if you are overworked, they can assist on the machine rather than printing. Or you can assist and learn at the same time, which kills two birds with one stone, although it's a bit of a cheapskate way of doing it if you ask me. But more companies are doing that now'.

In reality, Mailprint had made relatively little progress in this direction, with only a select few upskilled to skilled status as and when the company required. Similarly, flexible working arrangements within the pressroom were confined to the tasks undertaken by assistants, such as warehouse duties or simple printing tasks like mixing

inks, rather than printers, for whom, the key change in working practices had been the de-manning exercise some years previous. As noted, few of the printers had any complaints with this reduction, despite the local dispute that ensued at the time, although it was noted that the reduction in staffing levels had probably affected the apprenticeship numbers and approach:

'They don't take on any real apprentices anymore, its all internal now, but there are all those unemployed printers and union trainees out there. I cut an article out of the GPMU journal about the apprentice of the year. He also worked on a sheetfed machine at XXXX (a Leeds competitor) as a number two, but we cut those positions here. So, I cut it out and stuck it on my machine. They didn't like that, it was only a couple of days before the production manager came over and pulled it down' (sheetfed printer).

Nevertheless, the reduction in manning levels was not accompanied by more explicily flexible work routines, and the new manning arrangement of one printer and one assistant was rigidly applied. Thus, the possibility of a printer covering for an assistant was non-existent. Indeed, if an assistant failed to turn up for a shift most printers would refuse to run their machines until a replacement was found. Similarly, if they were awaiting work for their machine they would not be expected to help out on other machines, but would instead insist on using the time for routine maintenance and cleaning. In the printroom, then, each printer was associated with a specific machine. When the web crew were a printer down, cover would be allocated as overtime for web printers on other shifts rather than be imposed on an idle printer on another machine.

In addition to the changing nature of labour supply, a second point of contention amongst printers revolved around the introduction of the electropress machines. In terms of the layout of the shopfloor, the actual position of the machines between the web press and the sheetfed presses was deemed to have have upset the established cohesion and dynamic of the press room. Certainly, the sheetfed printers felt they had now been sidelined as all 'the action has moved down to the web end of the shop'. But the key concern related to the actual status of the electropress operators. As one of the

No 1 printers explained:

'We have a really sticky situation with the electropress machines. We have guys who run the machines, they are sort of semi-skilled, I mean they are very difficult machines to run ..... but you get the situation where these lads have been folders, or print assistants, and they have been trained up for the electropresses. Now, some of these guys think that they are fully fledged printers and they might go over to the lads on the presses and start telling them how to print, but they don't know what the hell they are talking about. You get that sort of situation if you train somebody up that has been something else and they are running a machine that is sort of comparable.....but you don't get that with apprentices or people who have come through traineeships. The workers on the electropresses are trained solely for those machines, whereas apprentices are required to do a whole host of things, machines, different ways of working, different parts of the print room ..... but they are solely that machine and that is it'.

Thus, the printers viewed the position of the electropress machines with suspicion as, for them, it offered a clear example of the potential of technological deskilling and posed a challenge to craft identity. Following Cockburn (1991:116), this is indicative of the tensions and struggles that can arise over the political dimension of skill. For whilst the EP operators had not undertaken a traditional craft apprenticeship they were, nonetheless, graded as Class 1 workers. In response, many of the printers regarded this as an attempt by the company to introduce cheap labour into the pressroom. As one of the sheetfed printers explained:

'It's wrong. The company are bringing people in from finishing and assisting to the electropress, giving them a £10 pay rise and they think they are doing OK. They don't realise they're getting £150 less than us. It's dangerous, where will it all end'.

Of course, as the previous section revealed, the EP operators were only too aware of the pay differential between themselves and the printers. Indeed, on pay-day the printers would wave their wage slips in the air to demonstrate the fact[7]. The key point of concern, therefore, was that the EP operators, by attempting to draw similarities with the skills of print, would undermine the value of the printers' labour power. In

[7] Furthermore, the printers wages were frequently discussed on the shopfloor, and one particular printer, who worked the night shift, had achieved almost legendary status by taking home £65,000 the previous year.

addition, printers were also wary of the potential for EP operators to move into the pressroom, as a No1 printer noted:

'If you used the electropress correctly it could be an avenue into print, because it's not totally skilled but it's not unskilled. You need to know about paper transport and it's web operated, so you could teach them some basics of print. We've always said it could be a stepping stone, if you like, from unksilled to skilled....but it is not actually even remotely like the lithography process, it's basically a glorified photocopier. So you couldn't teach them about the lithographic process, so it would be quite awkward'.

Despite these contentious issues over skill dilution, the printers were able to maintain a relatively privileged position in the shopfloor division of labour. In this regard, as Scullion and Edwards (1988: 118-119) note, the ability to attain 'unilateral control of the conduct of work' is an important feature of the job controls developed by craft workers such as printers. Certainly, as noted above, printers were able to resist the imposition of more flexible work routines, and the ability to ensure quality control was also regarded as a key indicator of discretion and skill. Nonetheless, the printers right to determine the quality of work could at times be challenged by clients who wished to supervise and pass jobs on press (ie. they would not let the job run productively until they were satisfied with the colour and print quality). In many cases, however, this served only to legitimise the knowledge and power of the printers. Invariably clients would be escorted to the press by a company estimator/salesperson who had negotiated the specifics of the job. It was a common complaint that the sales team knew little about the mechanics of printing and would, therefore, offer almost anything to secure a contract. For example, in one instance during the observation a client kept refusing a press pass due to inferior colour alignment; in their defence the printers argued that the colour quality was the best possible on the (cheap) paper requested by the client. They nonetheless repeatedly altered the colour specification at the clients' suggestions, knowing the job could not be improved. Eventually the paper ran out and the job had to be subsequently re-run on better quality paper.

6.3.4 Between the cabbage patch and rose garden: a note on the shopfloor division of labour.

As the discussion thus far makes clear, the meaning and purposes attached to training and flexibility varied between the finishing and printing section. Certainly, and in contrast to the finishing section, training was not associated as formally with increased flexibility in the printing section. Such findings do not fit very easily into typologies of labour flexibility such as the flexible firm. Firstly, it is important to note that all shopfloor workers are employed on a full time basis and labour turnover was very low. Secondly, the company is reluctant to pin its competitive advantage down to one specific section. As far as management is concerned, it could equally be the specialist finishing operations, or pre-press computer programming, as the print processes. It is necessary, therefore, to take a closer look at the way the division of labour was defined within the greenfield site.

Management exhortations for the development of a Mailprint philosophy were clearly premised on a unitarist assumption of the workforce knitting together for the good of the company. The need to integrate previously separate sections was posited as a pre-requisite for high levels of efficiency and quality work. On the shopfloor, however, there was an antagonistic relationship between the finishing and printing sections. The incorporation of the two sections under the same roof seems to have changed little. Indeed, it allows workers within each section to cast a more critical eye on the working practices of the other section. As one of the no 1 printer/supervisors commented :

'Basically, some of the people down there in the finishing side all they do is stack things on pallets, and fill hoppers and feed the machines. You know, they just stand there like cabbages. Its a running joke, we call them the *cabbage patch*, whereas they see us lot up here where everything is rosy, and we are all happy in our work, so they call this the *rose garden*'.

Such terms were confirmed by workers in the finishing section. For them, the rose garden tag was associated with a less intensive working environment. Training, and

increased flexibility, for the finishing section meant the workers were now expected to move where the work was. Furthermore, and more importantly, the introduction of the web press and the electropress machines had increased substantially the amount of work furnishing the finishing section. By contrast, the printers were not expected to operate in a more flexible manner and they were able to refuse to run a job without a full crew (this was particularly the case for the sheetfed printers). Moreover, print workers were not tied to the machine. Once a job had been successfully set up, it was monitored via a series of colour controls and a visual unit displaying print quality which were set into a control panel separated from the press. Consequently, when the presses were running productive work printers would tend to congregate at the web-press control panel and could engage in conversation, banter or go to the toilets for a cigarette. A major distinction between the two sections is, therefore, apparent in the porosity of the working day.

6.4 Summary

This chapter has presented a detailed account of the policies, practices and social processes of skill formation within a single printing company. A change of product market in the mid 1980s prompted a period of sustained growth for the company, which enabled it to embark on a significant programme of investment in plant, equipment and human resources. Most significantly, this entailed moving from a series of disparate production sites to a new, purpose built greenfield site on the edge of Leeds city centre. The move provided the company with an opportunity to introduce a range of new working practices and methods, and, certainly, prior to the move the company conducted a wide-ranging schedule of cross functional training. Investment in new technical equipment also prompted a basic training response, but, according to senior management, the prime rationale for human resource investments prior to the move was to underpin a broader 'management of change' initiative. In this regard, training activity at the company was geared towards three main concerns. Firstly, in terms of increased labour flexibility, which was undertaken most rigorously in the finishing

section to ensure the functional flexibility of workers across both folding and enclosing operations. Secondly, in terms of progression and internal development. Thirdly, training was presented as an ideological, cultural construct through which workers' could be instilled into a new holistic 'Mailprint philosophy'.

To a certain extent, the questionnaire data on employees' experiences of training at Mailprint supports management's espoused commitment to training and development. Nearly all respondents had experienced some form of training since joining the company and nearly two thirds had received training in the previous year. Yet, at the same time, a number of tensions were evident with regard to the nature of skill formation at the company. Whilst the ATC respondents were relatively sanguine about the potential for future training activities, this was not the case for production employees. Few expected to receive future training and few felt their employer encouraged them to undertake further training. This may well reflect a changing focus of training investment by the company. Prior to the move to the greenfield site, the key *business* imperative was to equip shopfloor employees with the skills needed to utilise new technological investments and, with respect to finishing workers, to operate in a more flexible manner. Once this training had been undertaken, and the move to the new site had been completed, the company's dedication to skill upgrading and internal development seemed to go by the wayside. This was most explicitly manifest with regard to the failure to replace the training consultant, who had started to introduce a more structured and consistent approach to training, but line managers also admitted that they were now 'too busy for training'.

Despite the high receipt of training by Mailprint's employees, few expected any further training to have any significant impact on their future pay or promotion prospects, most employees viewed further training more in terms of job security. On the shopfloor, the possibilities for career and internal development seemed remote. While the company had laid the basis for a *nascent* internal labour market, by using internal recruits for the

electropress positions and print apprenticeships, the actual possibilities for progression were circumscribed. Furthermore, it was also apparent that the emphasis on internal development had created a number of tensions on the shopfloor between different groups of workers. The printers, in particular, were concerned over issues of skill dilution and regarded the internally trained electropress operators as an attempt by management to introduce cheap labour into the print room. There was also some concern amongst craft workers in both the printing and finishing sections over the actual nature of apprenticeship training. The emphasis towards on-the-job training at the expense of a period of college training was deemed to produce workers who were not trained up to the standards required by the trade. As far as the company was concerned, the college provision was outdated and irrelevant to the production capacities at Mailprint, but management was also concerned to get trainees engaged in productive work as soon as possible.

Despite the opportunities afforded by the move to the greenfield site, in terms of new working practices, no broader HRM initiatives were set in train. No formalised system of staff appraisals existed for identifying the training needs of shopfloor workers and attempts to introduce more flexible forms of working proved limited. Whilst the finshing workers had been trained to operate in a more flexible manner, they contrived wherever possible to maintain familiar and traditional shopfloor routines. Nevertheless, a more sophisticated system of job planning and more extensive management supervision meant that such workers now had to work harder, moving to wherever the work was. By contrast, the printers were not expected to move from their designated machines and could refuse to run jobs if a print assistant was not available. The fact that these differences were perceived on the shopfloor in terms of the *rose garden* and *cabbage patch* significantly undermined the desire by management to create a unified company philosophy and culture.

In summary, whilst Mailprint had invested significantly in training provision, it seems

that its underlying approach was pragmatic, piecemeal and short-term, with no longer term mechanisms or procedures put in place for identifying future skill requirements and training needs. In this respect, initiatives such as IiP which seek to promote a more formal and rigorous approach to training investment were rejected as irrelevant to the business needs of the company. Similarly, the company had little time for the activities of TECs, partly because it regarded such agencies as essentially powerless to affect the training activities of companies, but also because, as the customer service director noted, 'we don't need a TEC to tell us to train people'.

The next, and final empirical chapter, examines the character of skill formation in the printing industry in a more broadly defined way. Drawing from recent survey evidence, it seeks to unravel the patterns of training activity that are emerging in the industry.

Chapter 7: The Training Practices of Printing Firms: Survey Evidence from West Yorkshire.

This chapter seeks to complement the qualitative data on training practices documented in the two previous chapters, by presenting a more quantitative analysis of the relationship between enterprise restructuring and patterns of skill formation. Empirically the chapter draws upon the findings of a postal survey of printing firms in the West Yorkshire region. The survey identifies the key issues prompting and constraining training activity amongst printing firms in the region, and investigates the nature of training activity, issues of skill demand and the formality of training provision. In this regard, a key concern of the chapter is to assess the extent to which printing firms are adopting a strategic approach to skill formation that *embeds* training activity within a broader developmental approach, characterised by Investors in People (IiP) recognition or the pursuit of National Vocational Qualifications (NVQs).

Section 7.1 explores the characteristics of the firms participating in the survey. Section 7.2 analyses issues of training and human resource management, and section 7.3 examines the impact of union recognition on issues pertaining to skill formation. The final section will make a number of summary observations.

7.1 Company Characteristics

The questionnaire was distributed to one thousand and sixty nine printing firms and generated two hundred returns. The distribution and breakdown of returns is detailed in Table 7.1. A notable feature of the survey was the number of questionnaires (52) returned by the Post Office. This may be an unusual occurrence for postal surveys, but is nonetheless consistent with previous large scale surveys of the printing industry and, according to the study by Leighton *et al* (1991: 1), may be an 'indicator of the instability and vulnerability of many printing firms'. Reflecting this, there were a further 10 responses from companies which had ceased trading or gone out of business. In addition, 23 respondents replied that the questionnaire was unsuitable for their

company as they were not dedicated printing concerns, despite the fact that their operations would technically be classified under a print SIC code. Overall, the survey generated 108 usable returns, a final response rate of 10%.

Table 7.1: *Distribution and return of questionnaires.*

		% of total sample
Number of questionnaires distributed	**1069**	
Post office returns	52	4.86%
Refusals (lack of time/sole proprietor)	4	0.37%
Ceased trading as a printing company	10	0.94%
Not a printing company	23	2.15%
Unusable returns (duplicates, uncompleted)	3	0.285
Usable returns	108	**10.10%**

As Table 7.2 shows, in terms of firm size, small businesses employing less than a hundred people predominate. Overall, 86% of responding companies employed less than 100 people. These results are broadly in line with the national statistics for the printing industry as a whole, of which 97.7% employ less than 100 people, and the national economy in general (see Dunne and Hughes, 1990). There is, however, a discernible bias towards large organisations, with 14% of the sample employing more than 100 people, accounting for 71.5% of total employment, compared to just 2.3% of printing companies nationally. In terms of the range of employment, the smallest company was a single proprietor and the largest had a workforce of 530.

