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**WORK-RELATED EDUCATION IN PRIMARY SCHOOLS: A STUDY
OF INDUSTRY'S ATTITUDES AND TEACHER MOTIVATION**

by

Norma Iredale

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- 2 NOV 1999

Thesis submitted for fulfilment of the Degree of Doctorate of Education
University of Durham
May 1999

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Abstract

Over the last decade there has been a steady growth of work related initiatives in education which have more latterly involved primary schools. There is, however, no clear evidence as to the impact these have made on teachers working with young children. Casual observation would suggest that work-related education remains peripheral in many primary schools and appears to be fragmented even when visible. The reasons for this are unclear but there are indications that certain pressures upon schools along with particular perspectives of teachers and industrialists have proved influential to the decision

This study aims to determine what has motivated certain primary school teachers who are positively biased to embark upon work-related education and to ascertain the factors that have informed their views. It also seeks to discover why these teachers feel this aspect of work is important and what they hope to achieve from the activities in which they engage. At the same time the study enquires into the view of industrialists relating to work-related education in primary schools; explores what efforts are being made in this field; and aims to establish what industrialists hope to achieve.

The study reveals that the greatest motivation for teachers involved in this study to engage in work-related education is to prepare young people for life in a rapidly changing world. A positive link is exhibited between teachers who engage in work-related activities and their personal experience of business or industry. It is also revealed that industry, as represented by some of the large corporations, perceive links with primary schools to be essential. These links are, however, less common than links with secondary schools. A lack of some common understanding between educationalists and industrialists as to the outcomes of such endeavours is also disclosed. These points are discussed and a plan of action is offered.

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CHAPTER 1

Introduction

1.1 Foundation for the Study

Traditionally, education has centred on schools and classrooms, but in recent years there has been an increasing demand to extend the learning environment beyond these boundaries towards business, industry and the community.

These efforts have been introduced in many guises, using different names and approaches, and it is suggested by the writer that they might arguably be loosely classified under the term 'the work-related curriculum'. Over the last ten years or more a variety of literature relating to these endeavours has become available which include many accounts of the rise in popularity of these undertakings. Their foundations are attributed to the speech given by James Callaghan at Ruskin in 1976 (Maclure 1992). There is no doubt that the area of work under consideration has been more apparent in schools since this time but that Callaghan's speech was the sole cause might be debated.

Evidence suggests that there continues to be a variety of initiatives to promote and support work-related education in schools, and that these stem from different sources. Some endeavours have emerged from industry and business along with organisations associated with them - others have emanated from government and the public sector. The aims of the schemes undertaken are expressed in different ways, but it might be argued that many of them originated from concerns relating to the rapid changes which the world is being subjected to, and that in order to survive (both socially and economically), young people of the future must be better prepared. Suggestions as to how this might be achieved vary, but there is an underlying premise that the attitudes and skills of young people should be developed in

order to help them cope with the changing nature of work and society, and the implications this might have on their prospects. Trends indicate that fewer jobs will be available, and that many of these will be part-time. Rapid developments in technology signify that different skills will be called for, and these will fluctuate. Opinion is that business and industry will require adaptability and flexibility in their workforce who will need to be enterprising¹. As a consequence it is felt that young people should be encouraged to develop the knowledge, skills and attitudes required in the future while at the same time becoming more economically aware since this would help them relate more readily to the business and industry on which their future lives depend. Views expressed by Handy (1984) and Stonier (1983) among others, support the view that there is a necessity to integrate the aims of education with the needs of industry. They suggest that the shape of tomorrow's world is determined by the education system of today, arguing that there is a need for children to become adaptable citizens, and to develop their economic and industrial understanding. The relationship between education and the economy has been the cause of many debates although the extent to which education must be blamed is questionable. Brown (1997) is of the opinion that "education has become the scapegoat for Britain's social and economic problems" (p.401) yet Levin and Kelley (1997) suggest that there is a range of evidence that reveals there is "little truth in the belief that education is the key to the nation's competitiveness" (p.250). Despite this it has been suggested that "a new 'consensus' on both the left and the right of the political spectrum...has defined education as a key to future economic prosperity" Brown *et al* (1997 p.7). While it is acknowledged that there is no one solution to the problems faced by society, it could be argued that education has an important role to play in preparing young people for a vastly different world in the future.

Until more recently the thrust of education-industry work was aimed at older pupils in secondary schools who were about to embark upon their careers. Latterly, however, these initiatives have percolated through to primary schools

where their importance is increasingly seen to be a 'good thing'. This perception, nevertheless, is one that has not yet been widely accepted, especially in many primary schools where the application of endeavours appears to be fragmented. This is an observation which has been voiced by many workers in the field, and is supported by the writer's own experience of having worked with hundreds of primary school teachers in England and Wales. Reasons for this are unclear although the introduction of the National Curriculum and the resulting pressure placed upon teachers would seem to have thwarted efforts. Despite the many initiatives to encourage teachers to become involved in the education-industry interface, and attempts to provide support for education-industry links nationally for all phases of education through a network of Education Business Partnerships (EBPs), it would appear that primary schools still remain on the periphery. There are numerous complaints of the low involvement, but there is no evidence of any enquiries into why this might be the case. Dialogue with teachers, and evidence produced by researchers in the field, indicate that this lack of support by primary school teachers for the work-related curriculum has its foundations in a number of different spheres. These obstacles include work overload, and the attitudes and beliefs of the teachers involved. A preliminary review of the literature in this area to date reveals a paucity of knowledge. Given the lack of empirical research, it was considered that a better understanding of the formative influences which impel teachers to undertake this area of study in primary schools would be valuable. Linked to this is the disposition of industry toward primary school involvement. Evidence would provide some insight into what motivates teachers to become involved in work-related education, and would afford a clearer understanding of industry's attitude to engaging with primary schools. This could provide ways in which active participation might be encouraged by all those involved, resulting in the promotion of work-related education.

1.2 The Research Study

It is the contention of this thesis that the values, attitudes and beliefs of teachers have a critical effect on the provisions made. Hence it incorporates an empirical investigation.

The empirical study is in two parts:

- The first part provides insight into the various factors which have inspired teachers who are positively biased to engage in work-related education. Such insights have been gained through the use of questionnaires and autobiographical statements. The data also illuminate ways in which the various aspects of this work are approached in the respondents' schools. Questionnaire information is supplemented by a number of telephone interviews.
- The second part aims to provide insight into the views of some of those in corporate business who are charged with developing strategies to link education with business and industry. This element of the research is carried out through a series of semi-structured interviews with those concerned with education links in ten major companies in the UK. The responses offer a greater understanding of the process by which work-related initiatives are developed together with a view of the specific outcomes sought.

1.3 Structure of the Thesis

Before embarking on the study it is necessary to consider the position of work-related education in England over a number of years. Chapter 2 reviews the literature which suggests that this topic has caused some disagreement. The way in which the philosophy relating to work-related issues has changed more

recently is disclosed, bringing the debate to present times. Education is, in many cases, blamed for its contribution to economic failure through the lack of emphasis placed upon work and economic matters, and teachers are frequently consigned the task of transmitting the necessary knowledge. A literature review shows how schooling has, in the past, been approached as a form of cultural enrichment rather than aiming to promote vocational achievement, and attention is drawn to some of the actions taken to redeem this state of affairs.

Chapter 3 examines specific obstacles which might confront teachers when faced with the question of work-related education in primary schools and discusses some of the issues raised. These include the introduction of the National Curriculum; care versus controversy; and concerns relating to political indoctrination and vocationalism.

Chapter 4 analyses some research studies carried out with teachers and student teachers in areas associated with work-related education, revealing a number of the anxieties similar to those discussed in the previous chapter.

Chapter 5 explores industry's view of links with education reviewing some of the literature connected with the subject-matter produced by business and industry, or on their behalf. The reasons given by business and industry for working with education are examined and concerns put forward are considered.

Chapter 6 introduces the empirical research study which is in two parts. **Part one** is aimed at primary school teachers known to have shown interest in work-related education, gathering information as to what has stimulated them to introduce it into their curriculum. At the same time, some insight is gained into the way in which work-related education is approached in the respondents' schools. **Part two** explores the views of business and industry with regard to education-industry links. This chapter explains the aims of the survey, the issues addressed, and the methodology used.

Chapter 7 outlines the responses to the teacher survey. It is revealed that teachers are largely self-motivated and it is apparent that their view of education is one which aims to equip their pupils for life. Inspiration appears to have emerged from a variety of sources which include exposure to business and industry, association with others who are enthusiastic about the topic and a requirement to assist pupils in the choice of their career. The survey also indicates that schools most often connect work-related education to the requirement to link with industry and the local community. The data also implies that the topic of work-related education is most commonly incorporated into other subject areas rather than being approached separately.

Chapter 8 presents the responses to the industry survey. Comments from the educational representatives interviewed shows their commitment to linking with primary schools and an acknowledgement of the value of working with young children. It is also suggested that this commitment is not always translated into action. Often there is no firm written policy to involve primary schools, and some staff members fail to see the value of the undertaking.

Finally, Chapter 9 summarises the conclusions reached in both parts of the survey and specific recommendations are made as a result of the feedback. A simple model that might advance the position of work-relation education in primary schools is presented. The issues raised are discussed and final comments are made.

The results of the study with teachers involved with work-related education suggest that a prime motivator is the desire to enhance the curriculum and provide opportunities for relevant educational in the light of changes taking place in society. The data also suggest that positive attitudes have been formed toward work-related education by a number of teachers, through personal experience and some involvement with business and industry. Similarly, vision and experience of educational matters motivate those in business and industry. Awareness raising is crucial, but given the lack of

success with both schools and industry with discrete initiatives there is some endorsement for the idea for legislation which would impel action. The recommendations adopt this proposition. A process which would lead to the total involvement of all primary schools together with the majority of business and industry in work-related education is suggested by the use of a simple model. A discouraging factor is that this proposal would involve governmental ruling. Some further research into how such a decree might be regarded by all parties concerned would be interesting and valuable.

1.4 A Note on the Use of the Term ‘Work-Related’

The term work-related is complex and wide-ranging. The difficulty of expressing a whole series of ideas and approaches within one phrase is acknowledged. In this thesis the term ‘work-related’ encompasses a wide variety of approaches to and aspects of education, which are linked to business and industry. Work-related aspects of education could conceivably include such things as: careers education and guidance, economic and industrial understanding, enterprise education and community education, or they might simply be called education - industry links set up for the purpose of enhancing the curriculum or teaching about the world of work. Furthermore, a more recent term that has been introduced is ‘employability’. The CBI describe this as “The possession by an individual of the qualities and competencies required to meet the changing needs of employers and customers and thereby help to realise his or her aspirations and potential in work” (CBI 1998 p. 6). Included in their definition is unpaid work such as caring and community involvement and clients.

The headings used to describe activities taking place in work-related education frequently reflect definitions with which teachers feel most comfortable. Very often activities in primary schools are focused upon helping children to understand the nature of work, teaching about the world of work in the interest

of pupils rather than teaching for the world of work in the interest of employers. Other activities could conceivably include projects that focus directly upon the promotion of a better understanding of business and industry or upon the development of children's economic and industrial understanding. Mini - Enterprise is commonly seen as a way in which these lessons might be taught. Enterprise Education, on the other hand, can be viewed as a way of transmitting business knowledge while at the same time encouraging the development of skills² and attitudes which might otherwise be overlooked. Some undertakings stem from the requirement to enhance the curriculum and the processes of teaching and learning. Developing work-related education, often linked with companies in the local community of the school, provides familiar contexts involving real life situations. Active participation is seen as a great motivator and can contribute to a greater depth of understanding in subjects of study. Involvement with local business and industry also advances the development of links with the community which is seen as vital in most schools.

Work-related education then, may be interpreted as that which educates pupils for work, or indeed it may be a term used by some teachers to describe *good* education (in the sense that the curriculum is enhanced by work links). At the outset it is shown that the empirical work and views of the teachers described within the thesis are encompassed by this very broad definition.

Activities within work-related education may have slightly different purposes, but are likely to be subsumed within two main aims: to extend and improve the learning environment in and beyond the classroom and to prepare pupils for their future lives. These activities offer opportunities not normally available to those in education, especially young children, to see and take part in practices which, it might be argued, are a central part of life. This thesis incorporates a number of quotations which are taken from various authors writing on different facets of education-industry links. Throughout the text, in

these different contexts the various terms should be taken as being subsumed within the general overarching phrase ‘work-related’ education.

¹ There are many different definitions of the term “Enterprise” offered by different organisations. The definition used here is that of the Small Business Centre at Durham University Business School where Enterprise Education is viewed as an approach to teaching and learning. The aim is to encourage the development of certain knowledge, skills and attitudes in young people and to teach them about business, especially small business.

²Skill, attitudes and behaviours which might be included are: teamwork; communication; problem solving; risk-taking; and negotiation.

CHAPTER 2

Literature Review Reflecting the History of Work-Related Education in England

2.1 Introduction

This chapter seeks to chronicle the path of work-related education in England over the years and to reveal how it has been regarded. The way in which the accent has been placed upon the academic curriculum, as opposed to the vocational curriculum appears to evolve from a system of schooling developed to support the higher echelons of society. More recent developments in education are described to show how the controversy over work-related education has emerged as a central area of debate in the last twenty years, and attention is drawn to the way in which primary schools have been included in the discussion. The effects to date are considered, presenting some of the arguments which have been put forward with regard to the necessity for the inclusion of work-related aspects in schooling along with some of the solutions offered.

2.2 An Historical Perspective

“What the pupil at school needs to know is largely determined by what other people need him/her to know. So one must resist the idea that teaching children at school what society needs them to know is something wicked. Children at school are also members of society. What children need and what society needs are two interlocking concepts. Often people speaking of this aspect of education use emotive expressions such as ‘turning out fodder for industry’.... If one is seduced by these metaphors one forgets that it is in the interest of pupils themselves that they should be able to take an active working part in society and that they should be fit to work in industry, though not only there.”

Devlin and Warnock (1977 p. 65).

The authors of this extract succinctly voice the opinions of groups within our society today, and echo sentiments announced in the past. Even in the time Before Christ the great philosopher Aristotle put forward his views on the subject of what education should comprise:

“One aim of education has remained the same throughout the ages. That aim has been to induct the young into the culture of the community, society or nation of which they are members. We must not leave out of sight the nature of education and the proper means of imparting it, for at present there is a practical dissension on this point; people do not agree on the subjects which the young should learn, whether they take virtue in the abstract or the best life as the end to be sought and it is uncertain whether education should be properly directed rather to the cultivation of the intellect or the moral discipline.”

Aristotle (quoted in Francis *et al.* 1989 p.83).

Examples of similar views put forward on the subject can be found from this time forward. Moreover, there continues to be those from both business and industry, together with those in education, who favour an approach advocating that schooling should embrace the needs of the community and those within it. There are others who see this proposal as unnecessary or even detrimental to the educational process, as they believe that work-related education is utilitarian and can narrow the curriculum. (Kelly, 1989).

Since the advent of compulsory education in England more than a hundred years ago, the content of the curriculum in schools has been the subject of discussion and controversy. In particular, the role played by industry and the accent placed upon work-related education and vocationalism has caused concern. This, it would appear, has emerged from the long argued debate as to what constitutes education and the outcome which is sought. The aims are far from being agreed. Many maintain that the necessity is to enrich the lives of young people in such a way as to illustrate the cultural opportunities available to them and to inculcate the value of learning for its own end: others see the need to prepare young people for their future lives in such a way that they might live it to the full, whatever their calling. In addition, there is concern

about the changing nature of society and the pressing need to prepare young people for an uncertain future in a fast changing world, which by its very nature is shaped by economic factors.

Historically, in England, the focus in school has been placed upon academic learning as opposed to vocational. This is unlike many other European countries that have for a number of years given equal status to both, recognising the necessity for learning in each sphere. Many authors have debated the origin of this trend in English education and it has been suggested that this derived from the time when public schools focused on the development of potential leaders in our society, concentrating largely on the intellectual aspects. A century and a half ago Spencer (1861) stated that the one subject that schools left out almost entirely was that concerning the business of life, adding that if it were not for the learning acquired after education our industries would cease. The introduction of compulsory education saw this trend perpetuated and the National Commission on Education in its review of education (1993) tells us how despite numerous reports submitted prior to 1944, arguing the necessity for scientific and technical education, the emphasis continued to be placed upon “a liberal education, suitable for a gentleman” (p.23).

It might be suggested that there are deep seated influences in every country’s education system, shaped by cultural and social conditions, and the significance of the long established private education system in England might be considered as having a considerable effect on the ensuing curriculum.

Handy (1984a) is of the opinion that the underlying philosophy of the curriculum in the nineteenth century was directed at keeping young children out of the mines and factories, offering an alternative to work rather than a preparation for it. Others have suggested that the foundation for this attitude was based upon a commitment to uphold the social divide. Brown (1997), for example, characterises mass schooling in the nineteenth century as confirming existing social divisions rather than transcending them saying that “the

education a child received had to conform to his or her predetermined place in the social order” including occupational and domestic roles (p.394-5).

It would appear that compulsory schooling initially focused upon a ‘need to know’ basis with children being instructed in religious and moral issues together with reading, enabling them to read the Bible. Towards the end of the nineteenth century, however, ideas became more liberal with a growing belief that education had the potential to lessen the poverty although it has been suggested that this gave rise to some anxiety that the poor might be over-educated and thus be unfit for their station in life (Brown 1997; Simon 1971).

The underlying philosophy of education in England has been discussed at length by sociologists over the years and there is a belief that the curriculum which evolved from what was seen as the requirements of an educated person in the nineteenth century formed the framework of development for many years. The Report of the National Commission of Education (1993 p.13) reflects on how the interdependence of education and training “did not seem important earlier in the century”, since England was a thriving industrial nation, having much power and influence in the world. At the same time, the systems in place in business and industry required little or no initiative of a workforce whose offspring benefited from the public education system. A number of Royal Commissions drew attention to this fact (*ibid.* p.21), stressing the superiority of other countries in respect of scientific and technical education. It would appear that little notice was paid to these concerns, in view of what was regarded as the secure position, even dominance, held by England in trade. As a result, nothing was done to remedy the situation. Secondary education continued to provide for the middle classes and remained focused on the academic, leaning heavily towards the classics. The only evident vocational aspects were in the elementary schools which educated the working classes, preparing them for the more repetitive work and concentrating largely on time discipline, basic numeracy and literacy as well as reforming manners. Opinion of management in business and industry during this period is that it was of a poor standard and Finegold (1992)

suggests that “the economy was trapped in a low-skilled equilibrium” (p. 2), resulting perhaps from the low concentration placed on work-related elements in schools and a desire to maintain the status quo. International opposition was to prove that this situation was inadequate as competition began to grow, creating economic difficulties.

With the advent of the Second World War, transformations in the social structure of society led to moves being made to introduce changes in education. The Education Act of 1944 went some way to accommodating the demands of employers, who were calling for a better trained workforce, with the introduction of technical schools. The opinion of Hargreaves (1989 in Hargreaves and Reynolds) is that the Government, during the post-war period, was concerned with generating a technically equipped, socially productive workforce in an expanding economy. Investment in education was seen to be an investment in human capital, and in Britain’s economic future, but was not regarded as something which necessitated strong government intervention. According to Kogan (1971) it was left largely to the realm of the educationalists, who as professionals, were considered to be in a better position to make judgements about what was taught and how. During this phase, teachers and educational theorists, who conveyed an inordinate amount of influence, still largely held control over the curriculum. The major steps taken by government centred on the introduction of technical schools, mentioned earlier, focusing upon training for particular areas of employment in the large industries and the introduction of comprehensive schools which aimed at enabling working-class pupils to achieve their potential. Lawrence (1992) tells us how the reforms introduced at this time were considered “sufficiently far reaching as to satisfy the need for restructuring for many years to come” although Simon (1991) informs us that “in spite of a good deal of pressure and talk about secondary technical education, very little was achieved” with technical schools catering for “only about 3 per cent of the child population (mainly boys)”(p.135). McPherson and Willms (1997) tell us also that comprehensive schools have “had a mixed press” saying that “the few

British evaluations... have not pointed to gains from reorganisation that were socially or educationally significant” (p.683).

With the onset of economic decline in the late sixties and early seventies there was an upsurge in governmental interest in education. This resulted in a greater focus being placed on schools and what was being taught. Kelly (1989) tells us that increasingly over the years up to this time, attempts were quietly being made to restore more political control over the curriculum. There was criticism as to how standards in schools were falling (Pring 1996, Simon 1991), and Kogan (1978) recounts how in the early seventies, education, particularly comprehensive education which had been introduced as a means of liberating the system, became subject to the ‘onset of doubt’. Maybe more importantly, education was described as failing to fulfil the country’s economic requirements, and in the words of Evans and Davies (1990) the Government began “to consider that they could neither afford, nor continue to permit the luxury of a decentralised system which placed so much control in the hands of the professionals and localities and so little in the hands of the state” (p.59). A call was made for changes in education, and there is a belief that the indisputable process of achieving reform and the provision for ministerial intervention resulted from the Callaghan speech made at Ruskin in 1976 and the Great Debate which followed. Comparisons were once again made between Britain and other countries, and it was strongly suggested that educational success was linked to economic indicators. It was considered that education was not meeting the needs of industry. What is often referred to as the ‘crisis in curriculum’ reflected the growing dissatisfaction with the relevance of education, and educators’ capability to deliver the ‘economic goods’. In his speech at Ruskin, Callaghan declared that the goals of education from nursery school through to adult education were clear enough, in that they should equip children to the best of their ability for a lively constructive place in society, and fit them to do a job of work - not one or the other, but both. This is often alluded to as the beginning of the change process

in education-industry work, though some see it as the announcement of change rather than the cause.

It is Grant's (1986 p.55) opinion that there is clear evidence to suggest that it was changes in the generally perceived economic needs since the 1960s which have been a major influence on the curriculum though it has been debated that compulsory education has continuously reflected the needs of the economy from the start. This argument was put forward most forcibly by Bowles and Gintis (1976) whose Marxist critique of American schooling reflects upon the correspondence between education and production and has sometimes been viewed as a breakthrough in educational sociology. Their criticism of schooling, however, unlike the disputes mentioned earlier, focuses not on "the content of education but its form" (Bowles and Gintis, 1988). They argue that the way in which schools are organised represent the way in which business and industry are arranged, reinforcing the class structure which is already in place and promoting acquiescence. Brown *et al* (1997) consider that what is highlighted is "forced integration between education and the labour market rather than correspondence" (p.10). In a similar way, Bourdieu, the French sociologist, claims that existing schools systems reflect existing social gradations and patterns ensuring their reproduction. From their studies of cultural reproduction Bourdieu and Passeron (1977) conclude that the middle classes have increasingly capitalised on their cultural assets via the education system. Bourdieu (1997) argues that "cultural capital¹ in the form of academic credentials is essential to the reproduction of middle-class privileges" and that "schools help both to perpetuate and legitimate inequalities" (p.42). Other authors like Arnot and Whitty (1982) and Moore (1988) point out that what has been omitted from the theory put forward by Bowles and Gintis and others are additional factors which might influence education, thereby contributing to the outcome. Examples of these influences might be the school, the teacher or the parents and this is acknowledged by Bowles and Gintis (1988) in their reflections on their study when they say that "the correspondence principle forced us to adopt a narrow and inadequate appreciation of the contradiction

involved” (p.19). Cole (1988) points out that Bowles and Gintis “wrote specifically about the United States” (p. 33) suggesting the theory has little relevance to English education and Moore (1988) reminds us that “within the English tradition...education...has been seen as hostile to industry and commerce and to its materialistic values. Rather than preparing people *for* production, education has often been seen as providing the antidote to its dehumanizing and vulgarizing effects” (p.77).

Despite the way in which the limits of public education were being discussed by sociologists, ethnographers and historians (Johnson in Education Group II, 1991), Arnot and Whitty (1982) are of the opinion that “neither the phenomenological ‘new society of education’ of the early 1970s, nor the various strands of neo-Marxist theory that became more dominant later in the decade, generated the volume of work that might have been expected nor did they make the contribution to the transformation of curriculum practice that the more enthusiastic early proponents of these ‘new directions’ envisaged” (p.93). The growing feeling was that education was principally a means to an economic end, and this was not being fulfilled satisfactorily. From this time forward, there was an expanding degree of active intervention in education, and this has been discussed at length elsewhere². It might be argued that Callaghan’s speech marked a climax in the debate. As an outcome there was a thrust to make education more responsive to the requirements of the economy, and there was profound motivation for elements of work-related education to be introduced. With the growing recognition of rapid social and technological change, the necessity to integrate the aims of education with needs of industry was considered essential.

There is no doubt that curriculum activities linked to the world of work became more apparent from this time on, the most immediate consequence being the introduction of a number of innovations which were seen as a move towards the modernisation of education and away from the traditional. These initiatives included a programme for secondary schools known as the

Technical and Vocational Education Initiative (TVEI) which was highly valued by those who participated. The aim was to encourage collaboration between employers, the community and educational institutions. Substantial financial support was available for this scheme, which might well be considered the reason for its initial popularity. Also, the scheme was quite long-standing, having only recently come to an end in the early nineties. In any event the initiative was indisputably successful, and this has been revealed in the many accounts published³. An impact was most certainly made in the attitudes and enthusiasm of the teachers concerned and in the outcomes achieved by their pupils. Such was its influence that elements even permeated into primary schools to great effect. Pring (1996 p.115) describes TVEI as an attempt to “focus upon the qualities and capacities, the skills and the understandings, which enable all young people to live valuable, useful and distinctively human lives”. He laments its demise like Graham (Graham and Tytler 1993) who bemoans the fact that the drive to transform education was not sustained. In his view, had initiatives such as these been left to flower several problems might have been solved.

2.3 The Changing Context

From the middle of the 1970s a growing emphasis has been placed on developing links between industry in its widest sense and education. The emphasis has shifted over time, from concentrating these efforts on pupils and teachers in upper secondary schools, to involving all phases of education. Endeavours have emanated from a wide variety of public and private organisations. All wish to draw education and industry closer together, all have different conceptions of how this might be done, and stress the importance of different outcomes. Jamieson (1985) describes them as not being “a homogenous collection of groups united by a common purpose except in the most general sense” (p.1). This is true, and evidence can be found in the documentation of initiatives which have taken place over the

years⁴. Undertakings have lacked statutory ruling, relying largely on the ideology of teachers and any experience and knowledge they might have to draw upon, together with the goodwill of those businesses and industries willing to cooperate. As a result endeavours have been fragmented and, to a large degree, uncoordinated.

The drive to introduce education-industry work has been influenced not only by an assortment of organisations, but by government schemes and legislation which again have largely been targeted at secondary schools. 1986 saw the implementation of 'Industry Year' which provided a shift in focus, since the involvement of primary schools was actively encouraged with the inclusion of a primary schools' industry competition. Also the White Paper 'Better Schools' (DES 1985) was published around this time, saying that primary schools should "give pupils some insight into the adult world, including how people earn their living" (p.20). This was the culmination of a series of reports which made "reference to the need for children to have some understanding of the economic and industrial world" (Smith 1988 p.5). Maybe as a consequence, a number of initiatives and organisations which actively encouraged the involvement of primary schools can be identified from this time. The most prominent were the Schools Curriculum Industry Partnership (SCIP) and Mini Enterprise in Schools (MESP). Other schemes set up to target secondary schools progressed to incorporate some primary school involvement⁵. A number of case studies reveal activities which have taken place as a result of these initiatives and others. Many remark upon the reluctance on the part of the teachers to be involved initially, describing their attitudes of concern as to how such activities could be introduced or, would indeed, benefit young children. Nevertheless, the outcomes reported by the teachers are decidedly positive. While in general only passing comments are made to their disposition, emphasis is placed on the learning which has taken place, not just on behalf of the children, but also the teachers and the businesses with which they worked. Smith (1988) draws our attention to how a number of case studies refer to the way in which activities involving

business and industry have contributed to the professional development of teachers, with the teachers themselves commenting on how their horizons have been widened (p.20). Underlying the activities which are reported is the willingness of the teachers to be involved, their open outlook and predisposition to change being evident.

With the advent of the National Curriculum in the mid 1980s there was some concern that the advances made in education-industry work would fall back, since the core curriculum's emphasis was strongly placed upon the more academic subjects. The wording of the Education Reform Act (1988) when it was published, however, led to some optimism. It declared that a 'broad and balanced curriculum' would be offered, creating the impression that a more integrated approach to these subjects would be advocated. The rationale of the 1988 Act proclaimed it would "develop the potential of all pupils and equip them for the responsibilities of citizenship and for the challenges for employment in tomorrow's world" stating that the intention was "to secure for all pupils in maintained schools a curriculum which equips them with the knowledge, skills and understanding that they need in employment" (DES 1987 p.3). This again offered encouragement to those previously pessimistic for the future of work-related education, and those involved in education-industry work saw the possibility of its continuance. At this point there were hopes that legislation would embed such learning in the curriculum as a statutory requirement, but this was not to be. The ruling which emanated to satisfy the requirements of the 'broad and balanced curriculum' was in the form of five themes⁶ for cross-curricular provision. It is evident from the account of Duncan Graham⁷ (Graham and Tytler 1993) of events at this time, that elements of the Government were more in favour of returning to a more traditional approach to education than had been advocated over the previous ten years. If we are to believe Graham's account, it was only his resolve which succeeded in the inclusion of the cross-curricular themes, against dire opposition. Ross (Ahier and Ross 1995 p.80) reasons that these themes "represent a grouping of areas all of which have social characteristics, so that

they could be considered as permitting the social studies that is so lacking in the foundation subjects of the National Curriculum” and as such are a essential. They were, nonetheless, non-statutory relegating them to secondary orders.

Economic and Industrial Understanding was included in the cross-curricular themes and this might be considered as the theme most closely linked to elements of work-related education. It was hoped that this would address the issues connected to education-industry work. Its inclusion was viewed by enthusiasts as an opportunity, at the very least, to raise teachers’ awareness to the scope provided by this subject matter together with the advantages it could bring. A great deal of effort and dedication by many people concerned with the topic resulted in the provision of a document for teachers, Curriculum Guidance 4 (NCC 1990), which aimed to assist in the introduction of this theme, and here the writer speaks from first-hand experience of working with the authors of the publication. Alas, the low status of the themes, together with the infusion of vast amounts of documentation pertaining to the core and foundation subjects⁸, resulted in their influence being minimal. From the inception of the National Curriculum, the Government has consistently stressed the need for teachers and schools to upgrade their efforts in delivering the core and foundation subjects. In the bulk of literature produced to support and encourage this task, little or no mention has been made of the cross-curricular themes or their place in the scheme of things. As a result, the significance of Economic and Industrial Understanding, along with its companion themes, has been reduced in the eyes of many teachers. The education-industry movement, however, carried on undeterred, supported by many businesses and industries which saw the benefits to be gained.

Despite the lack of stress placed upon work-related education in official curriculum documentation, 1990 saw the introduction of Education Business Partnerships (EBPs). The EBPs task, as outlined by Government, was to set up a network of local partnerships between education and business, providing

coherence to, and co-ordination of these (Hillage 1994 p.1). All phases of education were included in the links, which were encouraged from primary school onward, and this intent is made clear in the documentation. The recommendation provided some encouragement for the education-industry movement, since there appeared to be some reaffirmation by Government of the desirability of alliances between industry and primary schools. The feeling was that these had in some way been signified as necessary once again, providing an opportunity to reinstate Economic and Industrial Understanding in the primary school curriculum. Some achievements have emerged from the establishment of this network. Elements of activities concerned with work-related education continue to prevail, though indications are that the efforts being made are still concentrated on those schools who have shown interest and enthusiasm over the years. Staff in EBPs working with schools describe a number of difficulties in their efforts to accomplish their objectives in primary schools, the major obstacle being the vast number of schools implicated. Lack of human resources in some EBPs very often result in the continuing involvement of schools who have shown interest in the past, since negotiations are easier and less time consuming. The reported outcome is that there is little or no increase in the number of schools being affected.

The combination of all the initiatives introduced to promote Economic and Industrial Understanding (EIU) has resulted in Kerr (1994) being of the opinion that it is the one theme which has received the most attention, attracted the most resources and guidance, and achieved the most permeation across the curriculum (p.1). This might certainly be true in the case of secondary schools where the relevance is seen to be much greater than in primary schools. Indeed, the notion is supported by research on the implementation of the cross-curricular themes in secondary schools, carried out by Rowe and Whitty (1993) who reported that “Economic and Industrial Understanding (was) the most permeated of the five themes” (Times Educational Supplement p.8).

While journals continue to be peppered with articles which describe examples of good practice connected to work-related education, there is an equal amount of commentaries which lament its limited integration in schools. Regrettably, as in the past, work-related activities remain restricted and Jamieson (1996 pp. 114-115) is of the opinion that more generally “the fruits of the labour invested in this theme have been washed away by the National Curriculum”, saying that “the worst scenario has come to pass: the cross-curricular themes are dead and buried as a formal part of the National Curriculum, although elements of them live on in the praiseworthy practice of some schools, and the occasional enlightened OFSTED⁹ inspection”. This observation is supported by other authors, and Jamieson and Harris (1994 p.19) draw on this information when discussing the implementation and predominance of the cross-curricular themes - Economic and Industrial Understanding in particular. They declare that “there is little evidence to suggest that schools are undertaking this task in any serious way” making reference to HMI 1991; Rowe, Aggleton and Whitty 1993; Jamieson and Harris 1992. Drawing on the evidence of other texts (HMI 1991; Bartlett 1993 and Wallace 1992) they argue that “at best, provision for the themes exist in the school development plan, at worst the themes are recorded in a low level audit fashion which has little effect on implementation” saying that “in the main.... it would be true to say that most schools are approaching the themes in a rather half-hearted fashion”. We are also informed by them that feedback from OFSTED inspections indicates that “the implementation of cross-curricular themes is not seen as priority by schools” (1994 p. 19).

Ahier and Ross (1995 p.2) also draw our attention to the HMI report (1991) mentioned above, quoting the statement which points out that many “teachers appear to ignore the cross-curricular themes, or to be ignorant of them”. Interestingly, recent figures from the DfEE (1995) report that more primary schools now have links with industry (fifty eight percent) but the figures indicate that only twenty nine percent of these links involve curriculum development. It would appear that the function of these links remains

questionable given that strong indications of systematic or well-regulated elements of work-related education continue to be infrequent.

2.4 The Situation Today

The implementation of the National Curriculum clearly placed increased and perhaps impossible demands upon teachers, and there was some recognition by Government that the requirements laid down were in many ways unrealistic. As a result, a Commission headed by Sir Ron Dearing (1994) was set up to review the situation. A number of changes emerged, the most significant of which was a freeing up of twenty percent of curriculum time for the teaching of elements not covered by the core and foundation subjects. Ahier and Ross (1995 p.2) are keen to report that “the idea of the Whole Curriculum was untouched” by this exercise, but at the same time we must concede that no additional encouragement was given to teachers to place more emphasis on the cross-curricular themes. As Ahier and Ross (*ibid.*) rightly point out, “the NCC’s cross-curriculum descriptions, in themes and skills, remain as the only official guidance on the nature of the whole curriculum” and these are sadly neglected.

Nevertheless, it cannot be denied that much has been done in schools to respond to changing circumstances and we are frequently told that Britain is a leading player in the education-industry movement (CBI 1994). Despite the lack of statutory requirements, Government still continues to lay emphasis on the importance of these links. This was highlighted at a recent EBP conference when the Under-Secretary of State for Education announced that “The Government is convinced that partnership not only pays, but is absolutely essential” (Partnership Points 1997). It might be suggested that some of the difficulties encountered in the introduction of work-related education, especially in primary schools, lie in the qualification of this statement which followed - “... if we, as a nation, are to improve our standing

and competitiveness into the 21st century” (*ibid.* p.14), the indication being that education plays a major part in the failing economy. The same publication (Partnership Points 1997) carried a review of the speech given by the Secretary of State when launching the first ever National Education Business Activity Week in November 1996. She is quoted as saying “The young people in our schools, colleges and universities today are the workforce of the future - the people who will play a key part in ensuring our future competitiveness and success. They must achieve the highest educational standards they can and develop the skills they will need when they join the labour market” (*ibid.* p. 1). Kerr (1994 p.20) argues that it is “the insistence of successive governments since the 1970s that the education system must be more closely linked to the world of work and the country’s economic goals (which) has brought a range of critical responses from those concerned with education”. Some agreement with this notion must be offered. Kerr (*ibid.*) goes on to say that the critical responses from educationalists have focused on three particular concerns:

- i. disagreement with the rationale for the policy change centred on EIU and the ‘new vocationalism’ in the curriculum
- ii. unease at the rhetoric used by Government and employers to justify the policy and the values implicit in the language
- iii. anxiety about the contradictions in the various policies and initiatives and the implications for their operation in schools.

It is true that much emphasis has been placed upon Britain’s economic decline and education’s contribution to it. This is a phenomenon not just in this country, but in many of the developed countries of the Western world where “the economic and reductive tendencies” (Apple 1995 p. xvii) have been expressed. It has been argued that when compulsory education was first introduced it was viewed as a means of enabling children to obtain employable skills, to be able to support themselves and contribute to the economic well being of society. It might be suggested that this view has re-emerged in part.

Abbott *et al.* (1996) suggests that when defining the failures of the English education system the emphasis has been placed upon three areas: “lower

standards and lower participation rates on post-sixteen compulsory education when compared with our competitors, poor training and qualifications in the vocational sphere and finally an education system which is culturally antipathetic to industry and commerce” (p.31). Many authors have laid blame on the teaching profession, drawing attention to their aversion to industry. Jamieson (1986 in Jamieson and Blandford p.3), for example, commented on how schools, in his opinion, had been captured by an anti-industrialist culture, resulting in education being led by an elite who had little sympathy with the interests and values of industrialists. It must be admitted that the writer has experienced this attitude when working with teachers who have expressed their distaste for industry and all it represents.