Table 7.2: *Distribution of responses by firm size.*

No of employees	Number	%	Cumulative %	National print data % *	Employment (No)	Employment %	Subsidiaries
1-9	41	38.0	38	76.5	195	3.7	1
10-19	21	19.4	57.4	11.5	289	5.5	1
20-49	23	21.3	78.7	7.6	474	9.1	5
50-99	8	7.4	86.1	2.0	526	10.1	3
100 or more	15	13.9	100	2.3	3729	71.5	7

n = 108 * Census of production 1992

A more detailed breakdown of the distribution of employment is presented in Table 7.3. Nearly 95% of all employees are employed on a full-time basis, with men outnumbering women by 2.5 : 1. Nonetheless, whilst it is clear that part-time labour accounts for a very low percentage of the total workforce, nearly half of the sample make use of this type of contractual arrangement. Where part-time workers are employed they are more likely to be female. Casual workers are used by an even smaller percentage of the sample, less than a fifth of all companies, although in percentage terms casual working is more significant than part-time working. This finding is heavily biased by one large company which claimed to use 74 casuals.

Table 7.3: *Detailed distribution of employment.*

	Male		Female	
	Number	% of total	Number	% of total
Full time employees (over 30 hours per week)	3062	67.1	1245	27.3
Part-time (under 30 hours per week)	17	0.4	92	2.0
Temporary/casual	70	1.5	80	1.8

n = 105

Turning to the ownership profile of the sample, 84% can be considered sole traders, with just 17 firms indicating that they were owned by a larger business concern. This was more likely to be the case for larger organisations employing more than 100 people, 50% of which were subsidiaries. In most cases, the subsidiary operated as a division of a larger, typically well known, printing group, but there are a number of instances of print companies owned by large, diversified non-print conglomerates.

Table 7.4: *Distribution of printing activity.*

Activity	Number of responses	%
General Printing	19	17.6
Books	2	1.9
Periodicals	3	2.8
Journals	1	0.9
Stationery	2	1.9
Labels	2	1.9
Flexible packaging	5	4.6
Screen printing	7	6.5
Security	1	0.9
Cartons	3	2.8
Graphic reproduction	3	2.8
Trade typesetting	2	1.8
Trade finishing	4	3.6
Combination	42	37.8
Other	12	10.8

Identifying the main business activity of the participating firms proved tricky. The survey was designed to allow respondents to record all areas of activity, but they were

requested to highlight the area of greatest specialisation. The majority of respondents failed to do this. Furthermore, it became clear than many companies were engaged in a very wide range of activities. As Table 7.4 reveals, just over a third of the sample reported that they were engaged in a combination of activities. The next most frequent, sole printing activities were screen printing (6.5%) and flexible packaging (4.6%) respectively, with the remaining activities fairly evenly spread. Similarly, the 11% of the sample in the 'other activity' category were engaged in a variety of, often tangential, print activities, such as, engraving, digital printing and paper manufacture.

Companies were asked to specify the main markets for their products and Table 7.5 presents the responses. The local, regional and national market predominates, with over half supplying customers within Leeds, and approximately three quarters supplying customers within the rest of the Yorkshire and Humberside region and the rest of the UK. If we aggregate the percentage of sales supplied within each market by the responding companies[1], 96% of sales are located within the UK. By contrast very few goods are supplied to customers located outside the UK.

Table 7.5: *Location of markets by sales* (percentage).

Location	Frequency	Percentage of sales
Leeds	58	22.4
Rest of Yorkshire and Humberside	72	33.8
Rest of UK	78	39.8
Rest of EU	20	1.8
Rest of Europe	6	0.2
Rest of world	9	2.0

n = 103

[1] These figures represent very simplistic aggregate percentages of goods sold and give no indication of how this translates into actual value.

Given the wide variation of printing activities, it is not possible to provide a definitive analysis of non-respondent firms. Comparing the respondent sample with the overall questionnaire population, which included all companies with a print SIC code, it is clear, however, that the returns were predominantly forthcoming from companies engaged in traditional printing production. Thus, for example, no publishing companies completed the questionnaire. Furthermore, as noted earlier, small firms are under represented. Despite these differences, the sample is generally consistent with the variation of activity and establishment size within the industry. Moreover, as training provision is typically most pronounced within medium to large organisations (Heyes and Stuart, 1994:41, Keep and Rainbird, 1995:531), the responding sample will allow us to assess the extent to which 'best practice' HRD practices are being introduced within the printing industry.

7.2 Training policies, practices and Human Resource Management concerns.

In order to ascertain the degree of 'formality' devoted to training and development, the survey asked companies if they had established a formal written training policy and dedicated training budget for the establishment. The existence of either a formal policy or budget for training may, in this context, be indicative of a positive attitude by companies towards the development of its workforce (Keep, 1989b), and may, in the long term, lead to a coherent and sustained investment in quality training. As Table 7.6 reveals, such a scenario is, at present, limited amongst the respondent companies. Overall, 24% of companies claimed to have a formal, written training policy and even fewer (18%) had set aside a dedicated budget for investment in training provision[2]. If these figures are dis-aggregated by firm size a clear, and perhaps expected, trend emerges. The larger the organisation, the more likely the existence of a training policy and training budget. Whilst just over a fifth of those companies employing between 20-

[2] The questionnaire could have probed the issue of training budgets, by asking questions on training expenditures. Given the complexity of such issues (see Ryan, 1991), and the fact that the purpose of the survey was to provide general descriptive data, this micro area of debate was left unexamined.

49 people have a formal, written training policy, for those companies employing more than 100 people, 80% claimed to have such a policy.

Table 7.6: *Existence of a company training policy and budget.*

No of employees	Training Policy (No)	%*	Training budget (No)	%*
1-9	1	0.9	1	0.9
10-19	5	4.6	3	2.8
20-49	5	4.6	2	1.9
50-99	3	2.8	3	2.8
100+	12	11.0	11	10.2

* Percentage of the total sample.

As research by Marginson *et al* (1988) has demonstrated, a company's claim to have a policy for the management of human resources does not mean that this is specified in writing, given to employees, can be adequately explained by senior management or is indicative of actual practice. Consequently, while the present survey asked respondents to indicate whether they had established a *written* training policy, we have no way of confirming the legitimacy of a positive response. In such cases, respondents were asked if they could briefly explain the key purpose of the company training policy. Such supporting statements were forthcoming from 22 of the 26 companies purporting to have a written training policy. Common responses included statements such as: '[T]o develop people to maximise their potential'; '[T]o train employees to the best of their ability to meet customer objectives'; '[T]o raise skill and customer awareness to optimum levels'; '[T]o develop a multi-skilled workforce over time'; '[T]o keep abreast of the latest technology and on-the-job training'. In other words, most statements were broad ranging rather than focused declarations of intent whereby training is tied explicitly to a broader HRM or business strategy. There were a few cases where the aim of the training policy was implicated as central to improvements in

efficiency and performance, but only one respondent gave a specific and detailed statement, where the aim of the training policy is '[T]o support XXX's critical success factor regarding people, where we must have an appropriately skilled, educated, motivated and flexible workforce who will perform with increasing effectiveness and productivity to help us achieve our central business objectives'.

The existence of a training policy means nothing if, in reality, no training is actually undertaken. The survey sought therefore, to explore the skills currently most in demand by respondents, the levels of investment in training and the methods of training undertaken. As Table 7.7 indicates, professional and management type skills appear to be most in demand at the present time. For the sample as a whole, 47% reported a current demand for selling skills, with management and marketing skills ranked in second and third place. This picture, with some slight variations, held regardless of the size of the firm, although those firms employing more than a 100 people were significantly more likely to demand management skills than those employing less than 50. There was also a clear, linear trend with regard to supervisory skills, which were more of a concern for the larger organisations. In terms of more technical and production skills, skilled press-room capabilities and computer skills were in highest demand.

Meeting these various skills demands may, however, be problematic. A third of the sample reported having experienced recruitment difficulties in the last twelve months. In line with the preceding discussion, the most commonly reported area of recruitment difficulty was for sales workers, although the recruitment of skilled craft workers appeared equally problematic. This may well be a reflection of the current economic environment within which the companies are operating, coupled with a 'tightening' of the local labour market in recent years. Indeed, whilst 65% of the sample reported an increase in output in the twelve months prior to the survey, this had taken place within an increasingly (67.9%) competitive environment. Reflecting this, a third of

respondents claimed to have increased the number of full-time employees in the last 12 months, with 37% projecting an increase for the forthcoming year. In contrast, 15% reported a decrease in the past year and just 5% projected a decrease in employees in the next 12 months.

No companies reported recruitment difficulties for management personnel. This finding that may well reflect the owner/manager or family controlled structure of many printing companies. The high reported demand for management skills may, therefore, be indicative of a perceived deficiency of knowledge amongst existing managers, suggesting a desire to adopt a more professional and strategic approach to organisational management.

Table 7.7: *Skills currently most in demand by size of company* (percentage*).

Skills	1-9	10-19	20-49	50-99	100+	Total
Management	29	29	**57**	38	**67**	41
Supervisory	15	29	39	50	60	32
Selling	**49**	29	52	**63**	47	**47**
Marketing	41	**33**	43	38	33	39
Commercial Awareness	10	19	17	50	13	17
Engineering	0	10	9	13	27	8
Skilled print-room	39	29	43	25	40	37
Pre-press	32	19	30	13	27	27
Finishing	24	**33**	30	25	20	27
Computing	27	24	35	25	47	31
Other	0	5	13	0	0	2
Difficulties in recruiting	20	29	43	50	47	33

* figures refer to percentage of respondents within each size band.

Having identified the various patterns of skills currently demanded, and established the existence of recruitment difficulties for a third of the sample, it is now appropriate to explore in more detail the nature and levels of investment in training provision that have taken place. The data set out in Table 7.8 provides a 'snapshot' of the levels of training for production employees in the 12 months prior to the survey. Out of the total sample of 108 respondents, 53 companies, employing 3849 employees, provided a detailed breakdown of the number of production employees receiving training. Of the 55 companies which did not respond, it is clear that the majority had not engaged in such training activity. Some respondents may have simply been unable, or unwilling, however, to provide such data. Table 7.8 can, therefore, be taken to represent the minimum level of training provided and, more importantly, presents the key trends observable for production training. Examining the results it is noticeable that companies are far more likely to have engaged in additional staff training. Taking the total number employed in the sample overall, this represents 4.2% of respondents' employees. To put this in some sort of context, the level of additional training uncovered by a national IMS survey conducted in early 1990, respondents were thus reflecting on activity in 1989 (the tail end of the 'Lawson boom'), was 5.4% (Leighton et al, 1991)[3].

The most striking finding, however, is the relatively low levels of investment devoted to upskilling non-craft employees. Thus, companies do not appear to be tackling any shortages of certain types of skilled labour through extensive retraining programmes of non-craft employees.

[3] These figures are 'justifiably' crude in order to facilitate comparison, but it should be noted that the aggregate IMS figures mask any regional bias. The figures refer simply to the total number of employees receiving additional training divided by total employment for the *whole* sample.

Table 7.8: *Levels of training for production employees in the last twelve months* (number of individuals).

	New entrant training	Additional staff training	Retraining from non-craft to craft.
Pre-press	31	100	
Press	29	47	19
Finishing: craft	28	50	6
Finishing: non-craft	21	22	XXXXXXXXXX

n = 53 Total employment for 53 responding companies = 3849

Turning to the actual types of training undertaken by the sample, Table 7.9 shows that the most frequent investment in training provision in the preceding twelve months was related to new technology familiarisation, a situation that is perhaps unsurprising given the fact that 85% of respondents had invested in new technology sometime in the last five years. This would seem to account for the focus on additional training for production employees. A significant minority of the sample, some 31.8%, had also invested in management training and 30% in quality awareness. The levels of investment varied significantly between companies, with a number of respondents identifying numerous areas of training activity within the last twelve months, but the data gives no information on the length of such training activity.

Nonetheless, identifying levels of training investment may in itself be of limited informational value. The design of the survey instrument means that the nature of investment is defined by the respondent; for example, a one hour demonstration during the installation of a new machine may also be 'double-counted' as quality awareness and upskilling training. Furthermore, merely identifying an area of investment allows little analytical purchase on the actual *quality* of training undertaken. The one major exception may be the 21.5% of the sample who claimed to have invested in modern

apprenticeship training, although, again, companies may define apprenticeships in different terms. The only authoritative finding we can, therefore, present at this stage is the fact that over a quarter of the sample engaged in no training activity whatsoever in the last 12 months.

Table 7.9: *Areas of training investment in the last twelve months.*

	Frequency	Percentage
Investment in management training	34	31.8
Supervisory training	25	23.4
New entrant training	31	29.0
Modern apprenticeship	23	21.5
Upskilling	23	21.5
New technology familiarisation	45	**42.1**
Teamworking skills	20	18.7
Quality awareness	32	29.9
General training	24	22.4
Other training	4	3.7
No training investment	28	26.0

In order to probe the issue of training quality the questionnaire asked a number of questions relating to the methods of training, the use of external training providers and certification. In this context, the results presented in Table 7.10 explore the various methods of training deployed by the participating companies, along with the most characteristic approaches undertaken with regard to new entrant training. Nearly a third of respondents (31.8%) indicated that new entrants would follow a specific company training programme for a set period of time. The prevalence of more regimented and structured training approaches for new entrants was far lower, with under a fifth (18.7%) of respondents claiming to follow the guidelines of the national training

agreement and just over a quarter (26.2%) reporting the adoption of a modern apprenticeship scheme.

Table 7.10: *Characteristics of new entrant training and predominant methods of training.*

	Frequency	Percentage
New entrant training.		
Follow BPIF/GPMU training agreement	20	18.7
Modern apprenticeship scheme	28	26.2
Select number of BPIF modules	5	4.7
Specific company training programme	34	**31.8**
No real training needed	16	15
Other training	3	2.8
Methods of training used at site.		
On-the-job (by member of company)	96	**89.7**
On-the-job (by external trainer)	25	23.4
In house off-the-job	21	19.6
External training provider	30	28.0
Learning by doing	65	60.7
Other methods	2	1.9

For the majority of the sample, training effort is typified by on-the-job training instruction. In nearly nine out of every ten cases this would tend to involve training by another member of the company, most probably by 'sitting next to nellie'. This finding was usefully explained by one respondent : 'This is very much a hands on business which does not have time to receive training from people who often do not appreciate the industry. Work experience from qualified colleagues is far better'. It appears that for a majority (60%) of companies skill acquisition is also acquired through learning by

doing. For many companies the provision of training would follow a pattern of a very short period of informal on-the-job training before the worker is 'thrown into the deep end' to learn the job for themselves. Thus, less than a quarter of respondents reported the use of external trainers for the provision of on-the-job training, and only 28% of companies claimed to use external training providers.