It might be suggested that the greatest difficulty in convincing teachers of the value of introducing aspects of work-related education, especially in the primary school, lies in the overt references to the ‘labour market’ and ‘economic success’ producing an antagonism to what was described earlier as ‘producing factory fodder’ rather than educating the whole child. Contained within the dialogue is no reference to the benefits in personal development which can be accrued from such links, or any curriculum enhancement. What is overlooked, in the hasty dismissal of the concept are the opportunities which can be derived by all concerned. As Craft (1995a p.113) points out, “the philosophy behind the cross-curricular themes was that they should permeate the statutory curriculum and make a significant contribution towards personal and social development”. She goes on to say “they could be seen as an empowering part of the curriculum, enabling children to understand themselves and the world of which they are part” (*ibid.* p.114).

Devlin and Warnock (1977 p.64) are of the belief that curriculum makers in the past have offered a choice of two possible functions: to either prepare young people for the task they would have to perform when leaving school, or, ensuring that they would fulfil their potential, arguing that rather than separating the two, both should be the objective. Many teachers still hold the

view that engaging in industry links or developing any kind of work-related education lays emphasis on vocational training, rather than recognising the interdependence of education, industry and commerce. It could be maintained that the strength lies in the all-encompassing phrase - 'education-industry links' and the lack of prescription which is placed on this area of work.

It has been noted here that many interpretations have been made, and these are without restriction. As Hargreaves A. (1994 pp. ix) points out "Teachers don't merely deliver the curriculum. They develop it, refine it and reinterpret it too". Morrison (1994 p. 3) suggests that the cross-curricular themes are the only part of the curriculum where prescription gives way to suggestion saying "that it is in these that greater freedoms can occur". The capacity for possibilities for work-related education is the portrayal of it and the ways in which it can be construed. For example, strong links can be detected between Economic and Industrial Understanding, Careers Education and Citizenship. A wealth of opportunity is available within the prescribed curriculum to deliver these essential areas of study, as enthusiasts will tell. Nevertheless, "it is what teachers believe and what teachers do at the level of the classroom that ultimately shapes the kind of learning that young people get" (Hargreaves A.1994 p.ix).

Recognising the difficulties involved in bringing education and industry together, two notable schemes were initiated in the late 1980s. The first was the Teacher Placement Service (TPS) which sought to introduce teachers to the world of business and industry, and to integrate it into their thinking and their curriculum practice. Lord Young (1988) drew attention to the problematic disposition of educationalists towards industry. In a White Paper published by the Department of Trade and Industry he commented that the education system appeared to be discouraging young people from working in industry. Seeing a necessity to bridge the divide between the two cultures it was proposed that ten percent of teachers should, each year, undertake a secondment to business or industry. The scheme, launched in 1989, had a

number of aims¹⁰ which were designed to establish a productive relationship between the two groups, initially concentrating on secondary school teachers before being opened up to primary schools.

The second scheme focused on student teachers and again this programme emanated from the Department of Trade and Industry, forming part of the Enterprise and Education Initiative. Enterprise Awareness in Teacher Education (EATE) launched in 1989 sought to initiate young teachers into elements of work-related education, helping them to incorporate it into their work. This effort legitimised earlier initiatives which had sought to achieve similar outcomes in Initial Teacher Education, emerging from Industrial and Commercial perspectives and Industry Matters¹¹. The criteria was that all courses had to incorporate Economic and Industrial Understanding into their teaching and that students should understand the significance of links between schools, local businesses and work (EATE research report no. 1 p. 2.2). Ideally, these combined efforts should have resulted in every practising teacher having some knowledge and understanding of education-industry links and the benefits these could bring.

Given the inter-dependency of nations, it might be encouraging to consider that alongside the initiatives taking place in Britain to promote work-related education, a conscious effort is, at the same time, being made by other countries throughout the world. These endeavours are particularly noticeable in Europe, North America and Australia. Efforts place a strong focus on the development of skills and attitudes in young people, deemed necessary to promote a healthy future in terms of economic and social life. The OECD (1995) stresses how the “advanced democracies at the close of the 20th century are struggling to make knowledge and learning a central aspect of social and economic activity”, urging us to recall that while the introduction of universal schooling was developing into an essential part of initiation into social and economic life a hundred years ago, “today’s ideal, at best partially realised, is to make.... schooling... better co-ordinated than in the past with

other forms of schooling that takes place beyond the school's walls"(p.7). They, like Kerr (1994), remind us that "schools do not function in a vacuum but are part of the wider community, locally, nationally and increasingly globally. What goes on in the community influences the curriculum in schools and vice-versa". Kerr (*ibid.*) confirms that "the nature of the system of education and training in Britain and its relationship to the future development of society, particularly its economic development, is the subject of much debate", reminding us that "all those involved in, and concerned about education and training have a vital role to play in this debate" (p.1-2).

2.5 Concluding Comments

That education should be directed solely to support the needs of business and industry is not the view taken by the writer; rather, there is some agreement with Wringe (1991) who believes that "it would be educationally and morally unacceptable for schools to 'sell' industry to their pupils, or present it in a falsely attractive light" (p.36). It is suggested, however, that some consideration must be given to the requirements of business and industry when shaping the curriculum, since it is the pupils who will ultimately benefit, having a greater knowledge and understanding of the practical application of their learning. Handy (1984a p. 153) draws our attention to the way in which education is a mirror of society, conceding that "it is unrealistic to blame it for the flaws in society or to expect it to be the lever for change", while proposing "that it adjusts its mirror quickly enough to reflect the world that is springing up around us rather than the world it used to be". His concern is that schools will remain rooted in the old and unsuitable traditions, and he urges us to recognise that they "need not be prisoners of their own or anyone else's past" prompting us to meditate upon "imaginative possibilities for the future" (1984b pp. 41 - 42). He also tells us (*ibid.*) that although most children are happy at school surveys suggest that most of them leave feeling they have failed, and that their experiences are largely irrelevant to later life. It is

necessary for us all to be constantly changing and readjusting to shifting circumstances. The challenge is to arouse the awareness of teachers to the need for transformation and develop positive attitudes toward work-related education in its many forms. Teachers especially, must reflect upon the aims of education, and consider that life for their pupils in the future will be undeniably different to that which they have experienced themselves. It is evident that teachers are not united in this purpose. The next chapter looks at some of the obstacles which are reputed to be significant in order to have a better understanding of how many educationalists view work-related education.

¹Bourdieu maintains that the cultural experiences in the home facilitate children's adjustment to school and academic achievements, thereby transforming cultural resources into cultural capital.

²For discussions on the changes which have taken place in the education system see Johnson in Education Group II (1991); Lawton (1992); Kelly (1989).

³ TVEI Evaluation Working Paper No. 3 (Cook, July 1989) gives an overview of evaluation findings and lists those consulted.

⁴ For examples of this see Jamieson (1985), Jamieson *et al.*; (1988), Ross (1990); Woulfe (1994).

⁵ Secondary school schemes which attracted the involvement of primary schools include: the Technical and Vocational Education Liaison (TVEI); the Teacher Placement Service (TPS); and the Compact Scheme.

⁶The five themes which were introduced by the National Curriculum Council were Health Education, Careers Education and Guidance, Environmental Education, Education for Citizenship and Education for Economic and Industrial Understanding.

⁷ Duncan Graham was the Chairman and Chief Executive of the National Curriculum Council 1988-1991.

⁸ The core and foundation subjects in England comprise: English, Mathematics; Science; Design and Technology; Geography; History; Physical Education; Music; Art; and Information Technology. Schools in Wales are also required to teach Welsh.

⁹OFSTED-Office For Standards in Education.

¹⁰ The aims of the TPS can be found in Abbott *et al.* (1996).

¹¹Industry Commercial Perspectives examined the ways in which strategies were adopted to introduce industry-related elements into Initial Teacher Education courses and produced a range of materials which could be used. As a result of Industry Year in 1986, Industry Matters funded a variety of local networks to assist with the design, development and dissemination of good practice.

CHAPTER 3

A Review of the Obstacles Associated with Work-Related Education in the Primary School

3.1 Introduction

In the previous chapter it was suggested that the introduction of work-related education has in some cases met with difficulty, arising from a number of issues. As well as the historical impediments these include the recent introduction of a statutory National Curriculum which constitutes a major obstacle to the permeation of the cross-curriculum themes, as does the aversion to change which teachers are reported to maintain. Also, the outlook of teachers brought by them to the classroom might be considered as central to the discussion since it is argued that this reflects upon the work carried out, knowingly or not.

Only more recently have the personal perceptions of teachers, which might be better described as beliefs, attitudes and values, been considered in respect of their work. While some research has been conducted into the way in which these might have been formed, commenting on how these might influence classroom practice, little attention has been paid as to how these attributes might impact on classroom practice with regard to work-related education. Similarly, scant attention has been given to the formative influences which might have shaped the viewpoint of practitioners who look favourably on the introduction of work-related education with young children.

This chapter sets out to review some of the literature surrounding issues which might be considered as influential in the introduction of work-related education in the primary school, including research revealing certain

characteristics deemed to be common to primary school teachers in particular. These characteristics include the caring role, frequently believed to be central to primary school education. The introduction of work-related issues is sometimes regarded as being in direct contrast to this approach since it can introduce children to topics which can be viewed as somewhat controversial. While it might be argued that all the issues mentioned here have widespread implications for many subjects in the curriculum, it is proposed that they have special significance for work-related education - a topic more recently associated with primary schools, having previously been almost exclusively a characteristic of secondary school education.

3.2 Primary School Teachers and Work-Related Education

When considering the history of education in England we must acknowledge that while there has been much discussion around the subject, work-related education is a fairly new phenomenon when placed as that which is necessary or a requirement for all pupils. Some reference has already been made with regard to the attitudes of teachers when confronted with this area of study, and it has been suggested here that these might have some bearing on the emphasis, or lack of it, placed upon this topic in primary schools. Research reveals that a number of issues might be involved, many of which are not exclusive to this area of study, but which could affect a number of subject areas. Those involved could include sex education, religion and a wide variety of topics including aspects of political ideology. Another determinant which is influential when discussing the school agenda is the recent introduction of the National Curriculum, which in many cases has been blamed for curriculum overload. Working with primary school teachers has shown that many of these factors are inextricably drawn together when the subject of work-related education is broached.

A few of the numerous initiatives established to support the endeavour to introduce work-related education were mentioned in Chapter 2 and many activities continue to endure despite the negative inferences. Morrison (1986 p.30) draws our attention to the fact that “Government has done a great deal to promote better links between education and industry” but reasons that all its members can do is “set a better climate” (*ibid.*) concluding that it is up to education and industry to ensure that the links persist. While statutory ruling which necessitated the inclusion of work-related education in the primary school would be favourable in the eyes of many supporters, there is some resignation to the fact that this is not forthcoming. As a result, the accent must be placed upon encouraging teachers to recognise the benefits which can be gained from this subject area and to advocate ways in which it might be included in the timetable. Woulfe (1994 p. 6) stresses that success comes from a “very high level of acceptance and desirability of school-business co-operation from both sides”. The need for teachers to value the work in question is implicit, but we must concur that “teachers like everyone else, can only assimilate new ideas to their cognition, which is bounded by their own experience” (Biott and Nias 1992 p.68). It has been suggested that, in many cases, teachers’ experience of industry and business is limited, thus restricting their capacity to acknowledge the worth of an industry-education interface, especially in primary schools. In order to teach any subject an understanding of it is necessary and a number of authors, including Kerr (1994), point out that “successful curriculum development of education for economic and industrial understanding requires that all teachers... (have)... a clear understanding of EIU” (p.1) and its objectives. In addition, Morrison (1994) contends that its introduction will challenge teachers’ practices and beliefs, while also constituting a challenge to the whole school ethos (p.12).

3.3 The Issues

1. The National Curriculum

Teachers have often been criticised for avoiding change but they are no strangers to it. This is more especially the case since the passing of the Education Reform Act (ERA) in 1988 which has brought about substantial transformations in education. Much of this change has involved the introduction of the National Curriculum which was imposed and which circumscribes a large part of the undertakings in school. Comments are frequently made with regard to the excessive amount of time taken up to fulfil the requirements, the implication being that there is little or no time left for anything else. Despite the compulsory nature of the innovations, it is advocated that there are still extensive opportunities for teachers to embody elements of the work-related curriculum in its many forms, *if they so wish*. Harris (1994) contends that “teachers ought to contest the present situation and seek, as intellectuals, to control rather than manage the schooling process” (p.108) but Fullan and Hargreaves (1992 p. 133) tell us that “when excessive amounts of contents are externally prescribed, as in the National Curriculum, the evidence is that teachers ultimately become preoccupied with coverage. They concentrate on the compulsory core at the expense of the interesting options, take less risks with time consuming enquiry methods, and so on”. In a study concerned with the way in which innovations resulting from the ERA were impacting on teachers, professional perspectives and responses to change Osborne *et al.* (1996 p.137), draws on the work of Pollard (1985), Nias (1989), and Acker (1990) when she tells us that “teachers’ professional ideologies and their beliefs about classroom practice have complex origins, deriving from a blend of personal biography, training, professional experience, classroom constraints and national, cultural and professional traditions”. She points out that before the introduction of the National Curriculum, teachers saw themselves as responsible for a wide variety of issues both inside and outside the classroom saying “they believed strongly in their autonomy and saw it as

central to their extended role that they be able to define and decide for themselves both what they would teach and how they would teach it. Teachers perceived their role to be changing and the extent to which they felt that their professional autonomy and personal fulfilment were threatened by the changes” (*ibid.* p.138). Osborne *et al* tell us that the theory put forward by Hargreaves D. (1988 cited in Osborne *et al.* 1996) is that having less responsibility in deciding the content should release more possibilities for implementation but say it may be that it is only teachers who are confident that they are able to make a creative response who have the assurance to make choices and select how they will implement the programmes of study (Osborne *et al.* 1996). Whatever the cause, indications are, with the pressure put upon them to implement the core and foundation subjects, many teachers have forsaken this path, and have forgotten or chosen to ignore the cross-curricular themes. As a result, there is a danger that pupils will gain knowledge of particular subjects without appreciating how this knowledge can be used outside the classroom.

The way in which schools are faced with the task of “bringing together all the disparate subjects which can make up a contribution to the pupils’ understanding of the world of work” is commented upon by Jamieson (1993 p. 211). Circumstances are such that the onus is on the teacher at the chalk-face, who has to visualise how Economic and Industrial Awareness and Understanding can provide new ways of developing existing subjects in support of a broad and balanced curriculum. At the same time we are urged to consider how “teachers are at the centre of educational provision and the implementation of any new and externally driven policy will inevitably be mediated by the enthusiasm, skills and practical constraints which characterise every teacher’s daily practice” (Osborne *et. al.* 1996 p.137). Harris (1994) is more positive, suggesting that teachers can “take a leading role in constructing a future built on and celebrating the participatory power of the autonomous person - a future our children might face with some excitement rather than turn away from” (p.115). We are reminded by Fullan and Hargreaves (1992) that

“without such activity on the part of teachers there will remain an ever-present risk that the purposes and practices of schooling could be directed toward lesser ends” (p.115). They are of the opinion that “curriculum reforms can be adapted to the needs of one’s own school. They can be used as opportunities to reflect on, reconstruct and even reaffirm one’s values and purposes as a school community” (*ibid.* pp. 16-17). This has been demonstrated in a number of primary schools with which the writer has worked, where the policy displays the value placed upon work-related education, using it as a mechanism to teach the core and foundation subjects. Rather than constituting another subject the emphasis is placed upon the teaching approach used, resulting in a sense of purpose and realism in the subjects taught.

Ahier and Ross (1995) comment on how the cross-curricular themes, which provide a route for the legitimate introduction of work-related education, should be of “particular appeal to primary practitioners who are suspicious of artificial boundaries between subjects” (p.6) since they offer the opportunity for integration. McBride and Powell (1996) argue likewise, expressing the view that “EIU is more easily absorbed within the primary curriculum because of the facility to cross subject boundaries” (p.3). Lawton (1989), however, indicates that “new kinds of responsibilities associated with changes in the curriculum... can either be seen as adding to the burden... or as giving teachers even greater possibilities for extending their professional role” (p.85). He goes on to say that “there is a danger that schools will be tempted to accept the National Curriculum in the form of a list of subjects” (p.91) and the likelihood of this is inevitable. It might be argued that most recently, action by Government has done little to rectify this situation, placing pressures on schools which have moved them away from the work-related curriculum. With the demands of assessment and the concern surrounding league tables, indications are that teachers are disinclined to consider anything other than the basic necessities in the curriculum, unless it is well founded in their beliefs.

2. Teachers' attitudes, values and beliefs

Within the dialogue surrounding teachers' actions, reference is often made to their beliefs, attitudes and values. In spite of this, Ball and Goodson (1985) draw our attention to the fact that only more recently, the subject of teachers' lives and careers have been considered as having some influence on their professional roles. They tell us how, in the past, concerns regarding the outcome of education, especially in Britain, have focused on school performance, and the dominant affect of pupil's social and cultural differences. The emphasis has shifted over the last twenty years, and Ball and Goodson (*ibid.*) draw our attention to the extent to which teachers themselves might affect the position. They explain how evidence suggests that in the first instance this change in emphasis led to an assault on teachers, blaming them for the inadequacy of their pupils and the reproduction of gender stereotypes (1985 p.7). More recently this trend has shifted to reflect upon the constraints within which teachers work and the ensuing consequences, transforming them from "villains to victims upon the recognition that they operate in situations which place them in a position affected by society, their situation and their pupils" (*ibid.* p.7). Nias (1989) considers that it is surprising that "an occupation which has for nearly 200 years attached great importance to the idea of knowing and catering for the individual child has paid little formal attention to the concept of the individual teacher" (pp. 18-19). She stresses that primary teachers, especially, have attracted very little attention from education analysts. In retrospect it seems ironic that these governing factors, which might have some sway in the execution of teachers' roles, have only lately been recognised. There are, undoubtedly, circumstances in everyone's lives which shape outlook and performance. Teachers are no exception. They are often viewed as 'beings apart' especially by the children they teach, who sometimes find it difficult to accept their having a home and family like everyone else. As Fullan and Hargreaves (1992) so rightly point out, teachers are not "wheeled out of the cupboard at 8.30 a.m. in the morning and wheeled

back in at 4.00 p.m.” (p.36). They, like everyone else, are products of their circumstances and of life around them.

It is fanciful to suppose that education could be value free and as Lawton (1989 p.8) contends “every statement that a teacher makes is value laden”. He suggests that these values are “connected with ideas about the purpose of education, probably connected with more general values and beliefs, and maybe the purposes of life” as they perceive it (Lawton 1989 p.3), albeit unconsciously. It could be maintained that none of us is value free, but it might be argued that teachers, maybe more than others, need to be aware of their values in order that they might contemplate their actions and the subsequent results of these. Nowhere more so than in the curriculum areas involving elements of economic education which Price (1996) reminds us, concerns not only earning a living but living a life.

Halstead (1996) recognises the possibility of some conflict with the term “values”. He gives his interpretation of it (in education) as being “what the teachers choose to permit or encourage in the classroom” (p. 3) and this view is endorsed by the writer in this context. Halstead (*ibid.* p.5) describes that his own definition of the term as being the “beliefs, attitudes or feelings that an individual is proud of, is willing to publicly affirm, has been chosen thoughtfully from alternatives without persuasion, and is acted on repeatedly”. He argues that “values are central to both the theory of education and the practical activities in schools in two ways. First, schools and individual teachers within schools are a major influence, alongside the family, the media, and the peer group, on the developing values of children and young people, and thus society at large. Secondly, schools reflect and embody the values of society; indeed they owe their existence to the fact that society values education and seeks to exert influence on the pattern of its own future development through education” (p.3).

We must acknowledge that values are hard to analyse, since they are firmly established in our inner selves. At the same time we are compelled to consider

that “if values are our standards and principles for judging worth... (and) are the criteria by which we judge things... to be good, worthwhile, desirable; or on the other hand, bad, worthless, (or) despicable” as Shaver and Strong imply (in Halstead and Taylor 1989 p.15), then much thought must be given to them. There is little doubt that these underlying inclinations are of indisputable concern in education. These might well be of particular importance when considering the introduction of non-statutory aspects of the curriculum, where choices must be made of what to teach and how. These decisions might conceivably be ‘value-laden’ and Morrison (1994) draws our attention to the possibility of this. He suggests the potentiality of “value barriers” when introducing cross-curricular themes, contending that not only do “different people have their own construction of worthwhileness” which might result in them being disregarded, but goes further to suggest that the “conflict and disagreement over the value or extent of the innovation (might well be) endemic” (p.27). A view often expressed when case studies involving work-related education are produced is that teachers need a degree of commitment. It is considered that belief in the value of what is being done depends on the success achieved (Francis *et al.* 1989). Some put forward the argument that a driving force is needed in a school to implement such activities. This point is made forcibly by Mills (1996) who argues that it is unlikely that the cross-curricular themes will have a very high status as non-assessed elements of the curriculum without the leadership of a subject or theme co-ordinator. Others like Hameyer (1996) consider that “innovations from above are less likely to be as effective as those controlled by individual staff” (p.78).

Debates revolving around optional opportunities in school are not uncommon. Indications are that, as in other organisations, those who are able to put forward the most persuasive arguments or are most influential will be most successful in promoting their views. Apple (1995) advocates that schools are crucial sites for ideological struggles, inasmuch as, knowingly or not, they produce and reproduce ideologies which he describes as “inconsistent sets of beliefs made up of lived meanings, practices and social relations” (p.14). In

the same way Ball (1992 p. 67) draws our attention to the manner in which “schools are microcosms of wider society” expressing the belief that teachers will, either consciously or unconsciously, adhere to the varying values and beliefs of the community around them. The implication is that what emerges in classrooms largely depends upon the attitudes, values and beliefs of teachers involved. There is little doubt that teachers are reflective about the activities they undertake, though Hameyer (1996 p.76) puts forward the argument that “the reflective practitioner admits that s/he does not know enough and is willing to continue learning and adapt to new situations”. At the same time Nias (1989) informs us that from her work with teachers, she has discovered that they “develop strategies which preserve their self-image, filtering out strategies which seek to interfere with their beliefs” (pp. 203-204). One example might be the way in which “the enterprise culture is perceived as inappropriately individualistic by some educationalists and in opposition to collective values in society” (Francis *et al.* 1989 p.3).

It may well be that many teachers are unaware of the part they unconsciously play in shaping what is ultimately delivered in the classroom. Ball (1992 p.69) reflects that it was only upon taking up the appointment of head-teacher that she recognised that teachers are not always aware of their own values, together with the fact that they could not truly self-evaluate until their philosophy was made explicit to them. She discusses the difficulties of affecting teachers to change, and contemplates on how the self-evaluation necessary very often brings about feelings of guilt. This perception is endorsed by Nias (Biott and Nias 1992 p. xvi.) who acknowledges that “change at the level of beliefs and assumptions is not only difficult to achieve, (but) is also slow and, since it is usually attended by conflict and guilt, is often accompanied by suffering”.

3. Teachers and change

The issue involving teachers and their attitude to change has already been touched upon. To a great extent the approach to change involves views on education and what it comprises since these are deep seated, and this has been discussed by a number of authors. Contrary to belief, these views emanate not just from academics or the teachers themselves, but from the community as a whole. Parents can have a notable affect on what is taught and how, in many cases supporting the methods and curriculum content which they themselves experienced. It is often said that education is the one subject on which everyone considers themselves to be an expert, since everyone has been to school. While analysing the profound cultural beliefs related to education and schooling Hargreaves D. (1994 p. 42) quotes Cuban (1993) whose opinion of the common view of schooling is that “teaching is telling, learning is listening, knowledge is subject matter taught by teachers and books (and that) most taxpayers expect their schools to reflect these centuries-old cultural beliefs”. He stresses how these “are especially difficult to alter after a century of popular beliefs and practitioner acceptance”. Present day policies have made strenuous moves to encourage the participation of parents in educational decision making. As yet, it might be argued that teachers still employ great influence in the educational process.

Goodson (1988 p.90) supports the theory of the relation of change to past experiences and contends that to better understand “the broader patterns of evolution in schooling, such as the development of school innovations, school subjects, educational systems and the teaching profession itself” we must look to the background of teachers’ personal and professional lives. He maintains that “we must consider:

- the teacher’s previous career and life experiences
- the teacher’s life outside school

- the history of schools, subjects and the teaching profession within the teachers' life time

since these will all have an impact on the curriculum interpretation and how this is taught" (Goodson 1988 p. 84). Osborne *et al.* (1996 p.150) also consider that there are many variables at both institutional and individual level which may influence a teacher's stance towards change. These include the school's ethos and strategy for change and the socio-economic area of the school, as well as the ideology and previous beliefs about teaching held by the teachers themselves.

The view taken by Francis *et al.* (1989 p. 101) is that "educationalists, on the whole, are the successes of their system. They have survived it and are habituated to it. They can be expected to value it for what it represents. From school to university, from university to college and returning to school again, they experience familiar places, familiar rhythms, familiar values". Other authors reinforce this view, and Bloomer (1993) alludes to it as "the closed cycle" (p.12), drawing our attention to how this point was referred to by HMI in 1982. Ball (1992) is also of the opinion that "the roots of conformity to traditional schooling practices probably lie in the schooling experienced by the teachers themselves... If they have experienced nothing else, then they 'know' nothing else" (p.68). This sentiment, which is difficult to contradict, would be credible in any number of situations. Change does not come easily to any one of us, and we all have views which are firmly embedded in our experiences, but how these have emerged can only be determined by deeper introspection. Fullan and Hargreaves (1992) propose that "if our teaching is grounded in our purposes, the kinds of experiences we have had, and the kinds of people we have become, one way to retrieve the grounds of our teaching is to write personal autobiographies or life histories of our growth and development as teachers" (p. 95). In a similar way, Nias (1989) adheres to the belief that encouraging primary school teachers to talk about their work leads them to understand themselves more fully, providing the foundation for development

and change. She describes how her studies have revealed that teachers, like other human beings, can develop and change, but concludes that “they will not change professionally unless they also change as people” (1989 p. 79), indicating that they need to undergo situational changes in lives and experiences. She depicts teachers as individuals with a very strong “substantial self” (*ibid.*), using Steven Ball’s definition which distinguishes this as the inner core which is highly resistant to change (1972 in Nias p. 21), characterising the ‘substantial self’ as a set of self-defining beliefs, values and attitudes which develop alongside our situational selves and which is highly resistant to change (Nias 1989 p. 203).

The management of change is a topic central to society today, with a vast array of articles and books on the subject. The majority of these have emanated from studies of business and industry which have suffered profound reorganisation in recent years. More latterly, the reforms in education have led to the emergence of a number of texts which focus on education and change. Central to the dialogue is how changes might be effected in the curriculum and in the practice of teaching. Several authors have commented upon the difficulties encountered when seeking to bring about changes in education, and Hargreaves D. (1994 p. 12) is of the opinion that “schools, and especially classrooms, are remarkably resistant to change, much to the consternation of politicians, policy makers and innovators”. This belief is acknowledged by Nias (1989 p. 62) whose feeling is that “the glacial slowness in change in education is now almost a truism”. She relates how “recent explanations (e.g. Fullan and Hargreaves 1992; Nias *et al.* 1992) for teachers’ reluctance to alter their pedagogical behaviour have stressed the fact that individuals’ beliefs and values are at the heart of their behaviour and that it is hard to effect change at this level in the human personality” (p. xvi).

Change *is* difficult, and as Craft (1995a p. 162) indicates, the introduction of work-related education in the primary school (in particular) signals a departure from tradition. Given the length of time in which it might have formed any

part of the curriculum, it is unlikely that many teachers will have encountered such curriculum experiences at first hand, with those most likely being the younger members of the profession. As a result, it is reasonable to assume that perceptions of business and industry are restricted, and indications are that teachers will feel more comfortable teaching 'that which they know' and are familiar with. Some years ago, Stenhouse (1975) stressed the need for teacher development in order to achieve curriculum development. The view often taken in education when considering changes in the curriculum and the management of it is - what has gone before served me well, why should it not provide for future needs? While this attitude is discernible in all sections of the community when changes in all manner of things are proposed, it can be readily identified with recommended changes in education, from those both inside and outside the education system.

Stress has been placed on the need for relevant experiences to be made available for teachers to develop their awareness in the field of industry-education in order to introduce them to the opportunities available (Bullock, Scott and Waite 1993; Baker 1993) and some reference has already been made to the scheme introduced to allow teachers to undergo placements, enabling them to obtain an insight into business and industry. It cannot be denied that this is a worthwhile experience, but Jamieson (1993) prompts us to question how we can be expected to "believe that after a one-week placement (teachers) 'know' about the world of work" (p. 213). All we can hope is that they will be inspired to judge the worth of this experience to the good of their classroom practice. Sadly this is not always the case, as revealed in a study undertaken on behalf of the Department of Trade and Industry (1990) with teachers who had engaged in the Teacher Placement Service. Almost half of the primary school teachers questioned expressed the view that they were unclear how the experience could be of benefit to them in their work, with some even saying that it was a waste of time.

4. Care versus controversy

The realisation that many primary school teachers are unable to determine how experience of business and industry can benefit the curriculum causes us to reflect why this may be. It might be argued that fundamental to many primary school teachers is the notion of caring for the pupils, and that the introduction to business and industry is seen as contradictory to this ethos. The OECD (1995) portrays the school as a means of initiating children into adult society and where the teacher has a particular authority. Considering this, it is regrettable the indications are that many teachers do not testify to the relevance of work-related education with young children, not seeing it as part of the educational process with which they are involved, and actively seek to oppose efforts to include it (Jamieson, 1993). Teachers have put forward a number of arguments to support resistance and adverse opinions have been encountered first-hand by the writer. In a previous survey some primary school teachers expressed the view that enterprise education was “more suited to secondary education” (Iredale 1993, p. 10). This attitude is not uncommon and has been noted by several authors with regard to a number of issues which might be considered contentious. Comments made usually focus around two points of concern:

- Firstly, it is sometimes considered that work-related topics are not ideologically acceptable in primary schools; that they are not valid with children of this age group or that they are somehow morally unacceptable. Linked to this is the notion that work-related education favours ‘training’ young people for a job of work.
- Secondly, there are underlying notions of some form of political indoctrination based upon the economic needs of the country. This is sometimes seen as a wish by government to inculcate an attitude in children and young people which reflects Thatcherism and money-making.

These concerns tend to merge together, and in many ways each is difficult to contemplate in isolation. When talking with teachers it is evident that a variety of these elements are inter-connected in their thoughts, and it is sometimes hard to determine on which point they are basing their opposition. The view that young children should be protected from the world about them which includes shielding them from what might be considered as the harsher realities of life is often implied, although it might be claimed that many young children are much more familiar with some aspects of life than we would deem appropriate. Fullan and Hargreaves (1992) argue that “the greatest satisfactions of primary school teaching are found not in pay, prestige or promotion but in what Lortie (1975) called the *physic rewards* of teaching”, which they describe as “the joys and satisfactions of caring for and working with young people” (*ibid.* p. 33). Much of this is attributed to the “*ethic of care*, where actions are motivated by concerns and care for the nurturing of others and connectedness to others” (p. 33). Lortie is cited as saying that “the ethos of care is extremely common, but not exclusive to women” who “of course, make up the vast proportion of primary school teachers” (Fullan and Hargreaves 1992 p. 33). The ‘caring approach’ of primary school teachers is also commented upon by Nias (1989) who draws our attention to how highly this is regarded by practitioners, and those involved in education can easily identify with this.

The subject of work-related education is often considered to be controversial and can be seen as inconsistent with the aims of primary school education and with the aspect of caring. This point is taken up by Short (1991 p.333), who discusses at what age young children might be confronted with such issues. He writes of “the alleged prevalence among teachers in infant and junior schools of what Alexander (1984) has dubbed ‘the primary ideology’ ” which he describes as “a form of pedagogic folklore which, *inter alia*, views childhood as an age of innocence”. The foundation of this concept lies in the assumption that “teachers (together presumably with other adults) have a responsibility to protect the young from harsh and corrupt reality” (*ibid.*)

which could include earning a living. How this philosophy manifests itself in both infant and junior school classrooms is remarked upon, connecting the ideology with the developmental theories put forward by Piaget (referred to earlier) and the belief that children are unable to cope with particular issues until they have passed through given stages of development. Short argues that other researchers¹ dispute this theory, concluding that “the full extent to which young children at school can understand and benefit from a study of controversial issues will be known only when their teachers acquire an immunity to ideological and other constraints and begin to find out for themselves” (*ibid.* p. 348). The theme is also raised by Wilkins (1990 p. 186) who maintains that “the definition of what constitutes a controversial subject is subjective (since) the value systems and the personal constructs by which an individual lives influence whether in his or her view a subject is controversial”. There are many questions subsumed within work-related education which might be considered as controversial, but it can be argued that providing pupils with the opportunities to explore situations critically permits them to make their own judgements on well founded, first-hand information (Costello 1992).

Many young children are already well acquainted with contentious subjects through watching television for example, and this was indicated earlier. Programmes and news bulletins are peppered with tales of wars, environmental issues and items concerned with racism, to name but a few themes. In addition, there is the possibility of circumstances in the pupils' own lives which could be conceived as being controversial and in which they have had some involvement. Active participation in the world of work through school could afford pupils the opportunity to analyse all the relevant factors in a chosen situation, allowing them to make their own judgements after careful consideration. Ross (1992) feels that many teachers are more comfortable teaching facts rather than values, indicating that economic and industrial issues are inextricably linked with political, social and moral values. He draws our attention to how young children are much more likely to ask

searching questions about the workplace which might concern queries into salaries, working conditions or equal opportunities, indicating that adults would often be embarrassed by such questions, and suggesting it may be this which partially discourages teachers. We are urged not to be deterred, but to consider how these events could valuably contribute to children's economic and industrial understanding. Perry (1989 in Costello 1992) puts forward an even stronger argument against the introduction of Economic and Industrial Understanding. He claims that work of this type is potentially indoctrinatory and value-laden, but it might be argued that the omission of the subject area can be equally damaging since it removes the opportunity for critical thought and evaluation. A most frequently used argument is the possibility of conveying biased views, but Warnock (1996) points out the incongruity of this, suggesting that when presenting what might be broadly labelled as "political issues, a teacher has a duty to give his own opinion, but to give it as an opinion" (p. 50). In this way children can address real issues and develop their own value systems.

When considering the introduction of Economic Awareness into the classroom, Jamieson and Harris (1994 p. 22) recognise the difficulties which might be faced in each phase. Drawing upon previous research which they have undertaken, they suggest that the primary school offers the most possibilities, suggesting that there is sufficient evidence to support the belief that children understand those socio-economic ideas that they have direct experience of. Their contention is that "well constructed or selective experiences are likely to encourage young people to re-think or even reconceptualise their views of economic phenomena providing certain conditions are met". Those offered are:

- the students are confronted with an issue/problem which 'demands' solutions
- the students are asked to work on the problem in small groups

- the students are placed under some pressure to come up with satisfactory answers to the issues posed
- the students are encouraged to expose the reasons for their decisions to others for scrutiny
- the students are actively involved in working out the solutions themselves
- the situation or problem which confronts the students has some aspect of newness or novelty about it (cf Hamilton and Crouter 1980)
- the experience is one which is likely to engage with the students in the affective as well as the cognitive domain
- the students spend a significant amount of time reflecting upon their experiences and on teasing out and codifying the meaning (Boud, Keogh, and Walker 1985)
- repeated opportunities are given for students to have similar experiences, or to revisit the experiences or to make use of their learning in new situations so that the new learning is reinforced (Jamieson and Harris pp. 22-23).

There is a scant supply of research carried out in the UK with regard to children's understanding of economic matters. Much of what is known is based upon investigations carried out in the USA where Schug is a leading figure in the field, having conducted a number of studies. He informs us that while there is a growing body of research in this area, many of these studies have been based on the developmental stages formulated by Piaget². Schug concedes that the capability of young children to understand economic concepts which include controversial issues is developmental, but infers that they do not necessarily follow the pattern advanced by Piaget's theory, referred to earlier. He contends that it is essential to introduce economic concepts at an early age (1992). Blyth also argues that an economic perspective should be seen as "an aspect of educational development starting in the pre-school years" (1994 p.14) suggesting that "the learning accruing

from such work must depend upon the quantum of economic understanding which he or she begins” (1992 p.85).

The conclusion reached by McBride and Powell (1996 p. 3) is that at present “too little attention is given to the need to develop concepts, awareness and understanding when children are at the most impressionable age”, that is in primary school. They draw attention to recent research which implies that “children’s views, even (their) choice of occupation is significantly determined well before they reach secondary school” (*ibid.* p. 3). Attitudes and opinions are formed early, many even before school age and these are influenced by our surroundings. If we are to promote positive attitudes towards business and industry, where better than the primary school? It was commented upon earlier that many of the initiatives advanced have been aimed at secondary school pupils, but in many ways this might be considered as remedial education. Activities such as these with older children were recently described by a colleague as “throwing cement at the wall after it was built, to fill in the holes”. Surely the most effective structure is fashioned from a good foundation on which a strong framework might be built.

5. Political indoctrination

Maybe the greatest resistance shown to work-related education stems from the perceived political aspects and the references which have been made to the links between education and the economic decline. Jamieson (1993), for example, is of the opinion that it is this issue which is at the heart of the debate. He suggests that the way in which the perceived problems of the economy have been linked to educational performance is central to the conception of the work-related curriculum. Some, like Gott and Duggan (1996) regard this area of work as politically sensitive and Kelly (1990), is in no doubt that work-related education “is essentially a political activity” (p. 145). It is his opinion that this is unavoidable since it is part of education which prepares young people for adult life in society.