As for the type of external training provision used by companies, Table 7.11 clearly demonstrates that equipment suppliers were the most popular, regardless of firm size. As the case studies in Chapter 5 revealed, companies view equipment suppliers as a useful source of training during the implementation of new machinery. A few exceptions aside (for example, where companies send select workers to the manufacturers headquarters), this finding is in line with the preference of respondents for on-the-job training. By contrast, far fewer respondents reported using Leeds College of Technology, the largest provider of formal print training in the region, although given the level of criticism of the College's provision in recent years the findings may be higher than expected. Indeed, over half of all companies employing more than a 100 people, and a over a quarter of companies with a workforce of less than 20, indicated that they made use of the college. Nonetheless, critical comments were forthcoming from a number of respondents, including: 'Leeds College could have been a great source of training. When they changed from day release they spoilt it'; 'We applied to send a member of staff on a course advertised by the college. The course was cancelled due to lack of demand'.

Other sources of potential on-the-job provision, such as the BPIF and local Training and Enterprise Councils, had little impact on the sample, large companies aside. The exception was the use of external training consultants which, rather surprisingly, were widely used by respondents. This may well reflect a desire by companies to simply purchase short 'bursts' of training, tailored to specific company requirements, as and when required, rather than approaching an external source, such as a TEC, who may

expect them to tie training provision to some form of accreditation. A variety of alternative providers were mentioned by the 9% of respondents quoting other sources of provision, including: university courses, local adult training centre and headquarters training centre.

7.11: *Use of external training providers by size of company (percentage)*

Provider	1-9	10-19	20-49	50-99	100+	Total %
BPIF	2.4	4.8	13.0	0	53.3	13.1
Leeds College of Technology	24.4	28.6	17.4	12.5	53.3	27.1
Local TEC	12.2	19.0	13.0	25.0	33.3	17.8
Local Chambers of Commerce	12.2	0	4.3	12.5	20.0	9.3
Equipment suppliers	**29.3**	**38.1**	30.4	**50.0**	**66.7**	**38.3**
Private training consultants	9.8	23.8	**34.8**	12.5	66.7	27.1
Other providers	7.3	9.5	9.7	12.5	13.3	9.3

Certification is frequently used as a proxy measure of training quality (Felstead *et al* 1997). A position that has been championed by recent governments through the establishment of a series of 'training targets'[4], which seek to encourage companies to become accredited 'Investors in People'[5] and aim to increase the take up of NVQs at the workplace. Relating to this, the BPIF/GPMU recently estimated that, by 1998, 14% of printing companies had expressed a commitment to IiP, and thus set a target of 40% of companies employing more than 50 people to either be recognised or committed to IiP by the year 2000 (BPIF seminar May 1998). The survey findings from West Yorkshire suggest that this target may be overly ambitious. Only two companies had achieved IiP status at the time of the survey, and one of these, which employed 12

[4] See, for example, the recent green paper on lifetime learning by the Labour government (DfEE, 1998: Cm3790)

[5] Being an Investor in people is taken as an indication that the company is committed to developing the potential of its workforce and improving performance.

people, was an in-house printing department for a public sector organisation. For the sample as a whole, just 12 (11%) companies were currently undergoing IiP accreditation. If we focus specifically on those companies employing more than 50 people, however, the proportion of the sample either going through accreditation or currently holding recognition stands at 35%.

Table 7.12: *Employees undertaking NVQs by company size* (percentage).

	1-9	10-19	20-49	50-99	100+	Total
Employees undertaking NVQ's	9.8	19.0	13.0	50.0	73.3	24.3

Nearly a quarter of all respondents (24.3%) reported that employees were currently pursuing an NVQ qualification. As the results in Table 7.12 indicate, the size of the company seems to be an important factor. Barely 10% of companies employing less than 10 people have employees pursuing an NVQ compared to three quarters of companies employing more than 100 people. It is important to note, however, that the training targets set at the national level by the government and at the industry level by the BPIF and GPMU refer to the *number* of employees covered. The proposed printing industry targets for the year 2000 include: 20% of management qualified to levels 4 and 5; 25% of administrators qualified to level 3; 40% of supervisors with printing qualifications at level 3; and 35% of printing operatives with qualifications at level 3. The predominant NVQs reported by respondents included management, administration and printing qualifications, yet in only a very few cases were companies targeting all areas. We are also unable to ascertain the extent of NVQ take up in these organisations. Nonetheless, at the present time, it is almost certainly the case that NVQ take up is far narrower than the targets would envisage.

In order to assess the extent to which companies were developing a deeper, more strategic, environment with regard to human resource development, the survey sought to identify possible proxy HRM variables, such as the existence of an appraisal system, methods of teamworking and a commitment to total quality management. Table 7.13 reveals that only a third of all respondents determined the training and development needs of employees via a formal appraisal process, although the finding is more significant for those companies employing more than 50 people. In the absence of a formal appraisal process, respondents were given the opportunity to describe how they went about assessing the training and development needs of employees. In this respect, the most popular approach seems to revolve around occasional, informal discussions between employees and management and basic management intuition.

Table 7.13: *Human resource management indicators by firm size* (percentage).

	1-9	10-19	20-49	50-99	100+	Total
Appraisal system	7.3	28.6	34.8	75.0	86.7	33.6
Teamworking	9.8	28.6	43.5	37.5	73.3	31.8
Quality accreditation	7.3	33.3	39.1	75.0	66.7	33.0

Nearly a third of the sample also claimed to have introduced some form of teamworking within the last five years. Whilst a size effect is again apparent, it is less marked than was the case for appraisal. Indeed, teamworking was more prevalent amongst those companies employing between 20-49 people than those employing between 50-100. Any interpretation of these findings should, however, be treated with caution, for it may simply be the case that respondents, and particularly those in smaller companies, take a rather 'catholic' view as to what constitutes teamworking. Certainly, a number of respondents gave additional comments to the effect that 'teamworking is a necessary way of working in this organisation', thereby, reflecting the nature of work

organisation within small companies rather than the notion of self managed, polyvalent teams epitomised by the HRM literature (see Kochan and Osterman, 1994). The fact that less than a fifth of respondents had invested in dedicated teamworking skills within the last twelve months seems to offer some supporting evidence for this line of argument.

A third of the sample have achieved some form of quality award, most notably, BS5750 or ISO9000/1. Whilst large companies are once again more likely to have obtained a quality award, it is noticeable that the response for companies employing more than 100 people was significantly lower than with regard to teamworking or appraisal systems. This is not to suggest, however, that the third of large employers without a quality award pay no heed to such concerns. Indeed, it may be the case that there is a general antipathy amongst some companies toward the actual processes and nature of accreditation. As one respondent remarked, '[T]he principles are well understood and applied, but we don't collect badges or certificates'. In contrast, those respondents who have achieved a quality award seem more committed to systems of accreditation *per se*, as such companies are significantly more likely to be going through, or to have achieved, IiP accreditation.

Cross-tabulations reveal a significant association between the above practices and the existence of a formal, written training policy and training budget, thus suggesting that appraisal systems, teamworking and quality accreditation are more likely to occur within companies taking a more coherent, formal and strategic approach towards skill formation. Such an association could be rendered 'spurious' (Bryman and Cramer, 1997: 229-242) by the increased prevalence of such variables within large companies, yet further statistical testing for spuriousness[6] found this not to be the case. In general, the association remained regardless of firm size.

[6] The spuriousness test involved partitioning the tested relationship by different firm sizes. If the relationship is spurious then the original relationship disappears, if the original relationship holds, and remains statistically significant, then the association is non-spurious.

Table 7.14: *Factors prompting investment in training by firm size (percentage).*

	1-9	10-19	20-49	50-99	100+	Total
Competitive environment	36.6	33.3	34.8	**75.0**	**80.0**	45.8
Product market development	19.5	38.1	43.5	50.0	33.3	32.7
Technical change	**41.5**	**42.9**	**65.2**	62.5	40.0	**48.6**
Changing working practices	9.8	38.1	13.0	37.5	60.0	25.2
Quality requirements	24.4	**42.9**	52.2	50.0	60.0	41.1
Employee morale	2.4	38.1	39.1	62.5	33.3	27.1
Union pressure	0	0	0	0	6.7	0.9
Other	2.4	9.5	0	12.5	6.7	4.7

Having established a broad picture of the extent, nature and quality of training provision within the sample, it is now useful to examine the key factors prompting and constraining training investment. As Table 7.14 reveals, the key variable prompting investment in training was technical change, a logical result given the earlier finding that 85% of the sample had invested in new machinery within the last five years. This finding was, however, most marked for those very small companies employing less than 10 people. Elsewhere, respondents typically identified a range of relevant prompts, with quality requirements, changing working practices and product market development all scoring relatively highly for those companies employing more than 10 workers. Furthermore, for those respondents employing more than 50 people it was the competitive environment that was most likely to trigger investments in new skills. Pressure from a trade union to invest in training was insignificant, with just one large organisation citing this as a determining factor. Of the other factors identified, the most notable included general comments such as 'the desire to be the best in the market' and, in more specific terms, 'we need to train our own printers as it seems impossible to recruit trained men'.

Table 7.15: *Factors constraining training investment by firm size (percentage).*

	1-9	10-19	20-49	50-99	100+	Total
Cost	**61.0**	62.0	47.8	**37.5**	40.0	54.7
Lack of in-house facilities	14.6	33.3	21.7	**37.5**	20.0	22.6
Lack of courses	12.2	23.8	17.4	**37.5**	20.0	18.9
Quality and content of courses	9.8	23.8	9.6	**37.5**	33.3	20.8
Lack of time (employees too busy)	**61.0**	**66.7**	**65.2**	**37.5**	**60.0**	**62.3**
Diminished requirement for skilled labour	2.4	0	13.0	12.5	0	4.7
Fear of poaching	7.3	0	13.0	12.5	0	6.6
Current economic climate	9.8	14.3	17.4	**37.5**	20.0	16.0
Other						

Turning to possible inhibitors of training investment, it is clear from Table 7.15 that 'lack of time' and 'cost' are the two most frequently cited factors. These findings, as we may expect, are more pronounced for companies employing less than 50 people. But, nonetheless, for the sample as a whole over half regard cost as a constraining factor and six out of ten respondents claim that the fact their employees are too busy constrains investment in training provision. These results run against the grain of the more prescriptive, soft HRM agenda, where training is considered as an *investment*, no matter what the cost, in the human *resource*. In support of some of the case study evidence explored in earlier chapters, approximately a third of all companies employing more than 50 people cited the poor quality and content of courses on offer as a constraining factor. Given the recruitment problems and changes in the competitive environment noted earlier, it is, perhaps, surprising that only 6.6% of the sample cite 'poaching' as a possible constraint, and this may well be indicative of the low levels of certified training currently taking place.

7.3 The industrial relations environment.

Table 7.16 presents evidence on the extent of union recognition and membership of an employers association for the sample. Overall, a third of the sample were affiliated to the BPIF, a figure broadly in line with national statistics. Similarly, just over a third of all respondents recognise a trade union, which in most cases was the GPMU, though there are a couple of cases where other unions were mentioned. As expected, union recognition is significantly higher amongst those companies employing more than 50 workers. Ten companies (9.3%), however, claimed to have derecognised the GPMU. In line with the emerging picture of derecognition across the UK economy (Millward et al, 1992), this had primarily taken place in those companies employing less than 50 people. In this respect, there is some supporting evidence for the 'withering on the vine thesis', with three companies claiming that union membership was too low to substantiate recognition. Nonetheless, there is also at least one example of extreme anti-unionism, with one respondent adding the following addendum:

'Having run companies in the trade for the last thirty years, if it ever came about that unions became involved with firms on a compulsory basis, as they were 20 years ago, I would simply close the firm down and reluctantly go into retirement'.

Table 7.16: *Trade union recognition and affiliation to employers association by company size* (percentage).

	1-9	10-19	20-49	50-99	100+	Total
BPIF membership	9.8	42.9	39.1	62.5	53.3	33.3
Recognise a trade union	17.1	23.8	43.5	62.5	80.0	36.1
De-recognised a trade union	9.8	14.3	8.7	0	6.7	9.3

There is some evidence to suggest an associated relationship between union recognition and/or BPIF membership and the existence of a formal, written training policy and

training budget[7]. Further investigation, however, reveals that the association is rendered spurious by firm size. In other words, large companies are both more likely to recognise the union, hold BPIF membership, and have an established training policy and budget.

Table 7.17 explores in more detail the potential trade union impact on the training decision making process. In total, 3 out of ten *recognised* companies claimed to consult with the union over training issues. Actual union involvement in training decisions was less common, with significant union involvement only likely in companies employing more than 100 people. Nonetheless, nearly a quarter of all recognised companies stated that the union had a little involvement in training decisions. Over a third of the recognised sample claim to follow the BPIF/GPMU training agreement, although it is difficult to establish the extent to which they comply with the strictures of the agreement. Similarly, we are unable to discern the level of union influence in regulating the agreement within the various establishments.

Table 7.17: *Union involvement in the training decision making process by firm size* (valid percentages).

	1-9	10-19	20-49	50-99	100+	Total
Consult with union over training	2.4	4.8	8.7	25.0	53.3	33.3
Union heavily involved in training decisions	0	0	0	0	20.0	7.7
Union has a little involvement in training decisions	2.4	4.8	13.0	25.0	20.0	23.1
Follow the training agreement	2.4	14.3	13.0	12.5	40.0	35.9

[7] Although the association between BPIF membership and the existence of a training budget was not statistically significant.

7.4 Conclusions.

The key findings which emerge from our survey of printing firms in West Yorkshire show that there has been a wide variety of training activity. In the twelve months prior to the survey, 1 in 3 respondents invested in some form of management training, 1 in 5 claimed to have engaged in upskilling activity, and over 40% had undertaken new technology familiarisation training. Such investment must be set alongside an environment in which the majority of firms had experienced increasing levels of output, were investing in new technology, and over a third were forecasting that their levels of employment would increase in the near future. Against this backdrop, the current demand for skills amongst the sample was considerable and significant, particularly for management and craft skills. Furthermore, a third of respondents were currently experiencing difficulties in recruiting suitably skilled personnel. Given the fact that the *depth* of part-time and causal employment was low, even if the practice was widespread, it may be reasonable to conclude that companies would be attempting to meet their skills deficits through extensive and structured programmes of training, complemented by the introduction of new forms of working practices, such as teamworking and functional flexibility. On the whole, however, the findings do not support such a thesis.