Harris (1994) indicates that “it is becoming almost traditional to blame teachers and schools for certain ‘global’ economic problems” (p. 11). It cannot be denied that this argument has been put forward on a number of occasions, and it would appear that what many teachers resent is the implication by government that the blame for economic failure lies with them. There is sometimes even a conjecture that what is involved is some type of conspiracy to regulate education in terms of only what industry needs, and Ross (1992) argues that many teacher educators view industry education as a Conservative plot. Watts (1993) discounts the idea of a conspiracy theory, while allowing that circumstances over the years and the way they have evolved might give this appearance. On the other hand, Bowles and Gintis (1976, referred to Chapter 2) claim that there is a correspondence between the nature of schooling and the needs of the state. Like Bourdieu (1977) they see education as a means of actively underpinning and supporting the social and economic structure of society. Young (1996) proposes that the correspondence between education and the economy has always been tenuous, but suggests recent alterations in the patterns of work and the resulting social effects demand a curriculum which specifies for the future needs of society. As Ahier and Ross (1995 p. 4) point out “some more contemporary features may derive from concerns with poor national economic performance and the sense of rapid economic transformations which requires a new and flexible workforce”. They are, nevertheless, of the opinion that “so much has changed - in the economy, the culture and the personal lives of young people - that teachers can no longer rely on rational abstractions or presumed personal or social unities to develop programmes of social education” (p. 4). Harris (1994) pursues this line of attack, saying that “basically, idealist education theory denies, ignores, misconceptualises, and renders unproblematic certain important factors about the real world of daily experiences and practice. It fails to lay due emphasis on actual manifestations of material existence; particularly the effects of changing economic pressures and reforms on the practice and provision of schooling and education” (p. 10). Given the changing social climate it might be argued that education needs to

reconceptualise its approach, adapting to the future rather than living in the past.

6. Vocationalism

There are still many teachers who dispute the inclusion of work-related education on the grounds that this is a means of introducing elements of training into education, hence the comments made in Chapter 2 of how references are often made by teachers of 'producing factory fodder'. It would seem likely that this reaction emanates from some of the perceived hindrances mentioned in the previous chapter linked to the expectations of teachers and other members of society with regard to education and the outcomes of it. Corson's (1991) view is that there is a fundamental value at stake which involves the debate about an individual's entitlement to freedom but he, like Wiener (1981), maintains the belief that our views are heavily coloured by our past. It is Wiener's (*ibid.*) expressed opinion that many of the attitudes encountered today continue to be based upon the doctrine of the nineteenth century in which industry "meant an uncomfortable closeness to working with one's hands, not to mention an all-too-direct earning of money" (p. 18). He proposes that the whole outlook is enmeshed with the class system and that "vocational preparation... carry(s) the stigma of utility" (*ibid.*). Jamieson (1993) also points out how work-related education is associated with low-level skills and occupations connected with less able pupils. The writer suggests that this stigma remains. There are still teachers who exhort pupils to work harder in school 'or they will end up working in the factory down the road'. This attitude was remarked upon only recently as being 'alive and well', in a conversation between the writer and an industrialist. It is statements such as this which lay claim to the bias of teachers away from business and industry, and which do little to raise industry's standing in the eyes of young people.

At the other end of the spectrum there is concern that the aim is directed solely to the development of entrepreneurs. This view has a tendency to be

particularly directed at the many initiatives aimed at enterprise education. In many cases this term brings with it a sense of scepticism, much of which is the result of misunderstanding, with different people lending different connotations to the word and hearing different messages. Obstacles with the word and all that it implies have been discussed at length elsewhere (Caird 1990; Iredale 1993) and Francis *et al.* (1989) tell us of some of the negative connotations surrounding the concept of entrepreneurship uncovered in their research. It is true that the language of work-related education is ambiguous, and that enterprise was put forward strongly by Mrs. Thatcher and her Government, creating barriers to its acceptance. A common view is that this is a drive to assert the value of money and profit which causes it to be rejected out of hand by many teachers. Introducing children to business and how it works is often seen as encouraging them to *be* business people or entrepreneurs. If this is the case can we then suppose that football instruction, for example, is a means of directing pupils to be footballers? Surely it is more concerned with developing some insight into the subject concerned, and where possible developing knowledge, skills and understanding.

It cannot be denied that learning about money, profit and loss, can be an aim in work-related education. It might even be suggested that this is an essential part of education, and one that is often omitted, since Lawton (1989) tells us that “most adults in modern industrial societies have only a very hazy idea about their own economic system and how it works” (p. 22). It may be as a result of this omission and the lack of emphasis by schools that one concern which has been widely voiced is the lack of graduates wishing to enter the wealth creating areas of the economy. Grant (1986 p. 58) stresses the importance of promoting positive attitudes in this respect, a task in which, in his opinion, the education system plays a major part. During a project carried out in Leith (Opportunity Knocks 1986) one assistant head-teacher is quoted as saying, “I’ve always felt that we don’t do enough in British schools to introduce children to industry. There are so many prejudices compared to the US and Germany. For example, success, at least initially, means academic

success and industrialists have often blamed teachers for harbouring this attitude. But it is also a reflection of the past class system - separate dining rooms for the managers, for example. These things affect the kid's perception of industry" (p. 5). If teachers have negative views of industry and of curriculum initiatives concerned with economic matters, there is likelihood that these views will be transmitted to their pupils, however unwittingly. It has been argued by some that it is not only the overt curriculum which influences children but also the hidden curriculum (Morrison, 1996).

Morrison advocates that this is a powerful dimension, since it tacitly teaches norms and values. In a similar vein, Kelly (1990) argues that "implicit in any set of arrangements are the attitudes and values of those who create them, and these will be communicated to pupils in this accidental and perhaps even sinister way" (p. 11). It is in this sense that Ball (1987) considers that schools are micro political areas in which government policies and government practices are filtered and negotiated before emerging into school practice.

Kerr (1994) considers that the anti-industrial stance taken by teachers is hardly surprising, since they have been shunted down the route which links education with the world of work "with minimum consultation (on) the insistence of successive governments since the 1970s" (p. 20). He feels that the critical responses which have resulted are not unexpected but concedes that numerous teachers have "relied upon their professional judgement to sort out their responses to the issues" (p. 21). The question that remains is - on what is this professional judgement based?

3.4 Concluding Comments

It is evident that there are a number of reasons why work-related education is, in many cases, omitted from the primary school curriculum. It has been suggested here that the many additional commitments which have been placed upon teachers with the introduction of the National Curriculum must not be

underestimated as one of the major influences, having imposed numerous unprecedented demands. At the same time, it has been argued that opportunities are available within the timetable to introduce aspects of work-related education, if the teacher is inclined. In studies carried out to determine how primary school teachers view themselves and the task they perform, Nias (1989) identifies how they “*expect* (writer’s emphasis) the job to make extensive calls upon the personality, experience, preferences, talents, skills, attitudes, values and beliefs of each individual. Equally, they expect the freedom to ensure that the ways in which, and still to some extent what, they teach are consistent with the values which are most salient to them”. Floud (1962 in Nias 1989 p. 33) is quoted as saying that “the tradition of the teachers who see themselves as ‘crusaders’ and ‘missionaries’ is a long-standing one in this country”, and this statement is endorsed by accounts given by teachers, which include comments such as, “whatever the other staff do, I’m not going to let my principles go; I live in my own world, make my own standards” (Nias 1989 p. 34). Thus it might be argued that if this is the case, never has the climate been more favourable.

Nias (*ibid.*) maintains that “the personal values which are incorporated in individuals’ substantial selves play an important part in the way they conceptualise and carry out their work” (p. 41), and this is demonstrated in the way in which they view themselves as having a ‘caring role’. But as Fullan and Hargreaves point out, “Primary school teachers should be persuaded by word and by deed that there are other kinds of caring to give and receive in the school community” (1992 p. 34).

Price (1996 p. 1) insists “it is possible to make provision for economic and industrial understanding, enterprise, partnership activities and other cross-curricular issues within the revised National Curriculum framework” but says “the only way is to try and create shared meaning in the wider school community about what is worthwhile” (p. 1). Central to the educational process is the need for children to have a common understanding of the world

in which they live, together with some recognition of the interdependence of individuals, groups and nations. Raven-Hill (1996) reminds us how the pupils of today are the producers, consumers and citizens of tomorrow, and stresses the importance of education in helping them to make sense of experiences that can be significantly addressed through the education industry interface. As McBride and Powell (1996) fittingly point out “industry and society will benefit in the long-term” (p. 3).

It was acknowledged earlier that education could never be value free, and Price (1996) stresses that we need “to acknowledge the curriculum not as neutral but as rightly value laden and to celebrate values in curriculum provision. In other words we add value by adding values” (1996 p. 1). While it might be argued by some that education should uphold existing patterns we must consider that the world is going to be different and to encourage people to act upon it. What was taught yesterday will not necessarily be of use tomorrow.

It is impossible to predict what life will be like in the twenty-first century, but we must consider that teachers are one of the most important influences on the life and development of young children, since they play a key role in creating the generations of the future (Fullan and Hargreaves 1992; Harris 1994). Clearly all teachers are not in agreement that work-related education plays a part in this scheme, and some of the arguments used against work-related education have been discussed here. What are not clear are the views of those closely associated with primary school education. The next chapter examines some research which enables us to reflect on their beliefs, and it is important that these be understood if industry-education is to endure for as Fields (1993a) suggests “as citizens of the twenty-first century it is imperative that all children are given opportunities to grow and develop their own understanding and appreciation of local, national and international industrial and commercial concepts” (p. 3).

¹Short refers to Allport 1954, Bruner 1960 and Phillips 1975.

² Piaget put forward a theory that children pass through certain stages of development. A comprehensive guide to his thinking is given by Beard (1971).

CHAPTER 4

A Review of Research Studies Associated with Work-Related Education Carried out with Teachers and Student Teachers

4.1 Introduction

This chapter provides a review of studies which might throw some light on the beliefs, attitudes and values of primary school teachers associated with work-related education with young children. Empirical investigations in the area of work-related education are limited, and it would seem that there is no research which has been specifically carried out on the formative influences which lead practising teachers to include work-related education in the primary school curriculum. A limited number of studies carried out in associated spheres reveals information which provides an insight into the views of teachers in all phases of education, and teacher trainers, towards aspects of industry education in its many forms. Much of the research is linked with the initiative to promote enterprise education into initial teacher training through the Enterprise Awareness in Teacher Education Service (EATE), which ran between 1989 and 1992. Other studies are concerned with the impact of the Teacher Placement Service and the Enterprise Awareness Initiative.

4.2 Practising Teachers

Maybe the most significant survey for the purpose of this study is one carried out by Andrew Irving Associates in 1988 on behalf of the Education Division of the Department of Trade and Industry (DTI). The survey aimed to ascertain teachers' opinions of the Enterprise and Education Initiative (EEI)¹, and was followed by a subsequent review in 1989 (Andrew Irving Associates 1990) to

determine any changes which might have taken place in the teachers' attitudes over a period of time. The investigation was quite extensive in that it involved one thousand classroom teachers throughout England, Scotland and Wales in all phases of education, from both maintained and independent schools. The conclusions reached suggest that during the period when the investigations were carried out there was "enthusiastic support for closer links generally between schools and local employers" (Andrew Irving Associates p. vii). The authors conclude that despite its lack of visibility in the curriculum, the importance to pupils of learning something about the world of work before they left school was highly rated when teachers were asked about it (*ibid.*). A closer examination of the data, however, reveals a slightly different picture.

The researchers set out to "establish the importance teachers attached to preparation for working life in their hierarchy of education priorities" (*ibid.* p. 4), and teachers were asked (unprompted) to determine the importance of a range of skills which pupils should acquire in their schooling. Of those responding in the first phase only eight percent of primary school teachers indicated that an understanding of a world of work or work experience was significant, and only two percent agreed with the principle in the second wave (*ibid.* p. 2a). These results, which are somewhat contradictory to the conclusions reached, are interpreted as being the outcome of the lack of prominence given to this area of study rather than an outright rejection of it, since, when teachers were asked specifically, their replies are said to have indicated that they believed this to be important. The view expressed is that "it rarely occurred to them spontaneously", (*ibid.* p. 4) which implies a latent concern. In the primary sector few teachers declared an increase in contact between business and education over the time of the study, which was a period of one year. Indeed many indicated that the situation had remained static, with specific events occurring only rarely (*ibid.* p. 9). Furthermore, attitudes toward the benefits of teacher placements in business and industry by primary school teachers were looked upon with "considerable reservation" (*ibid.* p. 22) with more than forty percent saying that they did not consider that a placement could be beneficial. Senior teachers are said to have shown more interest,

though it is the youngest age group which is noted as displaying the most enthusiasm. Concerns are said to have revealed deep-seated doubts among the teachers as to the benefit of involvement with the business community, and there was some anxiety expressed that the curriculum might suffer as a result. In some areas of the country there was a recognition by the teachers that, as a profession, they themselves needed to change “if they were to equip children for a changing world” (*ibid.* p. 5), and the indications are that those having had some full time business experience or a placement in industry were more in agreement with this point. Overall there is said to have been little growth in the increase in awareness and understanding of the Enterprise Education Initiative (EEI) over the two waves of the investigation. Rather there are insinuations that shifts in attitude tend to be inclined toward the negative rather than the positive. Much of this is attributed to the worsening climate in education in general, alongside the pressure and frustrations which have come to bear with the recent changes introduced.

While the Teacher Tracking Study (Andrew Irving Associates 1990) reveals little tangible data on the attitudes of primary school teachers toward work-related education, or how they might have been formed, it does reveal a difference in attitude between teachers in primary schools and those in secondary schools whose comments were more positive. This could conceivably be as a result of the closer proximity of secondary school pupils to the working environment and teachers’ recognition of the need to prepare them for it. What was exhibited was the more ready acceptance of industry-education links by those who have had direct experience of them in primary and secondary schools, even though the primary school teachers overall gave some indication that placements were of little value. Given that the founding hypothesis of the study was “that closer relationships are likely to lead to better understanding and greater respect and sympathy between teachers and business” (*ibid.* p. vii) it could be argued that this view was optimistically inclined, especially in the primary school phase since the authors themselves say that there was no real growth in understanding or knowledge by the

teachers over the time. The attitudes of the teachers toward business and industry were not closely scrutinised, but some general questions established the prevailing view which displayed mixed feelings. Included was the view that teaching was becoming too influenced by vocational requirements by almost two thirds of the primary school teachers questioned.

The study carried out by Andrew Irving Associates (1990) was carried out prior to the establishment of the Teacher Placement Service. A subsequent questionnaire administered in 1993 by Anderson and Huddleston endeavoured to discover how the situation might have changed, and built upon the information gathered previously (Abbott *et al.* 1996). The aim was to examine “teachers’ perceptions, knowledge and attitudes in respect of education and industry links arising from placement in industry” (*ibid.* p. 31). Abbott *et al.* (*ibid.*) report the findings of the survey as revealing a difference in attitudes by secondary and primary school teachers toward education-industry work. As with the previous survey carried out by Andrew Irving Associates (1990), a much more favourable attitude was revealed by secondary school teachers who are deemed to be more positive than those from primary school teachers. Involvement in links with industry were said to have been much more infrequent by the primary schools with over ninety percent saying they “never or hardly ever had visits or talks by employers in school” (Abbott *et al.* p. 36) compared to more frequent links being reported by the secondary school teachers. The general consensus of opinion from primary schools was that “contact with industry had remained at the same level since 1989” (*ibid.*). In contrast to the former survey, primary teachers who had been involved in teacher placement were less positive of the benefits accrued, with thirteen percent saying they had been not very useful or were not at all useful. Only twenty five percent of the primary school teachers felt that links with industry could make lessons more relevant, some even indicating that links could narrow the curriculum. Interestingly, the view put forward by thirty percent of the primary school teachers involved in the survey was that business made a substantial contribution to society. In contrast to these findings, there was

some agreement by the primary school teachers that teachers should know more about business and industry, with more than half the respondents declaring that “it was essential that schools were geared to the needs of employers” (p. 38). The report concludes by acknowledging the difficulties in raising the awareness of teachers in the realm of industry-education links, while granting that there are complications involved in assessing the benefits gained from teacher placements. It was acknowledged that “despite the increased number of primary teachers undertaking a placement the evidence suggests significantly less involvement with industry in the primary sector and less positive attitudes” than in the secondary schools (p. 41).

4.3 Student Teachers

As distinct from focusing on practising teachers, a study in 1991 (EATE Research Report No. 1) set out to look at the economic and industrial background, understanding and attitudes of student primary teachers. It was hypothesised that since the students were not a homogenous group, all would have different attitudes resulting from a variety of experiences before entry to college. These, it was suggested, could influence their perceptions of “the place of EIU in the curriculum and perhaps, particularly in the primary curriculum, would be a greater barrier to developing EIU in children than teachers’ level of knowledge” (p. 3.2)

“The basic questions addressed were concerned with what students had brought with them to their initial training courses” (EATE 1991 p. 3.1), since it was believed that these attitudes and experiences could have some bearing and influence on “their attitude towards teaching EIU in primary schools”, informing on “the orientation that students have toward industry and enterprise”(ibid. p. 3.3). It was proposed that “student teachers might have a negative orientation to industry and enterprise” and that those mature students entering the course might be leaving business or industry because of this, which might cause them to “unconsciously develop similar orientations in

their pupils” (*ibid.*). The sample surveyed comprised B. Ed. and PGCE students². Questions directed at the students concerned:

- The extent of their economic and industrial understanding and how this related to their experiences.
- What experiences they had had through formal economics education, everyday life and their employment or work history.
- What attitudes and orientation had been brought with them to teaching in general, to the teaching of economic and industrial understanding, and to economic and industrial matters.

The view taken was that students arriving on an Initial Teacher Education course would have an array of attitudes regarding economic and industrial matters, and to the appropriateness of such matters with regard to primary school children. It was judged traditional, political, ideologicistic or functionalist perspectives might shape some students views and that these would determine how courses aimed to introduce EIU should be shaped (*ibid.* p. 3.2).

As might be expected, the major research findings indicated that students had varied economic experiences, levels of economic and industrial understanding and attitudes toward the teaching of EIU in the primary school. The dominant view was that teaching was a “caring activity which is essentially different from economic and industrial activities” (EATE 1991 p. 9.1) corresponding with the argument put forward in the previous chapter when describing the opinions advanced by various authors (Fullan and Hargreaves 1992, Lortie 1975; Nias 1989). It was also noted that many students lacked confidence in their own economic and industrial understanding, with those having more economic experience through previous work or family life revealing more positive attitudes toward introducing this subject area in primary schools. Despite the fact that the majority saw economic and industrial understanding as beneficial, relevant and important, they considered it to be less important in

the primary school than most of the other cross-curricular themes. In selecting topics and considering how to teach them, it was concluded, “students tended to marginalise possible economic and industrial aspects” (*ibid.* pp. 9.1-9.2) and the rationale for introducing EIU at the primary stage was ignored. There were many misconceptions about the nature of EIU. Interpretations of what was involved included:

- only the general expression of concepts
- mostly macro economics
- maintaining the status quo which would necessitate the incorporation of a political bias
- money making.

These findings have been subsequently confirmed by other surveys of student primary school teachers (Hodkinson and Waite 1991; Baker 1993) in relation to industry-education work. They also go some way to justifying the thinking on how practising teachers’ attitudes and beliefs accord.

The report outlined here (EATE 1991) sought to make use of the findings as a means of updating teacher education, since it was recognised that in order to guide student teachers, industry-education must be embodied in the course offered. Among some of the barriers identified was the position of course leaders and how they might comply with the requirements necessary to introduce EIU. Inherent in the need to educate student teachers in aspects of industry-education links is the requirement for teacher educators to be enlightened about this work. Difficulties envisaged for the lecturers were not dissimilar to those emanating from the students, i.e. lack of awareness of EIU; lack of confidence about teaching EIU; and resistance based upon many of the misconceptions underlying the rationale (EATE 1991 pp. 9.14-9.15). It was acknowledged that obstructions originating from the lecturers would result in students failing to be familiar with how EIU could be incorporated and best developed. In order to combat this a plan of staff development was suggested.

This approach was not unlike that of a Teacher Training establishment in Scotland which identified the need for staff development in the same area. Focusing more tightly on enterprise education the endeavour, once again, commenced with a survey which involved student teachers and their trainers as well as practising teachers. The breadth of this study was wide and the subsequent report, (Francis *et al.* 1989), comprehensive. While it is impossible to outline all the details here, attention must be drawn to some major points which provide useful insights. The study attempted to probe the thoughts and feelings of individuals in relation to enterprise initiatives and to investigate the philosophical, historical and cultural values held, which might be challenged. It was widely recognised that activities centred around ‘enterprise’ had generated a number of concerns, and the overall strategy is described as being on the periphery of the “education system, welcomed by some and a cause of concern by others (which)... can be greeted with cynicism and denigration...The enthusiasts and their antagonists hearing different messages” (*ibid.* p. 5). This statement must be commented upon as being true, having been mentioned earlier, its accuracy being reflected in articles which have been written on the subject as well as through personal discussion with teachers.

Through the study, the researchers sought to discover how the enterprise idea impinged on the values and commitments perceived as significant in education. It is interesting to note that comments garnered from the student teachers were varied, some being more in tune with the concept than others. Negative comments were associated with entrepreneurialism rather than enterprise (*ibid.* p. 14), but the overall point of view was largely undetermined. Comments from college staff, however, are reported as being more contentious, “the dominant tone (being) anger and sarcasm” (*ibid.* p. 27). The authors describe these staff members as “informed academics (who) were angry with politicians for their use of seductive rhetoric, with industrialists who criticised education using anecdotal evidence, with the media for colluding with politicians and the industrialists in challenging education

philosophy and practice” adding that “staff drew on their historical perspective of education to substantiate their arguments” (Frances *et al.* 1989 p. 27). Ensuing discussions with the staff are reported to have revealed deep-seated aversions to any comments which might be construed as criticism of their ability as teacher trainers. A fear that their thinking might be constrained in any way as to suggest a form of social engineering was reported. Their professional autonomy was seen to be at risk, and there was concern about the political and social implications. This disposition is not surprising to the writer who has encountered similar attitudes from Initial Teacher Training staff, whose hostility has been made clear when confronted by enterprise education programmes.

In contrast, secondary school teachers who were interviewed showed a much greater tolerance for enterprise, with their feelings leaning more toward “confusion and anxiety” (*ibid.* p. 38). This situation we are told, arose from the way in which teachers felt constrained by academic requirements while recognising the necessity for enterprise education.

It might be argued that the dogmatic attitude taken towards enterprise education and industry in general by the teacher trainers affords little hope for student teachers whose outlook might be affected. It also causes us to reflect that there may be some truth in the allegation that educationalists do indeed foster an anti-industrialist culture. Contradictory to this theory, a subsequent case study within the report from a primary school reveals a different tone. Teachers here, “had knowledge and awareness of the industry/enterprise idea but had not experienced how this could be developed to fit into a primary school”. They were given a remit to look particularly “at the vocational interest which could be aroused in Primary Children” (*ibid.* p. 57) from a committee studying the development of guidance in primary schools, of which the head-teacher was a member. The teachers involved describe the experience as being “an exciting enterprise” (*ibid.* p. 58) involving much scope for individual staff initiative, with the head-teacher playing the role as

catalyst, encouraging everyone and in particular those with the least confidence. It is described how the full width of the curriculum was considered with the demands built in, the children themselves being involved in the planning. Comments included how the activity, which lasted two terms, benefited all concerned from both education and business. The children are reported as having gained a “first rate insight into the world of work” (Francis *et al.* 1989 p. 59), with the context of work and the experience of a wider world being seen as important, as were the learning of the processes involved. It was claimed that everyone benefited, not least the children whose attendance was reported as being “above 95% which was well above previous figures” (Francis *et al.* p. 60) and parents are said to have commented on the effectiveness of this form of teaching.

Another school involved in the same survey had already recognised the feasibility of embarking upon such work in the primary school, undertaking the production of a community newspaper. One particular teacher instigated this project before others joined in. It is revealed that some concerns were expressed initially by both teachers and parents that the activity might detract from the “REAL work of the school” (*ibid.* p. 65) and that it was necessary to convince them that it was not “wasted time”, but time spent in real and purposeful learning and involvement revealed the reality of this. These two case studies communicate that the value of direct involvement in enterprise activities leads to greater appreciation of their worth, showing how attitudes can be changed.

4.4 Concluding Comments

The case studies described here contribute to our understanding of the views held by educationalists with regard to work-related education in its many forms. In particular, they offer us some insight into the attitudes of some practising primary school teachers as well as student teachers who are about to

embark upon their careers, and their trainers. The findings corroborate many of the preoccupations discussed in Chapter 3, particularly those relating to the role of caring for children in primary schools. Underlying the evidence submitted it would appear there are a number of concerns related to the involvement of business and industry in primary schools and the teachers' views of their role in fostering these links. It is evident that skilful leadership can be influential in promoting work-related education, and that involvement in activities promotes a depth of understanding of what is entailed and the benefits which can be accrued. A recent quote from an unnamed employer was that "We have an attitude shortage in the UK far greater than skills shortages" (in Cadbury 1997 p. 26). The question remains as to where this attitude stems from and how it is to be remedied. Business and industry can play a leading role in this endeavour and the next chapter looks more closely at their views on matters.

¹ The Enterprise and Education Initiative was introduced by the Department of Trade and Industry in 1988 as part of a broad Government strategy to promote greater understanding and co-operation between education and business.

² The B.Ed. students are those undertaking a Bachelor of Education degree which involves a four year course of study. The PGCE (Post Graduate Certificate in Education) students undertake a one year course on completion of a degree course which might pertain to any aspect of knowledge.

CHAPTER 5

Industry's Views on Education Links - A Literature Review

5.1 Introduction

Despite the difficulties outlined in the previous two chapters it has been suggested that links between education, business and industry have steadily increased over the last twenty years, from the time when Callaghan (1976) brought the discussion surrounding a more realistic curriculum into the public domain. Business and industry have played a vital part in promoting the realisation of this aim, and a number of initiatives have been advanced locally and nationally by them to drive this endeavour forward. The organisations involved have, in the main, been the large corporations who have the necessary resources, and a great deal of support has also been given by government organisations. As well as supporting the active participation of teachers and their pupils in industry-related work, these groups, along with a few individual companies, have generated a number of publications. Many of these have sought to clarify the rationale behind their endeavours, articulating views on the relevance of the initiatives and attempting to explain what is being done, and why. This chapter seeks to probe the view of work-related education issues put forward in articles and studies by business and industry, and other organisations working on their behalf.

5.2 Background

The endeavours of business and industry to work with education can be traced back to the mid nineteen-seventies, and these individual company efforts have been supported by a number of government departments some of which were

mentioned in Chapter 2. One government department principally involved has been the Department of Trade and Industry (DTI). More recently the Department of Employment has had some influence. Noticeably absent from the scene has been the Department of Education. Of late they have become more visible with their amalgamation with the Department of Employment from which has emerged the DfEE (Department for Education and Employment). As well as making financial donations to activities put forward by various interested parties from both business and education, the government departments concerned have, in some instances, undertaken to promote their own initiatives. The most auspicious of these projects was Industry Year in 1986 launched by the RSA; Teacher Placements launched in 1990 by the DTI and subsequently administered by the UBI (Understanding British Industry), an offshoot of the CBI; and the Education Business Partnerships set in motion by the Department of Employment in 1990. Other organisations have also sought to encourage industry's deeper involvement in education. One prime example is Industry in Education which appeared in 1993, having been established by leading industrialists. Industry in this context is a broad term, involving a variety of major employers who formed the trust, which aims to offer practical assistance to educational policy makers and providers, in the hope of helping them prepare young people for their working lives.

5.3 Why Should Industry Work with Schools?

It has been said that a great many attempts have been made to encourage work-related activities in schools. Still teachers ask why they should work or develop links with industry. The same question might be asked of industry. Why should they work with schools? The foremost goal of each individual business is not initially geared to support other organisations, least of all education, but to promote their own success. Why then should they be asked

to give what are frequently precious resources to a group in society which in many cases disdain their value?

There has been some contention over the years with regard to the way in which education should focus more strongly on vocational aspects and this was mentioned in Chapter 2. Where in the early days the purpose might have been conceived as a way of concentrating narrowly on training for specific jobs, it has become increasingly apparent that there is need for a much wider definition to be given to such activities. A variety of influences have contributed to this growing awareness, not least the altering economic climate which continues to bring about global change. Business and industry have had to adjust in recent years to accommodate these variations resulting in the modification of work patterns, which in turn have altered the social structure of society. With all of these adjustments, business and industry, along with government have become more conscious of the need for organisations to work more closely together in order to achieve more effective outcomes. More especially, the need for education, business, industry and the community at large to be more closely affiliated has become plain.

Most industrialists are happy to admit that their interest in developing links with education is not totally altruistic. British Petroleum (BP) concedes that their interest in school links “grew out of the need to encourage more young people to seek careers in science and technology” (BP Educational Services 1995 p. 4) and this approach concurs with the motivation of many employers especially in the early days. The aim was to advance the interest of pupils in subjects which most concerned their business. This approach has evolved over the years and the CBI (1994) reports that employers’ expectations of links at the moment are higher and more focused than in the past, saying that a much wider agenda has been adopted. BP (1995) concedes that the scope of their education links now is much more comprehensive than was previously acknowledged. While it might be argued that this outlook reflects that of a number of companies whose ideas have become increasingly clear in what

they hope to achieve (Forbes and Miller, 1988) it might be suggested that the point in question only refers to the large corporations. What is described would appear to be true in the case of Glaxo Pharmaceuticals, Tioxide UK and the Wellcome Foundation for example, who reveal that they have moved away from the more ad-hoc approach, focusing more closely on specific issues and co-ordinating their school-links policies more precisely (Turner 1990). A recently completed survey carried out to disclose the effectiveness of education business links (EBL) found the same situation did not apply to all businesses, indicating that “EBL activities (are) not (even) embedded in most company activities”. The survey also suggested that “business is sometimes involved for marketing and image purposes, rather than through a general interest in education outcomes” (DfEE 1997 p. 6). The same report states that companies who do become involved are now looking for more specific outcomes than in the past and that these are relevant to their business. The same point was made more directly following a study commissioned by the Schools Consortium and reported in the Times Educational Supplement on Business Links (June, 1997 p. 8). Here it was established that “most companies embarked on educational work to raise awareness of their brand, as well as to educate people about their goods and services”. This survey found that “few companies were keeping up to date with educational thinking, limiting their ability to capitalise on school needs” (TES June 1997 p. 8.). Obviously businesses that do become involved do so for a variety of reasons, the most important of which is described by Hillage *et al.* (1995) as “enlightened self-interest” (*ibid.* p. 6). This phrase is also used in an article concerned with the development of a corporate policy towards education when reporting companies’ views (in Jamieson and Blandford 1986 p. 32). They draw our attention to how industry-education links are seen to contribute “to the company’s reputation and to long term investment in the country’s future”, adding “the justification for their investment lies in their concern as a responsible corporate citizen”.

A major motivation is still reported as being concerned with human resources but this is considered to be less important overall, rather it is considered as “putting something back into the community” while at the same time “benefiting employers as a whole in the long run” (Hillage *et al.* 1995 p. 6). While individual companies have specific goals which reflect their business, its needs and the expertise they feel able to provide, these run alongside more general aims such as increasing industry understanding, helping to improve the quality and relevance of curriculum work and fostering practical transferable skills (in Jamieson and Blandford, 1986 p. 32).

Marsden (1988) suggests that the fundamental need for business to work with education lies in the fact that the future success of business is reliant upon the vigour and prosperity of the society in which it is placed. It would appear that the view of education links has become more sophisticated over the years, with the realisation that much more is involved aside from the fundamental recruitment dilemma. That is not to say that the recruitment needs of employers is not a highly relevant factor, coupled with the fact that government sees a close partnership between education and business as an important element to improve the nation’s competitiveness (Hillage *et al.* 1995). This fact was confirmed by Blunkett (TES, 1997 p. 3) who identified the need for government, business and education to work together to “change the negative attitudes and, in some cases, ignorant attitudes which many young people have toward industry” saying that “they must see the relevance to adult and working life of what they learn at school...if we are to increase our competitive edge in the world’s markets”.

Marsden (1988 p. 3) tells us that “astute employers....are now beginning to recognise that myopic pursuit of the short-term bottom line” may not be the best way forward and in reality, the recruitment and economic requirements are, in many cases, ‘played-down’. Wider issues are presented and the attitude put forward is that involvement helps create a more prosperous and stable society. British Petroleum (BP Educational Services 1995) is of the opinion

that it needs to invest in education as part of its “licence to operate in the community” (p. 3) and sees its contribution as allowing the company to take part in, and debate, issues which concern us all.

Indications are that many business people first get involved in education activities through personal interest (BP 1995) and this was confirmed by a recent survey carried out in the North of England (DUBS 1994). Research reveals that this is a trend likely to be more common with small companies who experience some difficulty in becoming associated with education-business links as a result of their being unable to afford involvement through a lack of financial and human resources, while having little knowledge of how to gain access (DfEE 1997; DUBS 1994).

Despite the fact that industry-education links remain a largely peripheral activity for many companies, Hillage *et al.* (1995) report that “the vast majority of employers believe that they are important” (p. 77) but somewhat contrary to this statement they say that around a third of employers see no value in links. Of those businesses involved, fifty three percent are said to have mission statements which aimed at contributing to the learning of students and teachers as well as their own staff. Miller *et al.* (1995 p. 4) tells us that companies they have operated with all have clear goals for their work with education, whether they were written or not. He summarises these as falling into five categories:

- raising educational standards, both among potential recruits and more widely
- development of existing staff
- fulfilling social and community responsibilities
- improving society’s and, in particular, young people’s knowledge and understanding of, and influencing attitudes to, industry and commerce
- enhancing the reputation of the firm and its products.

Specific outcomes identified by employers and reported by the DfEE (1997 p. 10) are:

- personal and professional development of employees
- enhancement of the company image
- company access to educational resources
- putting over a particular employment sector as a career
- “building good customers”.

It would seem that there are some similarities in these two sets of goals and outcomes. Staff development and company image are common to both, and there is an established requirement of the need for business advancement. Turner (1990) indicates that employers see links with schools as part of the companies’ culture of valuing their staff, and says that they “are more likely to gain commitment from staff if they are seen to be helping the community” (p. 9). He also points out the importance of companies understanding what is going on in schools, since the children will be their employees in the future. Romanowska (1990) declares that “longer term... the aim of school-links policy is working in partnership with education and with other companies, towards the mutual aim of producing flexible, informed citizens with better educational standards”.

The CBI is of the opinion that “education-business links are a crucial bridge between the world of work and the world of school” (CBI 1994 p. 5). The need for measurable outcomes to be clarified is emphasised with the three most essential being identified as:

- core transferable skills
- relevant knowledge: for schools, economic and industrial understanding; for business, knowledge of the educational system with its implications for potential recruits

- optimum performance: increased motivation, attainment and aspirations of all individuals involved.

Teacher Training which includes a business placement is considered to be imperative as is the need to focus more strongly on primary schools and attention is drawn to how “there is evidence that links can prevent children from forming stereotyped negative impressions” (p. 12-13). The CBI state that according to evidence received from EBP managers, only fifteen percent of primary schools include links in their development plans and the need for this figure to increase is emphasised.

5.4 Concerns of Industry

It is evident from the information revealed here, together with personal knowledge, that while the aims of industry often appear dissimilar there are some common objectives. It might be argued that industry is conscious of its needs, but at the same time is prudent enough to acknowledge that a wider approach is necessary. The influence brought to bear by the recruitment needs of employers was mentioned earlier. Comments have been made to suggest that this is no longer central to the strategy for industry-education, but indications are that this factor still plays an important role. This was highlighted in the report of a recent survey conducted by Industry in Education (1996), which clearly outlines the concerns of industry in its pursuit of candidates for jobs and which seeks to offer possible solutions which might be achieved through education. The deficiencies in job applicants are emphasised and evidence suggests that this results in a higher unemployment rate than is deemed necessary. Our attention is drawn not only to the cost to industry as a consequence of these inadequacies, but to the social problems which result from them. The survey focused on a number of issues including employment-related education, skills and qualities in education, and personal development, seeking to investigate beyond curriculum subject content and narrow job

related knowledge. More particularly the survey was concerned with “the processes by which young people’s attitudes, behaviour, group and organisational relationships are formed, and how the content and management of education can affect the realisation of these qualities in the workplace” (p. 7). The findings covered a wide spectrum, offering insights into young people’s thoughts about work and the preparation they were given in school, as well as employers’ reactions. The necessary attitudes and qualities which needed to be engendered in young people from an early age were focused upon particularly and it was disclosed how “OFSTED’s, and other school inspection reports, have indicated that the attitudes held by school leavers on the major issues in current society are formed at a very early age” (Industry in Education 1996 p. 18), arguing that this was very significant. It was suggested that “primary education should receive greatly increased attention from industry in respect of developing early positive attitudes toward employment and the world of work” (*ibid.* p. 18.), supporting the view put forward by the CBI earlier. The need to educate the ‘whole child’ was recognised, but some concern was expressed as to how the Education Reform Act (1988) only tacitly assumes this to include preparation for work.

Teachers’ views, as reported by industry, differ as to whether it is within the school’s requirement to teach work-related issues overtly or through a general education. The authors of the report cited previously (Industry in Education 1996) propose that in many cases teachers have often tended to interpret their role narrowly in respect of their obligation to teach work-related education with the outcome being that it is often omitted altogether. Pupils interviewed are said to have commented upon how, in their view, teachers made few attempts to “draw out everyday applications of curriculum topics” resulting in “little evidence of pupils being able to see the relevance of subjects in the curriculum to work or life beyond school” (*ibid.* p. 13). One of the difficulties expressed was the way teachers had trouble in conveying information about a world of work of which they had little or no knowledge, a fact which the teachers themselves acknowledged. Even teacher placements are said to have

had little impact on developing knowledge and understanding of business and industry.