Just under a quarter of the sample had established a formal, written policy for training provision, and even fewer (18%) had a dedicated financial budget to support this. Moreover, when pressed to explain their training policy, few companies appeared to have aligned their policy for training with their broader business objectives or embedded training within a broader human resource development approach. Given this lack of strategic 'vision', it is unsurprising, therefore, to find that the training activity actually undertaken was patchy and, in the main, informal. Over a quarter of the sample had engaged in no training activity whatsoever in the last twelve months. Where it had taken place, it was predominantly conducted either on-the-job by a more experienced employee or through 'learning by doing'. Whilst the study was unable to

ascertain the length or frequency of training effort, the survey results do provide some general support for the case study findings that much training activity revolves around new technology instruction. Indeed, most training activity for production employees was identified as basic additional instruction. It is of some concern that the evidence suggests that even the incidence of additional training is down on the levels recorded in 1989. Even more noteworthy is the almost total neglect of non-craft to craft retraining.

There is evidence that a degree of systematic and formal training had taken place. In particular, just over a quarter of the sample claimed to have invested in a modern apprenticeship scheme. Furthermore, approximately 28% claimed to have used the provision of Leeds College of Technology and nearly a fifth of the sample have made use of a local TECs services. Such results need to be tempered with a degree of caution however. Firstly, the data on new entrant numbers was pitifully low. Thus, the actual number of modern apprentices is almost certainly significantly less than institutions such as the BPIF would desire. Moreover, the fact that only a fifth of the sample claimed to follow the BPIF/GPMU guidelines for new entrant training suggests that many companies are introducing modern apprenticeships without regard for the established industry standards. Secondly, given the strong emphasis on serving regional markets, particularly for the smaller firms in the sample, it would seem logical to expect an 'attachment' to local economic agencies. The fact that this was not the case should, therefore, be of some concern to local Training and Enterprise Councils.

The accreditation movement also seems to have made a minimal impact on the printing industry. At the time of the survey, only two companies had achieved the Investors in People award, with just one in ten currently undergoing accreditation. The situation was more impressive, however, for those firms employing more than 100 people, three quarters of which claimed to be committed to achieving IiP status. Yet, as the case study of Storey Evans in chapter 5 indicated, IiP accreditation can be a long drawn out procedure and it is by no means a certainty that those committed will eventually

achieve the award. The recent targets set by the BPIF/GPMU for the industry seem, therefore, to be overly optimistic. Similarly, whilst NVQs are starting to penetrate the industry, both the breadth and depth of take-up is, at the present time, limited.

Turning to broader HRM indicators, roughly a third of the sample reported the use of appraisals to identify the training and development needs of employees, although this was most prevalent in those firms employing more than 50 people. For the sample as a whole, most respondents claimed to identify training needs through informal discussion and management intuition. Furthermore, even where formal appraisal systems supposedly exist there is reason to doubt the extent to which this affords real employee influence, as only a third of companies employing more than a 100 people cited employee morale as a key factor prompting investment in training. Again, methods of teamworking appeared to have been introduced by approximately a third of respondents. The survey was unable to determine, however, the exact form or nature of such working practices. But the limited investment in teamworking skills, coupled with the penchant of smaller firms to proclaim teamworking as the 'natural order' of working, suggests we would find few examples of the multi-skilled, autonomous group working practices espoused by much of the HRM literature.

Finally, the survey found only a limited involvement in workplace training decisions by the GPMU. This was most prominent in companies employing in excess of 50 people, and primarily related to union/management consultation. Thus, whilst over a third of all *recognised* firms reported following the national training agreement for training purposes, outside of the larger companies it is doubtful whether the workplace union have any significant role in determining that the specifics of the agreement are followed. In terms of the sample as a whole, just 13% reported following the national training agreement.

Chapter 8: Summary and conclusions.

The empirical data have raised a number of important issues with regard to current debates on skill formation and workplace restructuring. This chapter briefly reviews our empirical findings and provides a concluding statement. Section 8.1 summarises the key findings of the research on the dynamics of skill formation in the UK printing industry. Section 8.2 draws out the broader implications of the study for training and development and HRM research; the role of trade unions as agents of skill formation; and training policy formulation. Potential areas of future research are identified. The section concludes with a brief assessment of the methodological foundations of the study.

8.1 The dynamics of skill formation in the UK printing industry: A brief summary.

By focusing on the institutions and transformations of a specific industry, our case study has developed a nuanced, multi-layered analysis of the dynamics of skill formation. The study has shown the way in which investments in training and development are shaped, and influenced, by patterns of industrial and organisational restructuring, and how these processes of restructuring are themselves mediated by national, and local economic and sectoral developments. More specifically, the analysis has traced the historical evolution of the industry's training infrastructure, and assessed the extent to which this legacy of skill formation has been undermined by recent processes of restructuring and new management strategies.

Thus, over the past two decades, a complex and significant process of restructuring has intensified the heterogeneous and fragmented nature of the industry. The ramifications for the industry's employment structure and industrial relations environment have been profound, but have been manifested most sharply in the national and regional newspaper sector, where management responses to new technology have led to mass redundancies, industrial conflict, union derecognition and deteriorating terms and

conditions of employment. Developments in computerised systems and laser printers have also spawned a huge number of small print shops employing young, cheap, non-union labour (Goss, 1987). Whilst technological advancements have been just as widespread in the remainder of the general printing industry the institutions of industrial relations and job regulation have exhibited greater continuity. As the study indicated, those companies affiliated to the BPIF are still subject to a national collective agreement over pay, working conditions and training provision, and union density in these companies remains high (Leisink, 1996; Roe, 1996).

It could be argued that the industrial and product market structure of the general printing industry is, in many respects, conducive to multi-employer bargaining. For as Gennard and Judge (1997:69) note, '..where an industry is made up of many small companies which are very competitive with each other....the national agreement is important to members because it is seen as having the ability to take labour costs out of competition'[1]. The existence of the agreement has ensured, therefore, a strong role for union dialogue in the industry, with the provisions for skill formation widely recognised as one of the few cases of social partnership over training in British industry (Leisink, 1996; TUC, 1991). Nonetheless, whilst the institutional edifice remains, the changing terms of the agreement symbolise the contested terrain in which it operates. Not only has the agreement been instrumental in introducing new working practices into the industry over the last decade, but, in recent years, following the breakdown of the arrangements and dispute in 1993, the agreement has been re-fashioned on terms significantly more favourable to employers.

In terms of training arrangements, this has meant replacing any notions of compulsion with voluntary choice. Under the provisions of the new training agreement, therefore, the inclusion of a 'trainee quota' has been dispensed with. Whilst the need for manpower planning is still identified as important, companies are now merely

[1] See also Gospel and Drucker's (1998) recent study of the electrical contracting industry.

encouraged, rather than expected, to engage in a dialogue with the union over such matters. Similarly, there is no longer any requirement under the agreement for trainees to follow an appropriate college course. Nonetheless, even though the role of the agreement as a regulatory device seems to be diminishing, it still aims to set the standards for skill formation across the industry. In this respect, recent government initiatives such as NVQs, modern apprenticeships and training targets have been assimilated into the existing arrangements, although in the case of NVQs this proved to be a protracted process.

Despite these developments, the study suggests that the printing industry's traditional structures and mechanisms for skill formation appear to be in a state of atrophy. Whilst the number of new trainees in the industry increased from an all time low of 100 in 1991 to 500 in 1997, this increase was in line with the business cycle[2]. More broadly, the formalities and provisions of the agreement have been forsaken in recent years as employers have undertaken more locally defined, and business specific, programmes of training investment. Such investments were *triggered* by a variety of restructuring imperatives - including the changing competitive environment, technological developments, cultural change and the broader management of change - but, in general, were *manifested* in terms of informal, sporadic, on-the-job programmes of retraining activity, which were rarely linked to progressive levels of competency based qualifications or reward. There is little evidence to suggest, therefore, that firms are supplanting the traditional, industry based structures of training provision with well developed internal labour markets and career paths.

Nor did the research uncover any sustained, and coherent, alternative forms of skill formation and training stimuli emanating from local economic agencies and training providers. Whilst Leeds TEC and the Leeds Development Agency launched initiatives

[2] Nor, in relative terms, is the increase in trainee numbers that impressive. The electrical contracting industry, for example, had 10,229 registered apprentices in 1996 out of a total workforce of 82,000 (Gospel and Drucker, 1998:260).

aimed at upgrading the human and technical capacity of the local industry, their interventions foundered due to a lack of ongoing sectoral support. It is also clear that the introduction of NVQs and modern apprenticeships have generated an increasingly conflictual relationship between potential training providers. For example, as the Industrial Training Organisation, and thus the awarding body, for printing, the BPIF has sought to aggressively re-profile itself as 'the number one business support organisation for the industry', in contrast to its traditional, narrower, industrial relations role. In this regard, its commercial training packages now compete directly with the services of printing colleges, and to a lesser degree TECs, which have themselves sought to introduce more 'business-led' provision in recent years.

Taken as a whole, the empirical material presented in this thesis represents a meaningful addition to our existing stock of knowledge on the dynamics of skill formation in the UK. But, perhaps more significantly, the analysis reveals the benefits that can accrue from a sectoral specific investigation. Rather than adopting the typical, 'voluntarism explains all' approach, so pre-eminent in much of the VET literature, the sectoral focus has allowed us to cast the various roles played by capital, labour and state institutions, in shaping and constraining processes of training policy formulation and practice, within 'a [more] concrete and historically sensitive framework' (see Arrowsmith and Sisson, 1998:27). In this regard, the empirical findings have a number of implications for current debates on skill formation and HRM, social partnership, and state training policy and it is to these broader concerns that we now turn.

8.2 Themes and issues in the training debate: revisited

8.2.1 Skill formation and HRM.

For much of the HRM literature, patterns of investment in training and development are treated in an homogeneous fashion across British industry. Thus, with the exception of a few 'isolated islands of excellence' (Streeck, 1989: 94), most firms will, due to a series of re-inforcing institutional constraints, consistently regard training and

development as a cost rather than an investment. As a consequence of this determinism, managers are treated as essentially *passive* victims of the system, and the need for empirical analysis of the realities of specific sectors and firms is sidelined. This study suggests that such an account allows limited analytical purchase on the changing, evolving and different dynamics and processes of skill formation within and between British firms.

As our empirical findings revealed, even though few firms had established written training plans they were far from passive in this area. Firstly, training investment was triggered by a multitude of factors resulting in differential courses of training activity. For example, at Gilchrist a period of workforce retrenchment prompted a programme of retraining to increase the capacities of the much reduced workforce. For many of the smaller firms in our survey sample, the basic determinant of training provision was the introduction of new technology. At Storey Evans, customer demand proved highly influential, as the quality and service stipulations of its major 'blue chip' customers required the company to meet agreed targets and continuous improvements in performance. The influence of emerging customer-supplier relations in shaping patterns of skill formation and HRM is an underdeveloped area of enquiry and requires further empirical investigation.

Secondly, the company case studies suggest that managers are often well attuned to the language of HRM, and investments in training and development are often articulated, and understood, in relation to the broader 'management of change' and the requirements of 'cultural engineering'. This may well be indicative of 'emergent' HRM and training strategies, yet it is also clear that the relationship between, and implementation of, HRM initiatives can be far from straightforward. At Gilchrist, for example, the trajectory of multi-skilling and functional flexibility was claimed by the FD to have gone too far, thus obscuring and undermining the company's traditional specialised functions. The *unintended consequences* of new working practices and training

interventions may themselves emerge due to the lack of deeper strategic calculations. Indeed, pervasive informality would seem to militate against the implementation of more coherent policies and practices, such as training needs appraisals and skills audits, geared towards the identification of unforeseen future requirements. But, more significantly, our analysis suggests that the determinants and outcomes of workplace training investments are more sensitively appreciated when situated against the wider 'totality of employment restructuring' (Heyes, 1996:366).

Thus, a central argument of this thesis is that, hitherto, there has been a neglect of the way in which the dynamics of skill formation are shaped by different production and business requirements and the historical, and evolving, social institutions that characterise particular industries. Moreover, by locating processes of skill formation within a more grounded social and material context the study has been able to bring *political* concerns to the fore. Our findings from the printing industry have shown conclusively that we must be wary of accounts that depict skill formation as a value-neutral panacea. The case study of Mailprint, for example, provided useful insights into the way in which the underlying business imperatives of training and development can undermine deeper concerns of employee commitment and the establishment of a training culture. Whilst the company had undertaken a concerted programme of training in line with their immediate business needs prior to the new site this did not lead to any ongoing programmes of, or structures for, training. The emphasis on internal development was thus too infrequent, ad-hoc and firm specific to generate much enthusiasm amongst employees. It was also clear that employee attitudes towards, and expectations of, training provision and enterprise restructuring are conditioned by past experiences and the traditional definitions of skill that underpin the shopfloor division of labour.

Finally, the study identified some of the potential problems that can complicate emerging coalitions between companies and local economic agencies. All of the case-

study firms were well versed with recent national developments in training provision and, with the exception of Mailprint, all had played some role in the local sectoral initiatives. Storey Evans was unique in committing itself to pursuing IiP however, with the other three case study firms opposed to such accreditation procedures. The MD of Technoprint was strongly opposed to supply led initiatives which were insensitive to the demands of firms. Yet the key issue here, and one which strikes at the heart of the training and development agenda, is the question of *payback*. In contrast to the HRM literature, none of the companies regarded training as a 'vital component' *in itself* and all invested in line with their short-term competitive, product market and technological needs. In this respect, the benefits of training on an ongoing basis and to high levels is something that has yet to be proven to the business community. As the customer services director at Mailprint noted, '[O]ur concern is not about public consumption but about increased effectiveness....*I would dearly like to see some proof that what you might call externally qualified training impacts upon deliverable performance*.

8.2.2 Skill formation and the 'new bargaining agenda': trade unions as agents of skill formation.

According to the Labour government's recent green paper on life long learning,

'Learning is a natural issue for partnership in the workplace between employers, employees and their trade union. Businesses with their desire for improved competitiveness, and employees, concerned with job security and future prospects, have a shared interest in learning. This joint activity, focusing on practical issues such as time off for learning, employer support for individual learning accounts, and training plans for staff, signals a *new* and *modern* role for unions' (DfEE, 1998:35, *emphasis added*)[3].