The ethos of the school was another factor that was believed to have some bearing on the issue. The 'hidden curriculum' is remarked upon with reference being made to how "values can be caught as much as taught" (*ibid.* p. 28). It is noted that the "values and principles will or should stem from the view of what education is for, and of the nature of the society which it ought to serve - including the dual service of employers with usable output from the education system and providing pupils, as individuals, with a strong chance of gaining employment" (*ibid.* p. 28). Among the conclusions reached is that this area of work should form part of the spiritual, moral, social and cultural education of pupils and that teachers should be better prepared to teach these aspects. It was proposed that this might be achieved through more appropriate Initial Teacher Training and increased experience of business and industry.

5.5 Further Thoughts on Behalf of Industry and its Supporters

There is some recognition by those in industry, in its widest sense, that they subscribe to a different culture to that of teachers. It would appear that where it is clearly identified is the antagonism which is so often shown towards them by education and efforts have been made to temper the debate. Schemes such as the Teacher Placement Service and the Heads, Teachers and Industry (HTI)¹ initiative, for example, seek to accentuate the similarities between education and industry and companies are keen to stress that the learning involved is a two way process. Marsden (1988) is of the opinion that it is this difference in culture which lies at the heart of the matter when concerns about industry-education links are voiced, saying that it is only recently that each has "begun to realise the importance of the attitudes of others towards them" (p. 1). Speaking on behalf of a multi-national corporation, he points out the necessity to come to terms with this fact and suggests that rather than minimising the

differences, they should be used creatively. The DTI (1989) reports that “business and education are beginning to realise that they are not separate cultures, but have a common aim” (p. 24) and this might be considered as having some bearing on the slow but steady increase in links between the two.

Raising educational standards is often touched upon when discussing industry-education links, and this theme has been taken up by the Aim High campaign, co-ordinated by Business in the Community². The objective of the scheme is raise young people’s aspirations and achievements and is reported to be supported by around one hundred and fifty companies. As part of this endeavour, a number of companies advanced their views on industry-education links in a recent publication promoting the campaign. British Telecom (BT) is one company who is a keen supporter of the venture while also being involved in a number of other projects linked to education. BT’s aim is stated as making a fitting contribution to the community in which it conducts its business (Vallance, in Business in the Community 1997), the contention being that skills and talents need to be fostered so that these might contribute to economic growth. A spokesman for the National Westminster Bank considers that, “the future of society is an issue that the business sector ignores at its peril”, saying that “Investing in the community makes good business sense because business success is increasingly bound up with wider social, political and economic developments. Nowhere is this truer than in education. Business must help prepare our children for a changing world particularly in the employment field. By doing this we are investing in all our futures” (Wanless, in Business in the Community p. 6). The managing director of another business states that business has a key role to play in helping young people develop and practice the skills they need for the twenty first century (*ibid.*). The same publication includes a commentary from HRH the Prince of Wales who also advocates links between business and education. He points out how “partnerships and involvement of business have a key role to play in the process of education”, expressing the opinion that “Education is not least about preparing young people to assume their future responsibilities

as future citizens...helping (them) to achieve their full potential”, adding “a country which achieves anything less is failing our children in preparing them for the challenges of work and citizenship in the next century” (*ibid.* p. 5).

5.6 Concluding Comments

Many of the notions put forward here are conveyed on behalf of some of the most influential employers in our society today and, as such, they hold a prestigious sway. The authors quoted above clearly have the needs of industry at heart, yet it might be argued that they offer their recommendations not only as a means of benefiting employers, but also as a way of improving the life chances of pupils in schools through greater knowledge and understanding of the economic structure of society. Since the world revolves around economic factors each child must have the opportunity to occupy a fruitful place in the community. “If the work role is defined broadly as a role which gives a personal sense of productivity and contribution to the community” (Forbes and Miller 1988 p. 32) it might even be suggested that by failing to prepare young people adequately in this way, education is failing in its duty. We must remember that education is not just about interpreting and passing on the values of society, but aims to stimulate people to think for themselves and to change the world around them. Speaking on behalf of industry, Forbes and Miller (1988) endorse the argument put forward by the writer throughout, that *one* of the main functions of education is to prepare pupils for work. While this is not the main function it is, nevertheless, important. Forbes and Miller (*ibid.*) argue that the key to success in preparing young people adequately cannot be achieved through the curriculum content alone, but must take into account the teaching approach used. The view put forward is that the major requirement is to encourage pupils to develop key skills and competencies “to effectively carry out a work role in tomorrow’s organisation” (p. 32) and work-related education offers this possibility.

A recent comment from the DfEE (1996 p. 13) acknowledged that activity involving industry in its widest sense and education is “diverse, complex and incoherent”, but proposed that there is an increasing amount of effective work taking place, especially in primary schools. The truth of this statement might be debated, but it is true that some primary school teachers support the view that work-related education is not only valuable but also essential. What might have led them to acquire this viewpoint is unclear, so it was decided to carry out an investigation. This aimed to seek information from teachers engaged in work-related activities in primary schools in an effort to discover what had influenced them. Furthermore, it was planned to seek the views of business and industry on industry-education links, particularly with respect to primary schools. Chapter 6 outlines the methodology of the study and the results are described in Chapters 7 and 8.

¹The Heads, Teachers and Industry initiative was started in 1986 as a partnership between Warwick University, Humberside local education authority and local businesses. The objective is to provide twelve month placements for teachers in industry. The company pays for the cost of a teacher’s replacement, and the teacher attends a course at the University with an aim to encouraging a more business like approach to school management.

²Business in the Community is a national organisation which describes itself as “the leading authority on the promotion of corporate community involvement” whose mission is “to make community involvement a natural part of successful business practice and to increase the quality and extent of business activity in the community” (Business in the Community, 1992).

CHAPTER 6

The Main Empirical Study - Aims, Issues and Methodology

6.1 Introduction

Since no studies have been identified which assist in distinguishing the prime characteristics which have motivated teachers in primary schools to engage in work-related activities, or to ascertain industry's view on the matter it was decided to carry out an empirical investigation. This chapter describes a research project which was carried out in two parts. **Part one** of the study was aimed at teachers who were known to have shown interest in work-related education in primary schools and was designed to gain insight into the way in which the various aspects of this work was approached in the respondents' schools. The study also aimed, most importantly, to gather information on what had stimulated individual teachers to introduce work-related education into their curriculum. Information was first collected through questionnaires which sought a mixture of quantitative and qualitative data. This was then supplemented by information gained through follow-up interviews undertaken with a percentage of respondents.

Part two of the study was directed at some leading industries in an effort to discover their aims and objectives in linking with education and, in particular, primary schools. This was achieved through semi-structured interviews conducted with those people in the corporate business sector charged with the task of working with education.

6.2 The Issue at Stake

As already discussed, despite many initiatives to encourage teachers to become involved in the education-industry interface, indications are that there is still some reluctance on the part of a number of teachers to introduce work-related education into the primary school curriculum. A review of the literature in previous chapters reveals that few empirical studies have been carried out which throw much light on the matter as to why this might be so. What the studies examined do reveal is that some teachers recognise that a topic linked with business or industry can add value to the curriculum of primary schools and these findings are supported by the writer's own experiences. When considering the motivation of teachers to initiate such topics, however, there is little evidence to indicate what might have triggered their enthusiasm, though investigations into related issues have revealed some clues. It might be suggested that evidence gained through these studies, and encounters in the field, indicates that a number of factors could be involved in persuading teachers to implement activities connected to business and industry. It might even be proposed that the studies reported here imply that the beliefs, attitudes and values of teachers concerned play a vital part in the process. In order to explore what might have inspired primary school teachers to engage in work-related activities, it was decided to carry out an investigation with some who have shown particular regard for the topic under examination.

At the same time, evidence has revealed that a number of large corporations have played an increasingly active part in encouraging links with education. Where in the past these have been predominantly with secondary schools, indications are that there is now more interaction with pupils at the lower end of the age range. The industry survey described here was aimed at a number of leading companies in an effort to acquire a greater understanding of guidance given in respect of work-related education within their organisations. The inquiry also aimed to ascertain the major aims and objectives of the companies

involved. Particular emphasis was placed upon the primary school sector with company representatives being asked their views on work-related education with young children and their teachers. It was anticipated that this would give a more detailed insight into what industry hoped to achieve by working with education and how these aims related to primary schools, or if they were indeed considered to part of the target audience at all.

6.3 The Hypothesis

Comments referring to ‘the closed cycle’ of education experienced by many teachers have been made by a variety of authors (Francis *et al.* 1989; Bloomer, in Bloomer and Scott 1993; HMI 1982), intimating that a large number of teachers enter the profession through a route which is exclusively based upon academic experiences. It is often suggested that this plays a significant part in causing them to shun business and industry. Alongside this notion there are indications that some teachers are of the opinion that industry does not favour work with young children (DTI 1990), being more inclined to work with older age groups, resulting in them rejecting the possibility. Based on these assumptions which have been reinforced by the writer’s own experiences while working with numerous educationalists, it was hypothesised that those teachers who were pro-active in the field of work-related education in primary schools had experienced some notable events or circumstances which had significantly shaped their views positively toward business and industry. Since no systematic study has ever been carried out to test this hypothesis, it was considered that a survey aimed at discovering what teachers themselves felt had been most influential in guiding their thinking, would contribute valuable information toward a greater understanding of primary school teachers’ reasoning.

At the same time, information gleaned from business and industry with regard to primary school involvement would serve to ascertain whether there was any

foundation in the accusations made by teachers that industry has little concern for the primary school sector. The main hypothesis relating to this aspect of the investigation is that while many industrialists claim to embrace the idea of working with primary schools, this is an attitude which has only more recently been adopted and is sometimes in opposition to what many company members feel is appropriate.

6.4 The Teacher Study - An Overview of the Aims and Methodology

Part one of the survey sought information from primary school teachers who were known to have shown interest in work-related education in its many forms. The study enquired into the ethos of the schools pertaining to the subject matter under investigation, requesting general information with regard to how work-related education was perceived in the school. Most importantly it aimed to uncover the formative influences which had led teachers to become involved in any of the numerous aspects of this work. Evidence was sought from the teachers involved which illuminated factors which they considered to be most important in influencing them in their commitment to work-related education, and the impact these factors might have had on the approach used.

It was hoped that the responses would result in the identification of some common threads which could lead to a greater understanding of the motivations of the teachers concerned, and that this evidence might be used to promote further work-related initiatives in primary schools.

6.5 Methodology of the Teacher Study

1. Subjects

It is fully acknowledged that the sample of subjects used for this research is, by choice, of a biased nature. If time and space had allowed the opportunity to contrast those who were engaged in work-related education and those who were not, a truly comprehensive picture of the disposition of primary school teachers when confronted with work related education could have been obtained. However, as the objective of the teacher survey was largely to determine the influences which had been formative in bringing about individuals' involvement in work-related education, there were good academic reasons to justify that a biased group would provide the relevant information. Presumably those teachers who engage in work-related education are those best placed to comment on their reasons and motivational factors for doing so. Consequently, the group selected constituted a complete database of teachers who had shown interest in conferences and publications connected to the topic under consideration. Details were obtained through a central organisation concerned with the promotion of aspects of economic understanding with young children internationally¹. The group comprised three hundred and sixty teachers and head-teachers from primary schools in England, Wales, Scotland and Ireland. It is recognised that this is a relatively small number of teachers when considering the number of primary schools within the United Kingdom², but only serves to emphasise that it is a small proportion of schools that are documented as showing some active concern for work-related education. No weight was given to the proportion of infant, junior and combined establishments or to the position the recipients held in school.

It was anticipated that the involvement of teachers who were admittedly well disposed to the concept and practice of work-related education would result in a usable number of responses. In the event only ninety valid questionnaires were returned providing a limited result. After analysis of these, telephone

interviews were conducted with ten per cent of the respondents to gain a more in depth account of the information presented. These interviews were recorded and then transcribed for more detailed examination. Discussions here only revolve around this sample but it is recognised that there is ample scope for further research which would broaden the range of debate.

2. Materials used

The best means of collecting the necessary information for part one of the survey was shaped by such pragmatic considerations as the wide geographical spread of the subjects involved; what was practically feasible in terms of the researcher's time; and the school commitments of the respondents. These factors resulted in the decision to use a postal questionnaire, supplemented by a number of follow-up telephone interviews.

Nine people (ten per cent of those responding) were involved in the interview stage of the survey. This number was largely determined by the time available to the researcher. Those selected to participate in interviews were identified on the basis of interesting remarks they had made on the completed questionnaires and by the fact that they had indicated their willingness to participate in an interview.

3. The questionnaire framework

The questionnaire sent to the teachers comprised two parts and was designed to obtain a mixture of qualitative and quantitative data by using a combination of open ended and closed questions.

One section of the questionnaire was more structured in that it set down a number of questions concerning the overall attitude within the school to work-related education and the approach used, asking if it was perceived as:

- a general school policy
- an activity open to individual teachers or pupil groups
- integrated into curriculum subjects
- a separate activity
- strengthened by the introduction of the National Curriculum
- a statutory obligation
- a means of developing links with industry and the wider community.

The response required here was a simple tick indicating a 'yes' or 'no' answer to each. The age group and gender of the teachers concerned were also requested, and an indication of whether they would be willing to participate in an interview was sought.

The second section requested the respondents to provide an autobiographical statement reflecting upon the life experiences and formative influences which they felt had had some sway in their decision to introduce work-related education into the curriculum. Also requested were some details of current involvement. One A4 sheet was provided for this information but participants were invited to use extra sheets if required. A copy of the questionnaire can be found in **Appendix 1**.

4. The questionnaire design

It was considered that the design of the questionnaire was of the utmost importance in order that a good response rate would be achieved.

While the approach used relied heavily upon that of Palmer and Suggate (1993), modifications were necessary as a result of the differing context and the variance in the information required. For this reason, a number of informal interviews were held with a group of primary school teachers prior to the questionnaire being drawn up. This process was to assist with the shaping of the questions used in the questionnaire and to gauge the responses which

might be obtained. The interviews were semi-structured and were carried out locally in a school not renowned for industry-education work. Two infant school teachers and two junior school teachers were questioned. The basis for the inquiry was:

- how they would describe work-related education in the primary school
- why they thought it might be important
- why this was so
- if any aspect of work-related education was incorporated into their lessons
- if so, what had influenced them.

The infant school teachers had some initial difficulty with understanding what was meant by 'work-related education' but after some thought were able to identify with the term. Indications were that elements of these activities were incorporated into their curriculum, though they were not specifically identified or institutionally promoted. The consensus was that connections would occur through curriculum work involving the community or local geography.

Talking with these teachers helped to shape the composition of some key questions which needed to be addressed. The interviews were recorded and subsequently transcribed to facilitate examination. Copies can be found in **Appendix 2.**

5. The accompanying letter

Gall *et al.* (1996) is of the opinion that the letter accompanying the questionnaire is strongly influential in advancing the return rate. Knowing the reality of this, careful thought was exercised in its preparation. The letter set out the purpose of the survey in general terms with a view to preventing accounts being biased by illustrative examples. The importance of the data called for was emphasised and it was stressed that any comments would be invaluable inasmuch that any information significant to the research topic

would add substance to the database of knowledge. Recognition was given to the respondents' numerous commitments and confidentiality was assured. A reasonable, but specific, return date was determined and thanks were given in anticipation. A copy of the letter can be found in **Appendix 3**.

6. The piloting process

Having formulated the questionnaire and the accompanying letter, these were then pre-tested with a sample of six individuals drawn out of the population from which the respondents would be taken. Comments were called for in the form of criticism and recommendations for improvement.

Some thought was given to the resulting suggestions, leading to alterations in the text of both the letter and the questionnaire. Particular thought was given to the term 'work-related' which one respondent argued might be somewhat ambiguous. This term had caused some difficulty in the preliminary interviews with teachers outlined earlier and, as a result, the writer in consultation with colleagues gave careful consideration to this point. It was decided that the term should stand. Since those targeted were a homogenous group it was considered that the wording would be appropriate as it conveyed the sense of what was required in that it was not overtly explicit, indicating many activities and relating to no single one in particular.

7. The management of the teacher survey

The correspondence was individually addressed and sent to the group identified. With permission, the letter accompanying the questionnaire was printed on Durham University Business School headed paper to add some professional authority to the study (Gall *et al.* 1996) and a pre-paid, addressed envelope was enclosed to encourage success. Conscious thought had been given to the date of issue. Early February was selected when the new term would be well under way. It was anticipated that this period in school would

be more settled and there would be fewer demands on the teachers' time, contributing positively to the response rate. A return date was specified, allowing sufficient time for completion. Those people who had failed to respond by this date were sent a duplicate questionnaire and a revised letter (see **Appendix 4**) with another pre-paid envelope in the hope that this would invite a response. A further incentive was extended in the offer of a set of primary school industry-education resources to 'one lucky respondent'. This second request resulted in an increased amount of questionnaires being returned, totalling ninety in all.

8. The follow up process

The information gathered was then examined in order to identify those respondents willing to participate in the interview stage and also to determine further areas that might be explored in the second stage of the teacher survey. A letter to those willing to participate in the second stage thanked them for their interest, informed them that the interview would be by telephone and that a time would be determined with those selected by mutual agreement at a later date. In due time nine questionnaires were chosen to form the basis for the interviews and the respondents were contacted. A date and time for the conversation was agreed with each teacher. Interviews were based upon the distinctive information supplied in the individual's questionnaire, while following a pattern which sought to reveal details pertaining to the original research questions and some issues which had arisen out of them. Having gained interviewees' consent, each interview was recorded and then transcribed. The questions delved into a more detailed description of why work-related education had been pursued; how the activities were approached in school; what was expected from them; the disposition of business and industry in respect of these endeavours; and how the outcomes required by industry matched those in education. Details of the interview schedules and transcripts of the interviews can be found in **Appendix 5**.

6.6 The Industry Survey - An Overview of the Aims and Methodology

Part two of the survey was directed at a number of leading companies. The aim was to obtain an insight into the attitudes of those in the corporate business sector who are charged with developing strategies toward education. This entailed establishing the major aims and objectives of the companies involved, the policy of each organisation with regard to education links, how this had been developed and what outcomes were sought. Particular emphasis was placed on the primary school sector with companies being asked their views on work-related education with young children and their teachers. It was anticipated that this information would allow a more detailed understanding of what industry hoped to achieve by working with education *per se* and how these aims related to primary schools or, indeed, if primary schools are considered to part of the target audience at all.

It was hoped that a greater understanding of what industry seeks to achieve through links with education might help to shape future projects, promoting the value of working with young children.