The 'rhetoric of social partnership' has also underpinned the TUC's recent 'Bargaining for Skills' campaign, which exhorts 'employers and TECs to collaborate with trade unions' in order to upgrade the skills base of the UK economy (Heyes and Stuart, 1998:459). For proponents of the 'new bargaining agenda' (Leisink, 1993; Mathews,

[3] For a critical commentary on the 'Learning Age' see Stuart (1998).

1993), occupational concerns, such as training and development, offer the potential to transcend the adversarialism of traditional industrial relations interests. Yet, this study has identified some of the complexities that may underpin and complicate any joint union-management initiatives over training and development, and suggests that positive-sum depictions of training and development are problematic. More specifically, our analysis questions accounts which effectively abstract processes of skill formation from any broader understanding of the social relations of production, the wider industrial relations environment and the emerging nature of trade union strategy.

In the printing industry, both the BPIF and GPMU have a strong and vested interest in skill formation, and the national agreement appears to represent one of the few examples of social partnership over training issues across British industry. Yet the existence of an agreement tells us little about how the negotiation process and the relations in production have changed. As this study has demonstrated, the agreement has been symbolic of a contested and ongoing process of change in recent years. More significantly, the existence of the agreement does not determine its success. At the workplace level, few printing firms appear to be influenced by the agreement, and, as the case studies revealed, even when companies utilise the agreement's training modules they tend to do so on their own terms, rarely *involving* the trade union in the decision making process. Overall, the agreement has proved relatively ineffective in ensuring a stable and high intake level of trainees and in fostering the implementation of NVQs and IiP.

At a more general level, these findings give some indication of the difficulty facing trade unions in establishing a meaningful *mutuality* with employers over training decisions. Firstly, it is clear that the congruency of interests between capital and labour with regard to training and development cannot be taken as a given. Secondly, and perhaps more importantly, it is important to recognise that training issues cannot be divorced from the broader, and more traditional, industrial relations agenda. As the

TUC itself recognises, in order to engage more fully with training and development issues, trade unions will find themselves challenging longstanding managerial prerogatives over information and decision making. Given the apparent reluctance of employers to 'involve' trade unions in the decision making processes pertaining to training, it is clear that the actual social foundations of partnership have yet to be adequately defined or resolved (Heyes and Stuart, 1998).

Furthermore, as Kelly (1996) notes, the espousal of co-operation rings somewhat hollow compared to the hostility and marginalisation experienced by unions in recent years. For example, during the breakdown of the printing national agreement in 1993 the GPMU urged the BPIF to meet with them over training issues, despite their differences over pay and conditions, as this was essentially a joint concern. The BPIF refused to do so, and urged its members to move towards single employer bargaining throughout the dispute. '[I]n the absence of institutionalised political support for social partnership at national and sectoral level' (Claydon, 1998:192), it is hard to envisage any substantial progress being made in this area. In this regard, our analysis would support those commentators who suggest that improvements in skill formation are more likely to occur when union organisation is strong and active rather than weak and cowed (see Heyes and Stuart, 1998; Kennedy *et al*, 1994; Phillimore, 1997). As the case study of Mailprint indicated, whilst the union had 100% membership on the shopfloor, the absence of a strong workplace organisation meant it could do little to influence the training decision making processes.

The study also raises important questions with regard to the relationship between trade union skill formation *strategies* and their evolving membership *structures*. According to Phillimore (1997), union training strategies fall into two main camps[4]. Under the first, '*skill-capture*', model, unions strive to defend the skills of specific sections of the workforce, typically in line with craft traditions. Under the second, *inclusive*, model,

[4] This approach is heavily influenced by Mahnkopf (1992) and Streeck (1992).

unions develop 'strategy built around broad-based skills for all workers' (*ibid,* 34). For Leisink (1993), the formation of industrial unions, such as the GPMU, may aid innovatory union policies as inter-occupational rivalries are dissipated by the acceptance of 'broadly defined skill levels, which are conducive to internal flexibility and .....arrangements that offer retraining and redeployment' (*ibid*, 14). This study has revealed the difficulties merged and general unions face in shifting towards the *inclusive* model. Whilst the GPMU has advocated the uptake of NVQs throughout the industry this has yet to be articulated in terms of the development of well defined industry career paths for *all* workers. Indeed, the over-riding concern of the training agreement (with formal traineeships and modern apprenticeships) favours certain sectional interests based around established occupational labour markets, rather than the promotion of developmental internal labour markets. The key point to emerge here is that if trade unions are to become, and be perceived as, true 'agents of skill formation' they must devise strategies for training and development that cover, and appeal to, increasingly diverse membership needs and interests. The changing relationship between occupational and internal labour market interests, employer policy and emerging union strategies of skill formation is certainly an area well worth further empirical investigation.

8.2.3 Skill formation and policy implications.

We turn now to the policy implications of our analysis for the broader institutional configuration of the British training system. By devolving responsibility for the training system to employers, TECs were designed to create a more efficient alignment between the supply of training and the demand for skills, in the belief that employer investment in training would significantly increase. Our empirical evidence questions the ability of such agencies to foster the local regeneration of the skills base and significantly improve the levels of high quality investment in training provision. Firstly, TECs are faced with significant challenges in terms of generating enthusiasm for their products. Secondly, their ability to target, and meet, the needs of key local

industries is often found wanting. As the research uncovered, this is not due to a lack of intent or supporting initiatives, but the inability of TECs to raise the terrain of debate above the habitual sectional, and competing, interests of different training providers and industry constituents.

Sectoral specific initiatives represent unique attempts by TECs, and other economic agencies, to tackle industry concerns and future needs through the fostering of collaborative partnerships. Indeed, given the institutional exclusivity of TEC boards (see Rainbird, 1994b), such initiatives often provide the only real opportunity for trade unions and educational providers to engage with and shape TEC policy. The training grants obtained by the GPMU, for example, provide a useful insight into the possible collaborative relationships that unions can develop with TECs. Nevertheless, the effectiveness of such sectoral forums is often stymied by a lack of ongoing company support and commitment, particularly from small businesses. The study found that few firms were prepared to get involved in the Leeds printing initiatives, and those that did were primarily the larger printing organisations in the locality. Repeated attempts by Leeds TEC and the LDA to stimulate small firm interest in the initiatives all resulted in failure. One explanation, given by the MD of Technoprint, suggested that the 'supply led' nature of the initiatives had little relevance to the demands of small firms. But it is also apparent that the services of the TEC were typically perceived to represent the interests of larger employers.

Our empirical analysis thus questions the role and potential of TECs to 'meet the needs of new and established small businesses by .... developing local enterprise support networks to harness the growing opportunities available in local business markets' (Department of Employment, 1988:43). The study also challenges the prescription advanced by Vickerstaff (1992:8) that '[S]ector groupings may help small firms and facilitate the formation of group training schemes or co-operatives'. Even where TECs give greater emphasis to *sectoral networking*, the involvement of small firms, and the

generation of co-operative local networks, may not materialise. Many small firms often operate *insular* and *isolated* training and labour management strategies far removed from the priorities and quality driven imperatives of local agencies such as TECs. Furthermore, as the case of Technoprint demonstrated, many small firms may also see their interests as best served by employing a young, low cost, non-unionised workforce. Overall, the failure of TECs to engage with the needs and requirements of small firms raises some serious questions in terms of equality of access and opportunity, given the fact that firms employing less than 50 people now account for nearly half of the total UK labour force.

It is also evident that TECs have been far from successful with regard to the training activities of larger firms. As our survey and case study findings indicated, the National Education and Training Targets have failed to trigger, and deliver, higher levels of training investment and activity. Only one of the companies involved in the sectoral initiatives had committed itself to IiP accreditation, and it was apparent that even those firms involved in the Leeds printing initiative were far from enthusiastic supporters of the role of the TEC. Many of the companies were involved solely to promote their own interests and keep abreast of recent developments in the industry, and thus sidelined attempts by the TEC to promote its services and provisions to the industry.

According to Abbot (1994:85), TECs can improve their effectiveness, as well as their attractiveness to local businesses, by 'working in partnership, sharing information and resources, with sector specific organisations' such as the Industrial Training Organisations (ITOs). This downplays, however, the commercial imperatives of the contemporary training system and the likely conflicts of interest this can generate. As the ITO for the printing industry the BPIF regarded Leeds TEC with a degree of caution and, as the analysis of the sector groupings indicated, it sought to limit any possible competition between itself and the TEC. Nonetheless, the BPIF frequently clashes with TECs and other industry training providers over the provisions of NVQs and MAs.

In summary, recent policy initiatives aimed at providing a training market have failed to initiate a major programme of skill upgrading across UK industry, with TECs, in particular, failing to connect with contemporary processes of enterprise restructuring. Our findings show that firms' training policies and practices are primarily directed towards immediate production imperatives and short-term business goals, rather than as part of a long-term, continuum of human resource development. Denied a significant regulatory capacity, TECs have been unable to effect a major shift in UK patterns of skill formation. In this regard, it was perhaps unsurprising that the study found a residual degree of support for the old ITBs. As Mailprint's customer services director noted, 'without a bit of financial compulsion no amount of exhortation will help'.

At a more conceptual level, the study suggests that accounts which depict recent developments in terms of the emergence of a 'post-Fordist' state should be treated cautiously. Jessop (1993) argues, for example, that as the nation state becomes 'hollowed out', 'local, regional and sectoral institutions involving labor and capital become increasingly important in skill formation' (Rutherford, 1998: 133). Such institutions are themselves, however, shaped and constrained by broader processes of industrial and organisational restructuring. Thus, in the UK, the 'hollowing out' of the state has proceeded alongside the denigration of institutional capacities at sectoral and local levels. Against this backdrop, the potential for emerging social partnerships over skill formation, and their ability to effect meaningful and productive transformations, appear remote. The weaknesses of key social agencies and institutions continue to hamper the modernisation and upgrading capabilities of UK industry (Nolan, 1996).

8.2.4 Researching skill formation: a note on method.

This study has examined in some detail the relationship between restructuring processes, the dynamics of skill formation and firms' HRM policies and practices. Following an embedded case study design, the research utilised complementary empirical techniques to explore the interplay of factors shaping skill demand, supply,

acquisition and deployment within the printing industry. Our findings highlighted the way different production and competitive imperatives triggered and constrained firms' training policies and practices, and noted the difficulties firms faced in introducing a coherent set of HRM practices. In this regard, and in contrast to the 'controlled experiment' methodology of the NIESR, the case study design facilitated an analysis that was *acutely sensitive to context*, allowing firms' labour management strategies to be placed firmly within an appropriate institutional and structural environment. As a consequence, the study was able to examine the dynamics of skill formation at different levels of analysis, thereby integrating processes of restructuring and skill formation at the national, local and workplace level. Key in this respect was an assessment of the conditioning effect of the industry's training agreement and infrastructure and the role of local labour market agencies in shaping training decisions at the level of the workplace.

This approach stands in contrast to much of the extant VET literature, which has focused primarily on the institutional architecture inhibiting skill formation and possible technocratic cures for the British training problem. Our analysis challenges accounts which seek to understand policy debates concerning training interventions and skill upgrading strategies *in isolation* from the detailed realities of enterprise restructuring within specific firms and industries. Most significantly, the thesis questions the treatment of skill formation as an essentially 'positive' sum issue. Rather than sidelining the 'inherent tensions' in the training system between capital, labour and the state, this study has revealed the way processes of skill formation are inserted into, and played out in, the contested environment of the industry, the local labour market and the workplace.

Bibliography.

Abbott, B. (1994) 'Training strategies in small service sector firms: employer and employee perspectives', *Human Resource Management Journal*, Vol.4, No.2, 70-87.

ACAS (1992) *Consultation and Communication.* London.

Aglietta, M. (1979) *A Theory of Capitalist Regulation.* London: New Left Books.

Aldcroft, D.H. (1992) *Education, Training and Economic Performance 1944 to 1990.* Manchester: Manchester University Press.

Amin, A. (1991) 'Flexible specialisation and small firms in Italy: myths and realities', in Pollert, A. (ed) *Farewell to Flexibility.* Oxford: Blackwell.

Arrowsmith, J. and Sisson, K. (1998) 'Pay and working time towards organisation-based systems?', Industrial Relations Research Unit, University of Warwick, Mimeo.

Ashton, D. and Felstead, A. (1995), 'Training and development', in Storey, J. (ed) *Human Resource Management: a Critical Text.* London: Routledge.

Ashton, D. and Green, F. (1996). *Education, Training and the Global Economy.* Cheltenham: Edward Elgar.

Ashton, D., Green, F. and M, Hoskins. (1989) 'The training system of British capitalism: changes and prospects', in Green, F. (ed), *The Restructuring of the UK Economy.* Hemel Hempsead: Harvester Wheatsheaf.

Atkinson, J. (1984) 'Manpower strategies for flexible organisations', *Personnel Management*, August, 28-31.

Bacon, N., Ackers, P., Storey, J. and Coates, D. (1996) 'It's a small world: managing human resources in small businesses', *The International Journal of Human Resources*, Vol7. No.1, 82-100.

Baldamus, W. (1961) *Efficiency and Effort: an Analysis of Industrial Administration.* London: Tavistock.

Becker, G. (1975). *Human Capital*, 2nd edn. Chicago: University of Chicago Press.

Beer, M., Spector, B., Lawrence, P.R., Quinn Mills, D. and Walton, R.E. (1984), *Managing Human Assets.* New York: Free Press.

Best, M. (1990) *The New Competition: Institutions of Industrial Restructuring.* Cambridge: Harvard University Press.

Booth, A.L. and Snower, D.J. (1996) 'Introduction: does the free market produce enough skills?' in Booth, A.L. and Snower, D.J. (eds) *Acquiring Skills: Market Failures, their Symptoms and Policy Responses*. Cambridge. Cambridge University Press.

Boyer, R. (ed) (1988) *The Search for Labour Market Flexibility*. Oxford: Clarendon Press.

BPIF (1994) BPIF regional printing education plan for the north eastern region: incorporating Yorkshire and Humberside and the northern region. May.

BPIF (1996) *Facts and figures about the printing industry*, June.

BPIF (1998a) *Facts and figures about the printing industry*.

BPIF (1998b) *What skill targets would improve printing industry performance*?

BPIF/GPMU National Agreement 1992/3

Braverman, H. (1974) *Labor and Monopoly Capital: the Degradation of Work in the Twentieth Century*. New York: Monthly Review Press.

Bryman, A. (1988) *Quantity and Quality in Social Research*. London: Routledge.

Bryman, A. and Cramer, D. (1997) *Quantitative Data Analysis with SPSS for Windows*. London: Routledge

Burrows, R. and Loader, B. (eds) (1994) *Towards a Post-Fordist Welfare State*. London: Routledge.

Campinos-Dubernet, M. and Grando, J. (1988). 'Formation Professionelle Ouvrière: Trois Modèles Européenes', *Formation/Emploi*, 22: 5-29

Central Statistical Office: *Report on the Census of Production: Printing and Publishing*, 1980-1992.

Chapman, P. (1994), 'Investing in skills: training policy in the UK', in Buxton, T., Chapman, P. and Temple, P. (eds) *Britain's Economic Performance*. London: Routledge.

Child, J. (1967) *Industrial Relations in the British Printing Industry: the Quest for Security*. London: George Allen and Unwin.

Claydon, T. (1993) Training and the new bargaining agenda: the limits to co-operative joint regulation within the firm, paper presented to the British Universities Industrial Relations Conference. University of York, July.

Claydon, T. (1996) 'Union derecognition: a re-examination', in Beardwell, I. (ed) *Contemporary Industrial Relations: a Critical Analysis*. Oxford: Oxford University Press.

Claydon, T. (1998) 'Problematising partnership: the prospects for a co-operative bargaining agenda', in Sparrow, P. and Marchington, M. (eds) *HRM: the New Agenda*. London: Pitman Publishing.

Claydon, T. and Green, F. (1994) 'Can trade unions improve training in Britain?' *Personnel Review*, Vol.23, No.1, 37-51.

Cockburn, C. (1991) *Brothers: Male Dominance and Technical Change*. London: Pluto Press.

Collinson, M., Rees, C., Edwards, P. and Inness, L. (1998) *Involving Employees in Total Quality Management*. London: Department of Trade and Industry.

Coxhead, R. (1992) 'Printers fail the training test', *Litho Week*. July 28th, 19-17.

Crafts, N. (1996) '"Post-Neoclassical Endogenous Growth Theory": what are its policy implications', *Oxford Review of Economic Policy*, Vol. 12 No2, 30-47.

Crowley-Bainton, T. (1993) *TECs and Employers: Developing Effective Links. Part 2: TEC-Employer Links in six TEC Areas*. Employment Department. August.

Curry, J. (1993) 'The flexibility fetish: a review essay on flexible specialisation', *Capital and Class*, Vol.50, 99-126.

Cutler, T. (1992) 'Vocational training and British economic performance: a further instalment of the British Labour Problem', *Work, Employment and Society*, Vol. 6 (2), 161-183.

Daly, A., Hitchens, D. and Wagner, K. (1985) 'Productivity, machinery and skills in a sample of British and German manufacturing plants', *National Institute Economic Review*, No.111, 48-61.

Delbridge, R. and Turnbull, P. (1992) 'Human resource maximisation: the management of labour under just-in-time manufacturing systems', in Blyton, P. and Turnbull, P. (eds) *Reassessing Human Resource Management*. London: Sage.

Department for Education and Employment (1997) *Labour Market and Skill Trends 1997/98*.

Department for Education and Employment (1998) *The Learning Age: a Renaissance for a New Britain*, Cm3790, The Stationery Office.

Department of Employment (1988) *Employment for the 1990s*, HMSO.

Department of Trade and Industry (1996) *Small and Medium Sized Enterprise (SME) Statistics for the United Kingdom*, 1994. July.

Dolton, P.J. (1993) 'The economics of youth training in Britain', *The Economic Journal*, 103, 1261-1278.

Down, S. and Smith, D. (1998) 'It pays to be nice: Investors in People: the search for measurable benefits, *Personnel Review*, Vol. 27. No, 2 143-155.

Duberley, J. and Walley, P. (1995) 'Assessing the adoption of HRM by small and medium-sized manufacturing organisations', *The International Journal of Human Resources*, Vol. 6 No.4, 891-909.

Dunne, P. and Hughes, A. (1990) 'Small businesses; an analysis of recent trends in their relative importance, and growth performance, in the UK with some European comparisons', Working Paper No. 1, *Small Business Research Centre*, Department of Applied Economics, Cambridge University.

Edwards, P.K. (1990) 'Understanding conflict in the labour process: the logic and autonomy of struggle', in Knights, D. and Willmott, H. (eds) *Labour Process Theory*. London: Macmillan

Edwards, P.K. and Wright, M. (1998) 'HRM and commitment: a case study of teamworking', in Sparrow, P. and Marchington, M. (eds) *HRM: the New Agenda*. London: Pitman Publishing.

Elger, T. (1996) *Manufacturing Myths or Miracles? Changing Work and Employment Relations in British Manufacturing*, Labour Studies Working Papers No. 11, Centre for Comparative Labour Studies, University of Warwick.

Felstead, A. (1994) *Funding Government Training Schemes: Mechanisms and Consequence*s, Centre for Labour Market Studies, Working Paper No.2. Leicester University.

Felstead, A., Green, F. and Mayhew, K. (1997) *Getting the Measure of Training*, Centre for Industrial Policy and Performance, University of Leeds.

Finegold, D. (1991) 'Institutional incentives for skills creation: preconditions for a high skill equilibrium', in Ryan, P. (ed) *International Comparisons of Vocational Education and Training for Intermediate Skills*. Lewes: Falmer.

Finegold, D. and Soskice, D. (1988). 'The failure of training in Britain: analysis and prescription, *Oxford Review of Economic Policy*. Vol. 4, No.3, 21-52.

Forrester, K., Payne, J. and Ward, K. (1995), *Workplace Learning: Perspectives on Education, Training and Work*. Averbury: Aldershot.

Freeman, R.B. and Medoff, J.L. (1984) *What do Unions do?* New York: Basic Books.

Friedman, A. (1977) 'Responsible autonomy versus direct control over the labour process', *Capital and Class*, 1, 43-57.

Friedman, A. (1990) 'Managerial strategies, activities, techniques and technologies', in Knights, D. and Willmott, H. (eds) *Labour Process Theory*. London: Macmillan.

Gall, G. (1998) 'Resisting the rise of non-unionism: the case of the press workers in the newspaper industry', *Capital and Class*, No.64. 43-63.

Gamble, A. (1988) *The Free Economy and the Strong State*. London: Macmillan.

Garrahan, P. and Stewart, P. (1992) *The Nissan Enigma: Flexibility at Work in a Local Economy*. London: Mansell.

Geary, J. (1995) 'Work practices: the structure of work', in Edwards, P. (ed), *Industrial Relations: Theory and Practice in Britain*. Oxford: Blackwell.

Gennard, J. (1987) 'The NGA and the impact of new technology', *New Technology, Work and Employment*, Vol.2, No.2. 126-141.

Gennard, J. (1990) *The History of the National Graphical Association*. Cambridge: Unwin Hyman.

Gennard, J. and Bain, P. (1995) *A History of the Society of Graphical and Allied Trades*. London: Routledge.

Gennard, J. and Dunn, S. (1983) 'The impact of new technology on the structure of craft unions in the printing industry', *British Journal of Industrial Relations*, Vol.21, No.1, 17-32.

Gennard, J. and Judge, G. (1997) *Employee Relations*. London: Institute of Personnel and Development.

Gill, J. and Johnson, P. (1991) *Research Methods for Managers*. London: Paul Chapman Publishing.

Gospel, H. (1998) 'The revival of apprenticeship training in Britain?', *British Journal of Industrial Relations*, Vol. 36, No.3, 435-457.

Gospel, H. and Drucker, J. (1998) 'The survival of national bargaining in the electrical contracting industry: a deviant case?', *British Journal of Industrial Relations*, Vol.36, No.2, 249-267.

Goss, D. (1987) 'Instant print: technology and capitalist control', *Capital and Class*, Vol.31, 79-91.

Goss, D. (1988) 'Diversity, complexity and technical change: an empirical study of general printing', *Sociology*, Vol.22, No.3, 417-31.

GPMU (1995a) *GPMU and Technology: Special Report from the 1995 DRUPA Exhibition.*

GPMU (1995b) *GPMU Biennial Delegate Conference Report.*

GPMU Research (1995) *National Vocational Qualifications: an Introduction.*

GPMU (1998) 'Let's close the skills gap', *http://www.gpmu.org.uk.journal.*

Green, F. (1992) 'On the political economy of skill in the advanced industrial nations', *Review of Political Economy*, Vol.4, No.4, 413-35.

Green, F., Machin, S. and Wilkinson, D. (1996) 'Trade unions and training practices in British workplaces', *Centre for Economic Performance,* Discussion Paper 278. February.

Guest, D.E. (1989) 'Personnel and HRM: can you tell the difference', *Personnel Management*, Vol.21, No.1, 48-51.

Guest, D.E. and Hoque, K. (1993) 'The mystery of the missing human resource manager', *Personnel Management*, Vol.25. No.6, 40-41.

Guest, D.E. and Hoque, K. (1994) 'Yes, personnel does make a difference', *Personnel Management*, November, 40-4.

Handy, C., Gordon, C., Gow, I. and Randlesome, C. (1988) *Making managers*. London: Pitman.

Hendry, C. (1991) Corporate Strategy and Training, in Stevens, J. and Mackay, R. (eds) *Training and Competitiveness*. NEDO: Kogan Page.

Hendry, C., Jones, A. and Pettigrew, A.M. (1990) *Human Resource Development in the Small-to-Medium Enterprise: an Interim Report to the Training Agency*, Centre for Corporate Strategy and Change, University of Warwick.

Heyes, J. (1993) 'Training provision and workplace institutions: an investigation', *Industrial Relations Journal*, Vol.24, No.4, 296-307.

Heyes, J. (1996) 'A formula for success? training, reward and commitment in a chemicals plant', *British Journal of Industrial Relations*, Vol.34, No.3, 351-369.

Heyes, J. and Stuart, M. (1994) 'Placing symbols before reality: re-evaluating the low skills equilibrium', *Personnel Review*, Vol.23 No.5, 33-49

Heyes, J. and Stuart, M. (1996a) In search of skill formation: trade unions and training at the workplace, paper presented to the British Universities Industrial Relations Association Conference, Bradford, 5-7 July.

Heyes, J. and Stuart, M. (1996b) 'Does training matter? employee experiences and attitudes', *Human Resource Management Journal*, Vol.6, No.3, 7-22.

Heyes, J. and Stuart, M. (1998) 'Bargaining for skills: trade unions and training at the workplace, *British Journal of Industrial Relations*, Vol.36, No.3, 459-467.

Hirst, P. and Zeitlin, J. (1989). 'Flexible specialisation and the competitive failure of UK manufacturing', *Political Quarterly*, Vol. 60. No.2. 164-178.

Hunter, L., McGregor, A., MacInnes, J. and Sproull, A. (1994) 'The 'flexible firm': strategy and segmentation', *British Journal of Industrial Relations*, Vol.31, No.3, 383-407.

Huselid, M.A. (1995) 'The impact of human resource management practices on turnover, productivity and corporate financial performance', *Academy of Management Journal*, Vol.38, No.3, 635-72.

Hyman, J. (1996) 'Training and development: the employer's responsibility', in Towers, B. (ed) *The handbook of Human Resource Management* (2nd ed). Oxford: Blackwell.

Hyman, R. (1988) 'Flexible specialisation: miracle or myth?, in Hyman, R. and Streeck, W. (eds) *New Technology and Industrial Relations*. Oxford: Blackwell.

Ichniowski, C., Kochan, T.A., Levine, D., Olson, C. and Strauss, G. (1996) 'What works at work: overview and assessment', *Industrial Relations*, Vol.35, No.3, 299-333.

IDS Report (1995) 'Industry agreements: printing industry', No.688, May, p10.

IDS Report (1996) 'Industry agreements: printing industry', No.714, June, p10.

IDS Report (1997) 'Industry agreements: printing industry', No.738, June, p10.

Jessop, B. (1993) 'Towards a Schumpeterian workfare state? preliminary remarks on post-Fordist political economy'. *Studies in Political Economy*, Vol. 40 7-39.

Jessop, B. (1994) 'The transition to post-Fordism and the Schumpeterian workfare state', in Burrows, R. and Loader, B. (eds) *Towards a Post-Fordist Welfare State*. London: Routledge.

Katz, E. and Ziderman, A. (1990) 'Investment in general training: the role of information and labour mobility', *The Economic Journal*, 100, 1147-1158.

Keep, E. (1989a) 'Corporate training strategies: the vital component?', in Storey, J. (ed) *New Perspectives on Human Resource Management*. London: Routledge.

Keep, E. (1989b) 'A Training Scandal?', in Sisson, K. (ed), *Personnel Management in Britain*. Blackwell: Oxford.

Keep, E. (1992). 'Missing presumed skilled: training policy in the U.K'. Industrial Relations Research Unit, University of Warwick: Mimeo.

Keep, E. and Mayhew, K. (1995) 'Training policy for competitiveness: time for a new perspective' in Metcalf, H. (ed) *Future Skill Demand and Supply: Trends, Shortages and Gluts*. London: Policy Studies Institute.

Keep, E. and Mayhew, K. (1996) 'Evaluating the assumptions that underlie policy', in Booth, A. and Snower, D.J. (eds) *Acquiring Skills: Market Failures, their Symptoms and Policy Responses.* Cambridge: Cambridge University Press.

Keep, E. and Rainbird, H. (1995) 'Training', in Edwards, P. (ed) *Industrial Relations: Theory and Practice in Britain.* Oxford: Blackwell.

Kelly, J. (1996) 'Union militancy and social partnership', in Ackers, P., Smith, C. and Smith, P. (eds) *The New Workplace and Trade Unionism: Critical Perspectives on Work and Organisations*. London: Routledge.

Kennedy, S., Drago, R., Sloan. J. and Wooden, M. (1994) 'The effect of trade unions on the provision of training: Australian evidence', *British Journal of Industrial Relations*, Vol.32, No.4, 565-580.

Kern, H. and Schumann.M (1985) *Das Ende der Arbeitsteilung?*, Munchen.

Kitay, J. and Callus, R. (1998) 'The role and challenge of case study design in industrial relations research', in Whitfield, K. and Strauss, G. (eds) *Researching the World of Work: Strategies and Methods in Studying Industrial Relations*. Ithaca: Cornell University Press.

Knell, J. (1993) 'Transnational corporations and the dynamics of human capital formation: evidence from West Yorkshire', *Human Resource Management Journal*, Vol.3, No.4, 48-59.

Knell, J. (1996) The political economy of local economic development: a case study of skill formation. unpublished Ph.D. thesis, School of Business and Economic Studies, University of Leeds.

Kochan, T.A. and Osterman, P. (1994) *The Mutual Gains Enterprise: Forging a Winning Partnership among Labour, Management and Government*. Boston: Harvard University Press.

Labour Research Department (1990) *Bargaining Report* 91 (January).

Layard, R. (1994) 'The welfare economics of training', in Layard, R., Mayhew, K. and Owen, G. (eds) *Britain's Training Deficit: the Centre for Economic Performance Report*. Aldershot: Avebury.

Leborgne, D. and Lipietz, A. (1990) 'How to avoid a two-tier Europe', *Labour and Society*, Vol.15, 177-200.

Leeds City Council (1997) 'Leeds labour market', *Leeds Economic Handbook.*

Leeds Development Agency (1992) Leeds in Print: a Study of the Printing and Packaging Industry in Leeds.

Leeds Economic Development Strategy (1995) Facts and figures.

Leeds Training and Enterprise Council (1994) Annual labour market assessment for Leeds 1993/94.

Legge, K. (1995a) *Human Resource Management: Rhetoric and Realities*, Basingstoke: Macmillan.

Legge, K. (1995b) 'HRM: rhetoric, reality and hidden agendas', in Storey, J. (ed) *Human Resource Management: a Critical Text.* London: Routledge.

Leigh, C. and Robbins, P. (1993) 'Financial services in Yorkshire and Humberside', *Labour Market Review*, Employment Intelligence Unit.

Leighton, P., Varlaam, C., Holly, S. and Davies, C. (1991) *Employment Training in the British Printing Industry: a Report to the British Printing Industries Federation.* Institute of Manpower Studies: Brighton.

Leisink, P. (1993) 'Is innovation a management prerogative? changing employment relationships, innovative unions', Leverhulme public lecture, University of Warwick.

Lipset, M.S., Trow, M. and Coleman, J. (1956) *Union Democracy: the Inside Politics of the International Typographical Union.* New York: The Free Press.

Loader, B. and Burrows, R. (1994) 'Towards a post-Fordist welfare state? the restructuring of Britain, social policy and the future of welfare', in Burrows, R. and Loader, B. (eds) *Towards a Post-Fordist Welfare State?* London: Routledge.

Lovering, J. (1990) 'A perfunctory sort of post-Fordism: economic restructuring and labour market segmentation in Britain in the 1980s', *Work, Employment and Society*, Special Issue, May, 9-28.

Lucas, R.E. (1988) 'On the mechanics of economic development', *Journal of Monetary Economics*, Vol.22, No.1, 3-42.

Mahnkopf, B. (1992) 'The 'skill-oriented' strategies of German trade unions: their impact on efficiency and equality objectives', *British Journal of Industrial Relations*, Vol.30, No.1, 61-82.

Marginson, P. (1998) 'The survey tradition in British industrial relations research: an assessment of the contribution on large-scale workplace and enterprise surveys', *British Journal of Industrial Relations*, Vol.36, No.3, 361-388.

Marginson, P., Armstrong, P., Edwards, P., Purcell, J. and Hubbard, N. (1993) 'The control of industrial relations in large companies: an initial analysis of the second level industrial relations survey', *Warwick Papers in Industrial Relations No. 45*, Coventry: IRRU: Warwick University.

Marginson, P., Edwards, P.K., Martin, R., Purcell, J. and Sisson, K. (1988) *Beyond the Workplace: Managing Industrial Relations in Multi-plant Enterprises*. Oxford: Blackwell.

Marsden, D. (1995) 'A phoenix from the ashes of apprenticeship? vocational training in Britain', *International Contribution to Labour Studies*, 5, 87-114.

Marsh, C. (1982) *The Survey Method: the Contribution of Surveys to Sociological Meaning*. London: Allen and Unwin.

Martin, R. (1983) *New Technology and Fleet Street*. Oxford: Blackwell.

Marquand, J. (1993) 'Mirrors, butterflies, and training policy', *Human Relations*, Vol.46, No. 9. 1071-1084.

Mason, G., Van Ark, B. and Wagner, K. (1996) 'Workforce skills, product quality and economic performance', in Booth, A. and Snower, D. (eds) *Acquiring Skills: Market Failures, their Symptoms and Policy Responses*. Cambridge: Cambridge University Press.

Mathews, J. (1993) 'The industrial relations of skill formation', *The International Journal of Human Resource Management*, Vol.4, No.3, 591-609.

May, T. (1993) *Social Research: Issues, Methods and Process*. Buckingham: Open University Press.

McGregor, D.C. (1960) *The Human Side of the Enterprise*. New York: McGraw-Hill.

Millward, N., Stevens, M., Smart, D. and Hawes, W.R. (1992) *Workplace Industrial Relations in Transition: the ED/ESRC/PSI/ACAS Surveys*. Aldershot: Dartmouth.

Mintzberg, H. (1978) 'Patterns in strategy formation', *Management Science*, Vol. 24, No.9, 934-48.

Mitchell, J.C. (1983) 'Case and situation analysis', *Sociological Review*, Vol. 31. No.2, 187-211.

Musson, A.E. (1954) *The Typographical Association: Origins and History up to 1949*. London: Oxford University Press.

Noble, C. (1997) 'International comparisons of training policies', *Human Resource Management Journal*, Vol.7, No.1. 5-18.

Nolan, P. (1989) 'Walking on water? performance and industrial relations under Thatcher', *Industrial Relations Journal*, Vol.20, No.2, 81-92.

Nolan, P. (1994) 'Fordism and post-Fordism', in Arestis, P. and Sawyer, M. (eds), *The Elgar Companion to Radical Political economy*. Aldershot: Edward Elgar.

Nolan, P. (1996) 'Industrial relations and performance since 1945', in Beardwell, I.J. (ed) *Contemporary Industrial Relations: a Critical Analysis*. Oxford: Oxford University Press.

Nolan, P. and O'Donnell, K. (1991) 'Flexible Specialisation and UK manufacturing weakness', *Political Quarterly*, Vol. 62 (1), 106-24.

Nolan, P. and Walsh, J. (1995) 'The structure of the economy and labour market', in Edwards, P (ed), *Industrial Relations: Theory and Practice in Britain*. Oxford: Blackwell.

Noon, M. (1991) 'Strategy and circumstance: the success of the NUJ's new technology policy', *British Journal of Industrial Relations*, Vol.29, No.2, 259-276.

O'Donnell, K. (1993) 'New Competition: a review article', *International Review of Applied Economics*, Vol. 7 (1), 109-17.

O'Donnell, K. and Nolan, P. (1989) 'Flexible specialisation and the Cyprus industrial strategy', *Cyprus Journal of Economics*, Vol.2, 2-21.

Oliver, J.M. and Turton, J.R. (1982) 'Is there a shortage of skilled labour', *British Journal of Industrial Relations*, Vol. 20, No. 2, 195-200.

Osterman, P. (1982) 'Employment structures within firms', *British Journal of Industrial Relations*, Vol.20. 349-361.

Peck, F. and Stone, I. (1993) 'Japanese inward investment in the northeast of England: reassessing "Japanisation"'. *Environment and Planning C: Government and Policy*, Vol.11, 55-67.

Peck, J. (1996) *Work-Place: the Social Regulation of Labour Markets*. New York: The Guilford Press.

Pettigrew, A. Hendry, C. and Sparrow, P. (1989) *Training in Britain: Employers' Perspectives on Human Resources*, HMSO: London.

Phillimore, A.J. (1989) 'Flexible specialisation, work organisation and skills: approaching the "second industrial divide"', *New Technology, Work and Employment*, Vol.4, No.2, 79-91.

Phillimore, J. (1997) 'Trade unions and the national training reform agenda in Australia, 1983-1996', *International Journal of Training and Development*, Vol.1, No.1, 34-48.

Pierson, C. (1994) 'Continuity and discontinuity in the emergence of the 'post-Fordist' welfare state'. in Burrows, R. and Loader, B. (eds) *Towards a Post-Fordist Welfare State*. London: Routledge.

Piore, M. and Sabel, C. (1984) *The Second Industrial Divide: Possibilities for Prosperity*. Basic Books: New York.

Policy Research Unit (1992) *The Paper, Printing and Publishing Industry in Leeds: a Sector Study*. Leeds City Council.

Pollert, A. (1988a) 'The flexible firm: fixation or fact?', *Work, Employment and Society*, Vol.2, No.3, 281-316.

Pollert, A. (1988b) 'Dismantling flexibility', *Capital and Class*, No.34, 42-75.

Porter, M. (1990) 'The competitive advantage of nations', *Harvard Business Review*, Vo.90, No.3, 73-92.

Prais, S,J. (1985) 'What can we learn from the German system of education and vocational training?', in Worswick, G.D.N. (ed) *Education and Economic Performance*. Aldershot: Gower.

Prais, S.J. (1995) *Productivity, Education and Training: an International Perspective*. Cambridge: Cambridge University Press.

Price Waterhouse/Cranfied (1990) *Project on International Strategic Human Resource Management. London*: Price Waterhouse.

Proctor, S.J., Rowlinson, M., McArdle, L., Hassard, J. and Forrester, P. (1994) 'Flexibility, politics and strategy: in defence of the model of the flexible firm', *Work, Employment and Society*, Vol. 8, No. 2, 221-42.

Rainbird, H. (1990) *Training Matters: Union Perspectives on Industrial Restructuring and Training*. Oxford: Blackwell.

Rainbird, H. (1992) 'Comparative perspectives on training: Britain, France and Germany', IRRU, University of Warwick. Mimeo.

Rainbird, H. (1994a) 'The changing role of the training function: a test for the integration of human resources and business strategies?', *Human Resource Management Journal*, Vol.5. No.1, 72-90.

Rainbird, H. (1994b) 'Continuing training', in Sisson, K. (ed) *Personnel Management: a Comprehensive Guide to Theory and Practice in Britain*. Oxford: Blackwell.

Rainnie, A. (1989) *Industrial Relations in Small Firms: Small isn't Beautiful*. London: Routledge.

Raper, P., Ashton, D., Felstead, A. and Storey, J. (1997) 'Towards the learning organisation? explaining current trends in training practice in the UK', *International Journal of Training and Development*, Vol.1, No.1. 9-22.

Rimmer, W.G. (1958a) 'Printing and printing machinery (1)', *The Leeds Journal,* July, 269-275.

Rimmer, W.G. (1958b) 'Printing and printing machinery (2)', *The Leeds Journal,* September, 353-357.

Rist, R.C. (1977) 'On the relations among educational research paradigms: from disdain to détente', *Anthropology and Education Quarterly*, Vol 8. No.2. 42-49.

Roe, A. (1996) 'The changing nature of national wage agreements in the British printing industry 1980-1995', paper presented to the British Universities Industrial Relations Association, Bradford.

Romer, P. (1990) 'Endogeneous technological change', *Journal of Political Economy*, Vol.198, No.5, s71-s102.

Romer, P. (1993) 'Idea gaps and object gaps in economic development', *Journal of Monetary Economics*, Vol. 32 (3), 543-73

Rutherford, T.D. (1998) 'Still in training? labor unions and the restructuring of Canadian labour market policy', *Economic Geography*, Vol. 74 (3), 131-148.

Ryan, P. (1991) 'How much do employers spend on training? an assessment of the 'Training in Britain' estimates', *Human Resource Management Journal*, Vol.1. No.4, 55-76.

Ryan, P. (1995) 'Trade union policies towards the Youth Training Scheme: patterns and causes', *British Journal of Industrial Relations*, Vol.33, No.1, 1-35.

Sabel, C. (1982) *Work and Politics: the Division of Labour in Industry*. Cambridge: Cambridge University Press.

Saunders, M.N.K., Lewis, P. and Thornhill, A. (1997) *Research Methods for Business Students*. London: Pitman Publishing.

Sayer, A. (1992) *Method in Social Science: a Realist Approach*. Second edition. London: Routledge.

Seymour-Ure, C. (1991) *The British Press and Broadcasting Since 1945*. Oxford: Blackwell.

Senker, P.J. (1992) *Industrial Training in a Cold Climate*. Aldershot: Avebury.

Sewell, G. and Wilkinson, B. (1992) 'Empowerment or emasculation? shopfloor surveillance in a total quality organisation, in Blyton, P. and Turnbull, P. (eds) *Reassessing Human Resource Management*. London: Sage.

Scott, D.T. (1987) *Technology and Union Survival: a Study of the Printing Industry*. New York: Praeger.

Sheldrake, J. and Vickerstaff, S. (1987) *The History of Industrial Training in Britain*. London: Gower.

Sisson, K. (1993) 'In search of HRM', *British Journal of Industrial Relations,* Vol. 31, No. 2, 201-210.

Sisson, K. (1994) 'Personnel management: paradigms, practice and prospects', in Sisson, K. (ed) *Personnel Management: a Comprehensive Guide to Theory and Practice in Britain.* Oxford: Blackwell.

Smith, A. and Hayton, G. (1997) 'What drives enterprise training? evidence from Australia', Mimeo, Charles Sturt University.

Steedman, H. (1993) 'Do workforce skills matter', *British Journal of Industrial Relations*, Vol.31, No.2, 285-92.

Steedman, H. and Wagner, K. (1989) 'Productivity, machinery and skills: clothing manufacture in Britain and Germany', *National Institute Economic Review,* No. 128, 40-57.

Stevens, M. (1996) 'Transferable training and poaching externalities', in Booth, A. and Snower, D. (eds), *Acquiring Skills: Market Failures, their Symptons and Policy Responses*. Cambridge: Cambridge University Press.

Storey, J. (1989) 'Introduction: from personnel management to human resource management', in Storey, J. (ed) *New Perspectives on Human Resource Management*. London: Routledge.

Storey, J. (1992) *Developments in the Management of Human Resources*. Oxford: Blackwell.

Storey, J. (1995) 'Human resource management: still marching on, or marching out? in Storey, J. (ed) *Human Resource Management: a Critical Text*. London: Routledge.

Storey, J. and Sisson, K. (1990) 'Limits to transformation: human resource management in the British context', *Industrial Relations Journal*, Vol.21, No.1. 60-65.

Storey, J. and Sisson, K. (1993) *Managing Human Resources and Industrial Relations*. Milton Keynes: Open University Press.

Streeck, W. (1989) 'Skills and the limits of Neo-Liberalism: the enterprise of the future as a place of learning', *Work, Employment and Society*, Vol.3, No. 1, 89-104.

Streeck, W. (1992) *Social Institutions and Economic Performance: Studies of Industrial Relations in Advanced Capitalist Economies*. London: Sage.

Stuart, M. (1994) 'Training in the printing industry: an investigation into the Recruitment, Training and Retraining Agreement', *Human Resource Management Journal*, Vol.4. No.3. 62-78.

Stuart, M. (1996) 'The industrial relations of training: a reconsideration of training arrangements', *Industrial Relations Journal,* Vol.27. No.3, 253-266.

Stuart, M. (1998) 'Unions are keener than employers', *Parliamentary Brief*, Vol.5, No.5, 41.

Sykes, A.J.M. (1967) 'The cohesion of a trade union workshop organisation', *Sociology*, Vol.1. 141-63.

Tickell, A. (1997) 'Restructuring the British financial sector into the twenty-first century', *Capital and Class*, No.62, 13-19.

Trades Union Congress (1991) *Collective Bargaining Strategy for the 1990s*.

Trade Union Congress (1994) *Human Resource Management: a Trade Union Response*.

Tunstall, J. and Palmer, M. (1991) *Media Moguls*. London: Routledge.

Vickerstaff, S. (1992) 'The training needs of small firms', *Human Resource Management Journal*, Vol.2, No.3, 1-15.

Wallace, M. and Kalleberg (1982) 'Industrial transformation and the decline of craft: the decomposition of skill in the printing industry, 1931-1978', *American Sociological Review*, Vol.47, June, 307-324.

Walton, R.E. (1985) 'From control to commitment in the workplace', *Harvard Business Review*, March-April, 76-84.

Waples, J (1998) British printing rolls out a giant, *The Sunday Times*, 1March.

Wass, V. and Wells, P.E. (1994) 'Research methods in action: an introduction', in Wass, V. and Wells, P.E. (eds) *Principles and Practices in Business and Management Research*. Aldershot: Dartmouth

Wedderburn, K.W. (1989) 'Freedom of association and philosophies of labour law', *Industrial Law Journal*, Vol. 18. No.1, 1-38.

Williams, K., Cutler, T., Williams, J. and Haslam, C. (1987) 'The end of mass production?', *Economy and Society*, Vol. 16, No. 3, 405-39.

Williams, K., Haslam, C., Williams, J. and Cutler, T. with Adcroft, A. and Johal, S. (1992) 'Against Lean Production'. *Economy and Society*, Vol. 21 (3), 321-354.

Winterton, J. and Winterton, R. (1994) '*Collective Bargaining and Consultation over Continuing Vocational Training*'. Employment Department. February.

Womack, J.P., Jones, D.T. and Roos, D. (1990) *The Machine that Changed the World.* New York: Maxwell Macmillan International.

Wood, S. and de-Menezes, L. (1998) 'High commitment management in the UK: evidence from the Workplace Industrial Relations Survey, and Employers' Manpower and Skills Practices Survey', *Human Relations*, Vol.51, No.4, 485-515.

Yelland, C. (1989) *History of the Leeds Typographical Society: Volume II 1911-1985.* Leeds. Leeds Graphical Society.

Yin, R. (1994) *Case Study Research: Design and Methods*. 2nd ed. Thousand Oaks, Calif.: Sage.

Zimbalist, A. (1979) 'Technology and the labour process in the printing industry'. in Zimbalist, A. (ed) *Case Studies on the Labour Process*. New York: Monthly Review Press.

Appendix 1

January 1998

Training and Skill Requirements in the Printing Industry: A West Yorkshire Survey.

This survey is part of a research project investigating the nature of human resource management practices and local economic development in West Yorkshire. The enclosed questionnaire is designed to examine the training practices and skill requirements of print, packaging, publishing and other print-related firms. The basic aim is to identify the main problems and issues currently facing firms with regard production strategies and investments in training.

Despite the important contribution of the printing industry to local economic development, very little is know about the current training practices or the type of skills likely to be demanded in the future. The results of this survey will, therefore, assist companies and other interested parties (eg. institutions of further education and local economic agencies) in identifying key areas of need in the local business community, particularly in terms of the demands of small and medium sized enterprises.

We would be very grateful if you could spare some of your valuable time to complete the questionnaire. Most of the questions ask you simply to tick or circle a statement. Only a select few ask for figures. Your answers are essential in building an accurate picture of the current training needs of printing firms in West Yorkshire.

All responses will be treated in the strictest of confidence. Data from the survey will be analysed on an aggregate basis, thus individual firms will not be revealed in the results. All participating firms will be sent an executive summary of the findings.

If anything is unclear about the questions, or you would like further details about the study, please contact Mark Stuart on 0113 233 6851.

Please return the completed questionnaire in the **FREEPOST** envelope provided.

Thank you very much for your help.

Mark Stuart
Lecturer in Industrial Relations
Leeds University Business School

Appendix 2

Training and Skill Requirements in the Printing Industry: A West Yorkshire Survey

Contact:

Mark Stuart
Leeds University Business School
Blenheim Terrace
The University of Leeds
Leeds
LS2 9JT
Tel: 0113 233 6851

Training and Skill Requirements in the Printing Industry: a West Yorkshire Survey.

This survey is designed to examine the training strategies and skill requirements of local printing and print related firms in West Yorkshire. **Individual firms will not be identified in the analysis of the results**

Section A: Company Details.

A1. Name of company: _____

Town/City: _____

A2 What sector(s) of the industry do you operate in? Please tick all relevant boxes and circle your main activity.

General printing	☐	Screen printing	☐
Books	☐	Security	☐
Periodicals	☐	Cartons	☐
Scientific/journals	☐	Graphic reproduction	☐
Stationery	☐	Trade typesetting	☐
Labels	☐	Trade platemaking	☐
Flexible packaging	☐	Trade finishing	☐

Other (please specify).

_____

A3 Please specify the main print process(es) you use.

_____

_____

A4 Did the company relocate to the current site from another area?

Yes ☐ No ☐

If **No**, go to **A5**
If **Yes**, Where did the company move from and in what year/

_____

A5 Is this company : (please tick)

(i) HQ ☐
(ii) Branch ☐
(iii) Division ☐
(iv) Sole site ☐

A6. Is this company owned by a larger group? (please Tick)

Yes ☐ No ☐

If **no**, proceed to **A7**
If **yes**:
(i) Which Group? _____
(ii) Where are the headquarters located?

_____

(iii) How much influence does the HQ have over the following investment issues? (*Please circle: where 1= complete control; 2=moderate control; 3= occasional control; 4= discretion usually left to site; 5 HQ leaves all decisions to site*)

Recruitment :	1	2	3	4	5
Training decisions:	1	2	3	4	5
Working Practices:	1	2	3	4	5
Technical change:	1	2	3	4	5
Payment systems:	1	2	3	4	5

A7 What was your total turnover (approximately) in the last financial year?

£ _____

A8 Where are the main markets for your goods and services? Please specify the percentage of goods sold in the markets indicated.

Market		***% of sales***
Leeds	☐	_____
Yorkshire and Humberside	☐	_____
UK	☐	_____
EC	☐	_____
Elsewhere in Europe	☐	_____
World-wide	☐	_____

Section B: Workforce Details.

B1. Could you please specify the total number of employees at this site? (if you cannot give a precise figure, please indicate approximately)

_____

Of the total workforce, how many are employed in the following categories?

	Male	Female	Total
Full-time (over 30 hours per week)			
Part-time (uner 30 hours per week)			
Temporary/casual)			

B2 Could you please fill in the following box regarding the changing size of your workforce. Use the following key : Increase = **I** ; Decrease = **D**; About the same = **S**.

	Past year	Last 5 years	Next 12 months
Total Workforce			
Part-time employees			
Temporary/ casuals			

B3. Please indicate the number of workers at this site in the following occupations groups (give an approximate if you are unsure of the precise figure).

	Total	Male	Female
Managers and administrators			
Professional occupations			
Technicians			
Supervisors			
Clerical and secretarial			
Sales occupations			
Skilled craftsmen			
Semi-skilled/unskilled			
Trainees/apprentices			
Other occupations (specify)			

Section C: Training and Human Resource Management.

C1. Is there a formal, written training policy for this site? (please tick).

Yes ☐ No ☐

If **No**, go to **C2**.
If **Yes,**

What is the key aim of this training policy?

_____

_____

_____

C2. Does the company have a specified training budget? (please tick)

Yes ☐ No ☐

C3. Of the following skills, which are currently most in demand by your company? (please tick as many options as appropriate)

(i) Management skills ☐
(ii) Supervisory skills ☐
(iii) Selling skills ☐
(iv) Marketing skills ☐
(v) Skills in commercial awareness ☐
(vi) Engineering skills ☐
(vii) Skilled print-room skills ☐
(viii) Pre-press skills ☐
(ix) Finishing skills ☐
(x) Carton manufacture ☐
(xi) General computing skills ☐
(xii) Other, please state _____

_____

C4. Has the company invested in training in any of the following areas in the **last twelve months** (please tick as many options as appropriate and circle the area of greatest current concern)

(i) Management training. ☐
(ii) Supervisory training ☐
(iii) New entrant training ☐
(iv) Modern apprenticeship ☐
(v) Upskilling (assistant to minder status) ☐
(vi) New technology familiarisation ☐
(vii) Teamworking skills ☐
(viii) Quality awareness ☐
(ix) General retraining ☐
(x) Other (please specify) _____

_____

C5. What are the key factors prompting training at this firm? (please tick as many options as appropriate)

(i) The competitive environment ☐
(ii) Product market development ☐
(iii) Technical change ☐
(iv) Changing working practices ☐
(v) Quality requirements ☐
(vi) Employee morale ☐
(vii) Union pressure ☐
(viii) Other _____

_____

C6. With regard **new entrant** training for skilled occupations, which of the following characterises the company's approach. (please tick as many options as appropriate).

(i) Follow the guidelines of the BPIF/GPMU training agreement. ☐
(ii) Follow a modern apprenticeship scheme. ☐
(iii) Follow a select number of BPIF modules ☐
(iv) Follow a specific company training programme for a set time period. ☐
(v) No real training needed. ☐
(vi) None of the above. Please give details._____

C7. How many employees in the following occupational groups received training during the past 12 months? (Please put N/A where no training has taken place)

	New entrant training	Additional staff training	Re-training from non-craft to craft
Pre-press			
Press			
Finishing: craft			
Finishing: non-craft			XXXXXXXXXX

C8. What methods of training are used at the site? (please tick as many options as appropriate and circle the method that predominates).

(i) On-the-job training (by member of company) ☐
(ii) On-the-job training (by external trainer) ☐
(iii) In-house off-the-job training (eg. classes; demonstrations) ☐
(iv) External training provider ☐
(v) Learning by doing ☐
(vi) Other (please specify) _____

C9. Which of the following external training providers do you use? (please tick as many options as appropriate).

(i) BPIF ☐
(ii) Leeds College of Technology ☐
(iii) Local Training and Enterprise Council ☐
(iv) Local Chambers of Commerce ☐
(v) Equipment suppliers ☐
(vi) Private training consultants ☐
(vii) Other (please specify) _____

C10. Are any employees at this site currently pursuing an NVQ qualification? (please tick)

Yes ☐ No ☐

If **no**, proceed to **C11**.
If **yes**, at what level (grade 1-5) and for which occupation?

_____

_____

C.11. Has this site achieved the Investors in People accreditation? (please tick)

Yes ☐ No ☐

If **yes**, proceed to **C12**.
If **no**, is the organisation currently undergoing IiP accreditation?

Yes ☐ No ☐

C12. Do you determine the training and development needs of your employees through a formal appraisal process? (Please tick)

Yes ☐ No ☐

If **yes**, proceed to **C13**
If **no**, how do you determine the training and development needs of your employees?

_____

_____

C13. Has the company introduced any forms of teamworking within the last 5 years? (please tick)

Yes ☐ No ☐

C14. What are the main constraints affecting training provision? (please tick as many options as appropriate)

(i) Cost ☐
(ii) Lack of in-company facilities/instructors ☐
(iii) Lack of courses ☐
(iv) Quality and content of courses ☐
(v) Lack of time (employees too busy) ☐
(vi) Diminished requirement for skilled labour ☐
(vii) Fear of poaching by competitors ☐
(viii) Current economic climate ☐
(ix) Other, please specify _____

_____

C15. Has your company experienced any difficulties in recruiting employees in the last 12 months?

Yes ☐ No ☐

If **Yes**, for which occupational groups? _____

_____

D. Production issues.

D1. How have the following production indicators changed in the last 12 months? (please circle, where 1=substantially increased; 2= increased; 3= stayed the same; 4=decreased; 5= substantially decreased).

(i). The competitive environment 1 2 3 4 5

(ii) The company's level of output 1 2 3 4 5

D3. Has the company invested in new plant and machinery in the last 5 years? (please tick)

Yes ☐ No ☐

If **Yes**, please state the major items purchased.

_____

_____

D4. Has the company been awarded, or is it working towards, any quality initiatives? (For example, BS5750.

Yes ☐ No ☐

E. Industrial Relations issues.

E1. Is the company a member of the BPIF? (please tick)

Yes ☐ No ☐

E2. Do you recognise a trade union for bargaining purposes ? (please tick)

Yes ☐ No ☐ Used to, but derecognised ☐

If **yes,**

a. Which one(s) ? _____

b. How much involvement do the union have in training decisions? (please tick)

A lot ☐ A little ☐ None ☐

c. Do you consult with the union over training issues? (please tick)

Yes ☐ No ☐

d. Would you agree that training represents a potential area of management/union co-operation? (please tick)

Yes ☐ No ☐

e. Do you follow the Recruitment, Training, Development and Apprenticeship Agreement, as set out in the BPIF/GPMU national agreement, for training purposes?

Yes ☐ No ☐

F. Other Comments.

Have you any comments which you would like to add in response to the issues raised by this questionnaire?

Would you be willing to talk to us (in person or by telephone) at a later stage in this study. If so, please write your name address and telephone number below. Again, this information will only be used for the purposes of this study.

Address _____

_____

Contact name:_____

Telephone number:_____

Please return the questionnaire in the **Freepost** envelope provided.

Mark Stuart
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LS2 9JT
Tel: 0113 233 6851

Thank you very much for you co-operation in completing this questionnaire.

Appendix 3.

The proposed skill targets for printing companies.

To survive and prosper in today's markets each company should aim to have by the year 2000 a workforce which understands its business and can adjust to change, including *at least*:

1. one person with strategic and operational competence at NVQ level 5 or 4;

2. one person with sales and marketing competence at level 4;

3. first line supervisors/ team leaders with appropriate level 3 printing and management qualifications;

4. operatives and administrators with relevant printing qualifications, 75% at level 3;

5. a policy to maintain and improve the company's skill base

   a) by recruiting and training one young person on average through a Modern Apprenticeship or Traineeship, and
   b) by working with schools and other educational institutions to raise their standards and understand the printing industry's needs;

6. a) a process for planning training to meet business objectives;
   b) commitment to the BPIF/GPMU Training and Development Charter
   c) commitment to being a recognised Investor in People;

7. a well understood, fast and efficient costing, estimating and scheduling system capable of processing higher volumes of smaller orders with short lead times.

Source: BPIF (1998b)