1. Subjects

Individuals in twelve multi-national corporations known to have some involvement with education-industry links were approached with a view to their participating in the survey. The number selected was largely determined by the amount of travel entailed and the ensuing cost together with the time available to the researcher. The companies invited to take part represented a sample of different business functions. The roles held by the people with whom the initial contact was made varied, some having a title which signified their role of working with education, others held a position in personnel or community affairs. Two companies refused to participate after the initial contact was made. One declined on the grounds that being a company concerned with the manufacture and distribution of alcohol they would have

no association with young children and therefore did not see the relevance of partaking in the research project, even to give their overall views on education links. The other company held the view that their involvement with education was so long-standing and well documented that there was nothing to be gained from further discussion on the subject. Thus, ten companies were engaged in the study. The business focus of the companies involved is outlined in **Appendix 6.**

2. Materials used

Given that it was only possible to involve a relatively small number of companies in this stage of the survey, a semi-structured face-to-face interview was used. It was anticipated that this method would result in gaining a more in-depth understanding of the policies of the companies in question than could be expected from a questionnaire (Drever 1995). It was also envisaged that an interview allowed for a greater potential opportunity to seek more detailed explanations and explore individual viewpoints. A schedule outlining the rationale of the interview was devised to offset any feeling of uncertainty on behalf of the interviewee. This schedule mapped out the topics of discussion, giving a common frame of reference while allowing a degree of control by the interviewer.

3. The interview schedule

Prior knowledge of the companies involved in the survey indicated that all of them had, at some time, shown interest or had been involved in links with education. The extent to which these were formally recognised or recommended within the company was an unknown factor. The interview, therefore, focused on determining:

- i. if the company had a policy for working with education
- ii. if this policy specifically included working with primary schools

- iii. the objectives of the company's education policy
- iv. the outcomes sought from links with education by the industry involved
- v. how the company set about achieving the outcomes and objectives
- vi. how the work in which they were involved was disseminated.

Some questions urged a more structured response and others permitted greater freedom of reply. A copy of the schedule showing the prompts used by the interviewer can be found in **Appendix 7**.

4. Management of the industry survey

The first point of contact was made by letter, informing each recipient about the area of research, followed by a phone call to establish if the person in question, as a representative of the company, was willing to cooperate and if so to agree a suitable time to meet. On meeting the researcher, each interviewee was provided with a copy of the interview schedule. A general outline of the research project was given verbally. Where possible the intention was to record the interviews for later transcription. While agreement on the use of a tape recorder was given in every case, it was not possible to record all of the interviews due to the location of some of the meetings. A few venues proved to be unsuitable for this purpose due to background noise and alternative accommodation was not always available. As a result, three of the interviews relied on notes taken by the writer. In some cases the verbal information supplied by the interviews was supplemented with policy statements on education-industry links produced by the companies involved.

6.7 Concluding Comments

Although the response rate was small, both parts of the survey revealed some interesting information and the results are given in the following two chapters.

Chapter 7 reveals the results of the survey conducted with teachers. It shows that the greatest motivation to include work-related education in primary schools is to improve the educational development of pupils in times of social and economic change and to open up opportunities for them in their future lives. Their own personal experiences, or knowledge of business and industry passed on by people close to them are strongly influential. Chapter 8 describes how business and industry look upon work-related education and what they hope to gain. It would appear that the benefits looked for are largely focused on the success of businesses, which is not surprising. Alongside this, however, are some more public-spirited objectives aimed at supporting the community as a whole. Primary schools are generally accepted as playing a part in this key role.

¹ The organisation concerned was The International Association for Children's Social and Economic Education (IACSEE) who is responsible for the publication of an international journal and the organisation of bi-annual conferences.

² The number of primary schools in England and Wales alone is somewhere in the region of 25,000.

CHAPTER 7

Responses to the Teacher Survey

7.1 Introduction

This chapter presents the findings of **part one** of the survey which was aimed at primary school teachers who were known to have shown interest in work-related education. The results of the postal questionnaire are presented, explaining the method used to analyse the evidence. This is followed by data gathered in the follow-up interviews with nine teachers selected from those responding to the questionnaire. Some concluding comments are then made linked to the background literature analysis.

7.2 The Questionnaire Responses - Data Analysis

Only 110 responses to the survey were received in total and this was disappointing. Of these, 20 had failed to complete the autobiographical section of the questionnaire. Reasons for non-completion were rarely given, though a small number indicated a lack of time. This resulted in the receipt of 90 replies (25% of the original number dispatched) which gave valid information. Examples of the completed questionnaires can be found in **Appendix 8**.

The section of the questionnaire requesting more straightforward factual information was more easily quantified and the data was passed straight to the Statistical Package for the Social Science (SPSS). One major flaw that became apparent at the first stage of the analysis was the realisation that comments had been requested pertaining to the National Curriculum from teachers in Scotland and Ireland who use different guidelines. Two

respondents made reference to this matter but proceeded to complete the questionnaire nevertheless. Others in the same situation made no mention of the oversight. Differences in the curriculum requirements for Scotland and Ireland should have been acknowledged and the writer duly noted this error in the formulation of the questionnaire. Fortunately, the outcome was not affected.

Information relating to the major influences asked for on the second section of the questionnaire was in the form of autobiographical statements. Some of the replies were lengthy and several readings were required before any analysis could be made. Numerous reviews of the statements were carried out by the researcher, resulting in the identification of thirteen major categories. Several of the major categories of response comprised a number of sub-categories, others stood alone. A subsequent reading of the responses by a colleague afforded some inter-judge reliability of the categories determined. *Figure 1* shows the way in which they were formulated.

Major Categories	Sub-Categories
Changes in society and the need for improved educational development	Pupil motivation Active involvement New skills Life chances
Career opportunities	Teacher's own Pupils' future
School position	Unemployment issues
Employment in business and industry	Previous career Vacational work
The Influence of Other People	Inside school Outside school
Close family involvement in business and industry	Family involvement Husband's work Childhood experiences
Exposure to business and industry	Teacher placement Industry Year College links
The influence of other people	Inside school Outside school
Training courses	
Curriculum requirements	
Community involvement	
Imposed participation	
Funding	

Figure 1 - Major categories and sub-categories identified as the formative influences



Changes in society and the need for improved educational development was described in a variety of ways. The increasing need to develop the skills and attitudes required in a global economy and the requirement to motivate the pupils through active involvement were most commonly referred to. Through work-related education the relevance of classroom learning could be demonstrated and skills which might otherwise be neglected could be taught, thereby increasing the life chances of the pupils.

Linked to this were *Career opportunities* which were defined as the motivation by some teachers, in a world which was constantly changing. A few identified the lack of career possibilities offered to them in their youth. This was a chance to redress the balance with children in their care.

The *school position* often played a part in the decision to introduce work-related education, especially when the school was in an area of social deprivation and high unemployment. It was felt that in such circumstances pupils often needed to be made more aware of work and what was involved.

References to *employment in business and industry* emerged from those respondents who indicated that their interest had arisen from their own experiences of full time employment before teaching or in vocational work, while at college.

Close family involvement in business and industry was remarked upon by a number of people who explained that their families either owned businesses now or in the past, or worked in industry. From this close involvement the respondents had gained insight into business practice and saw the necessity for young people to have a similar knowledge. Some had had particularly interesting experiences in childhood which had shaped their views positively.

Exposure to business and industry came through familiarisation of these through challenges offered during teacher training, the Teacher Placement Scheme and Industry Year. Like those in the previous category the respondents recognised aspects which would provide invaluable knowledge and understanding for their pupils.

The necessity to link with business and industry was seen to be essential by some, to improve *staff skills* and to bring them up to date.

The influence of other people revealed how other people who were enthusiastic about the idea had stimulated a number of teachers to engage in work-related education. These influences came from colleagues inside their own schools and people outside the school environment.

Having attended a *training course* involving the establishment of work-related education was sometimes the initiator of interest. These occasions had introduced the respondents to useful resource materials and contacts and, no doubt, brought them into contact with enthusiastic people.

Curriculum requirements were most often related to particular subject areas which required practical links outside the classroom. Comments sometimes referred to the cross-curriculum themes, most especially Curriculum Guidance 4 (1990).

Community involvement was seen as necessarily involving aspects of work-related education linked to local business and industry.

Imposed participation through the delegation of responsibility or compulsory attendance of training courses involving work-related education was sometimes described as the activator.

Linking with business and industry was sometimes distinguished as a means of *funding* at the outset of work-related education initiatives.

Having determined the major categories and sub-categories of formative influences the information was then passed to SPSS to facilitate analysis.

7.3 Results

Part one of the questionnaire set out to determine some more general information about the respondents and the schools in which they worked. Of

the 90 valid responses, 63 (70%) of the replies were from women and 27 (30%) from men. That the majority of respondents were female was hardly surprising given that women make up the largest proportion of primary school teachers. What was unanticipated was the small number of respondents in the younger age group (under 35). Only 13 (14%) fell into this age bracket: a combination of male and female. The greatest number of respondents, 51 (57%), were in the middle age bracket (35 - 50) followed by those in the 50+ sector, 26 (30%). The statistical breakdown of age and gender is shown in *Figure 2*.

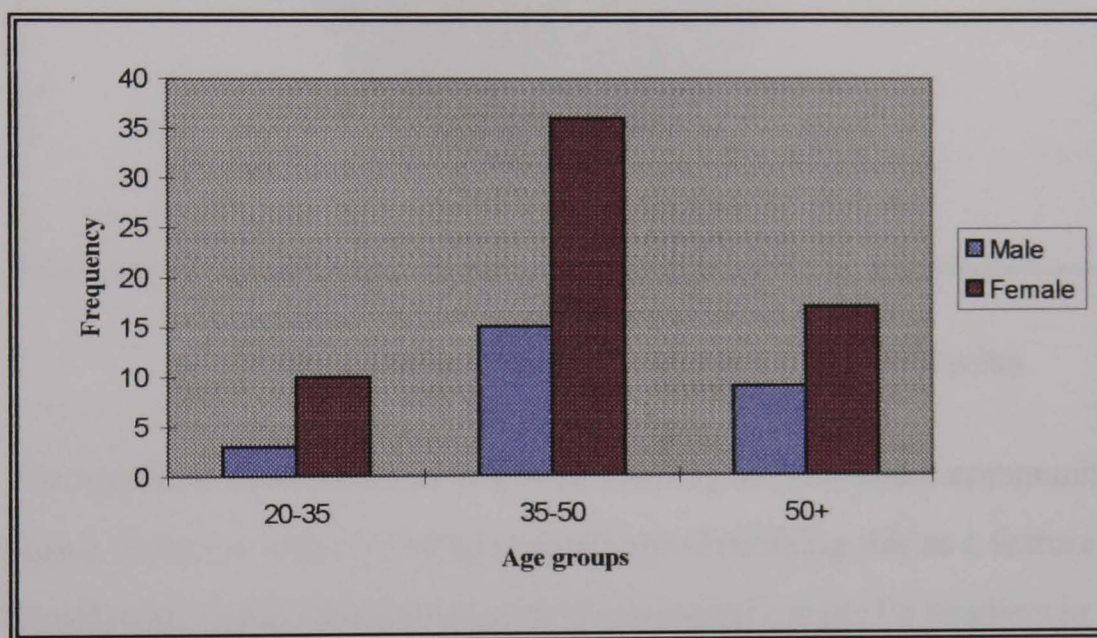


Figure 2 - Frequency of response - ages and gender

1. The school position

An overall view of how work-related education was regarded in school, and the importance placed upon it, was determined by asking ‘if work-related education was viewed as a general school policy’? In response, more than half 49 (54%) indicated that it was. 34 (38%) respondents answered in the negative, but indicated that the inclusion of work-related education was a regular school procedure despite the fact that it was not identified in the written policy, perhaps concurring with one teacher who noted that there were already “too many other policies at present”. Of the respondents who said it was not part of the school’s written policy, 32 (36%) indicated that it was an

area of work which was open to teachers who chose to engage in such activities, though not specifically defined. *Figure 3* shows the percentages of these samples.

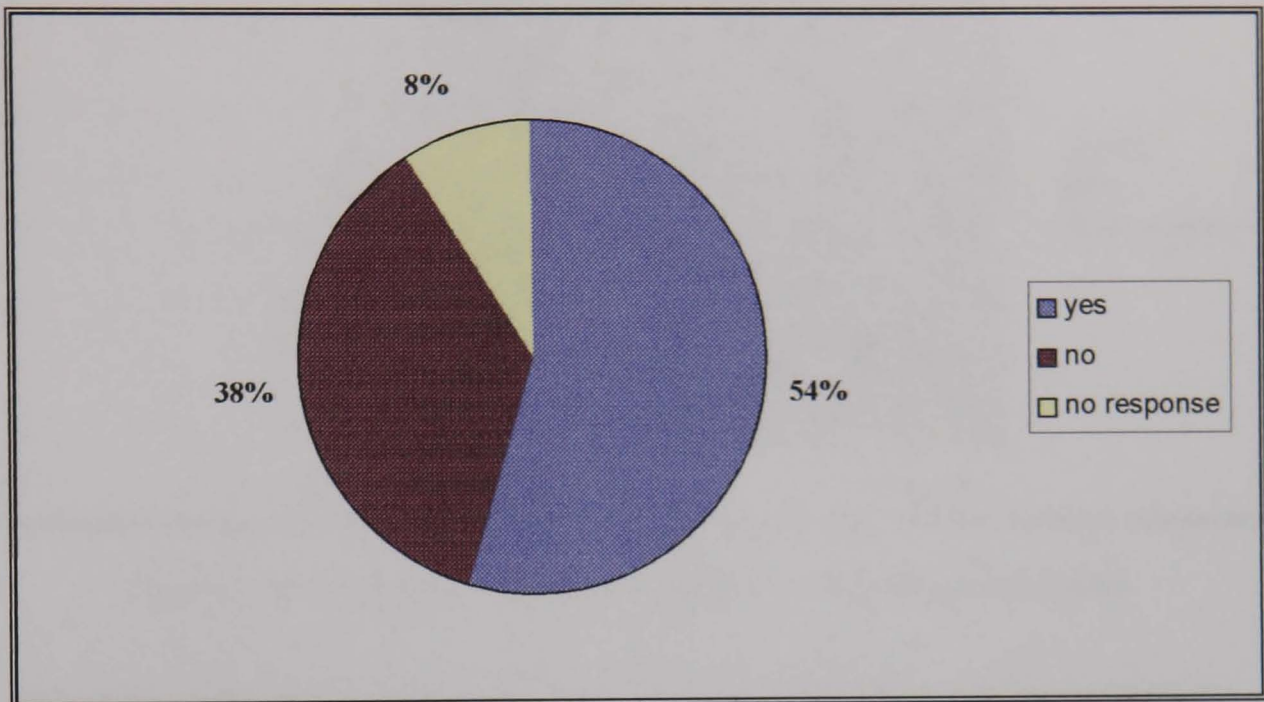


Figure 3 - Work-related activities as a general school policy

The explicit requirement to link with industry and the wider community was more common with 85 (94%) respondents identifying this as a feature. This standpoint would correspond with the comments made by teachers in the informal interviews held prior to drawing up the questionnaire, two of whom referred to links with business being encompassed in activities involving the local community. The statistics are revealed in *Figure 4*.

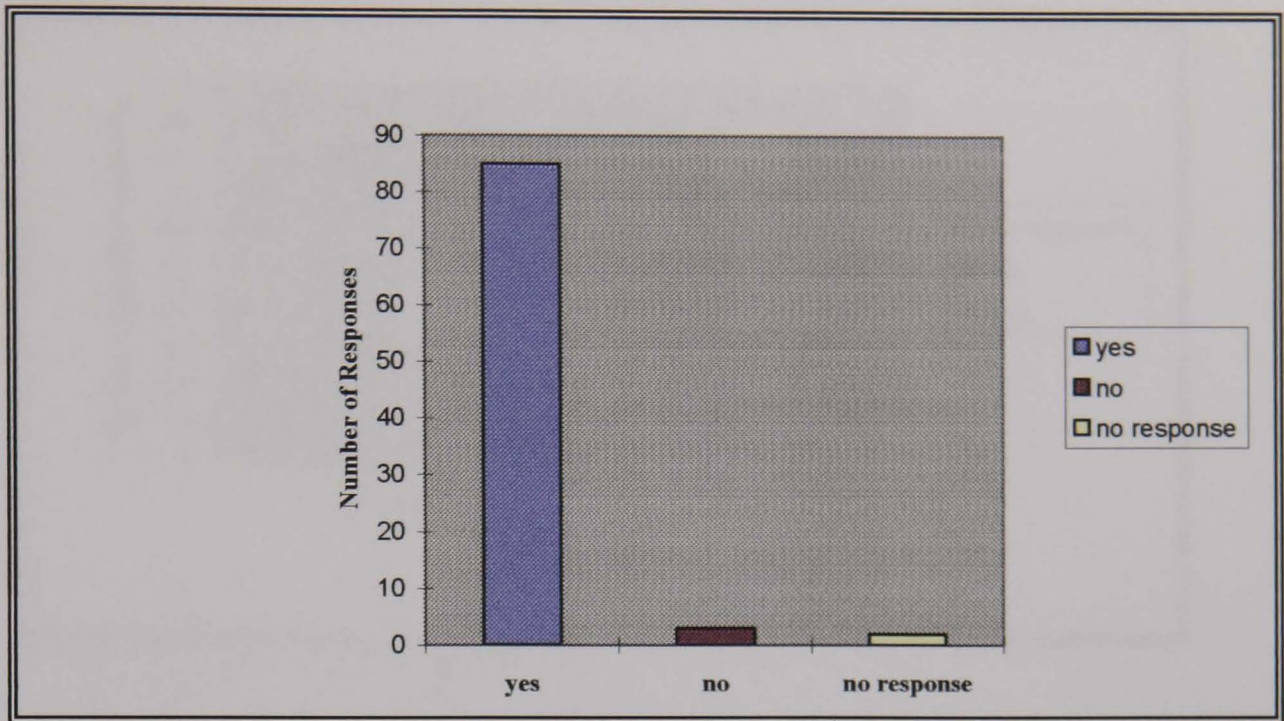


Figure 4 - Work-related activities as an approach to community involvement

When asked if work-related education was approached as a separate subject or integrated into the curriculum, 75 (83%) respondents disclosed that it was usually incorporated into other subject areas, with some remarking that “the topic needed to be suitable”. Indeed, 53 (60%) of the respondents stipulated that work-related activities were never approached separately. Whereas some respondents revealed that integration was the only approach used, 11 (12%) declared specifically that a mixture of the two approaches was employed, as shown in *Figure 5*. It was interesting to note that one respondent declared that work-related activities had been available to some members of staff as part of their professional development, but to date these experiences had not resulted in any form of curriculum development. The reason given was that this had “not really been considered before” but indications were that some activities were now being planned. This comment poses some interesting questions as to the way in which the experiences had been instigated and managed and by whom. Unfortunately, the respondent in question declined to be interviewed further. Another respondent declared that despite having a background of working in industry and owning her own business, her experiences to date had been used solely to generate funding.

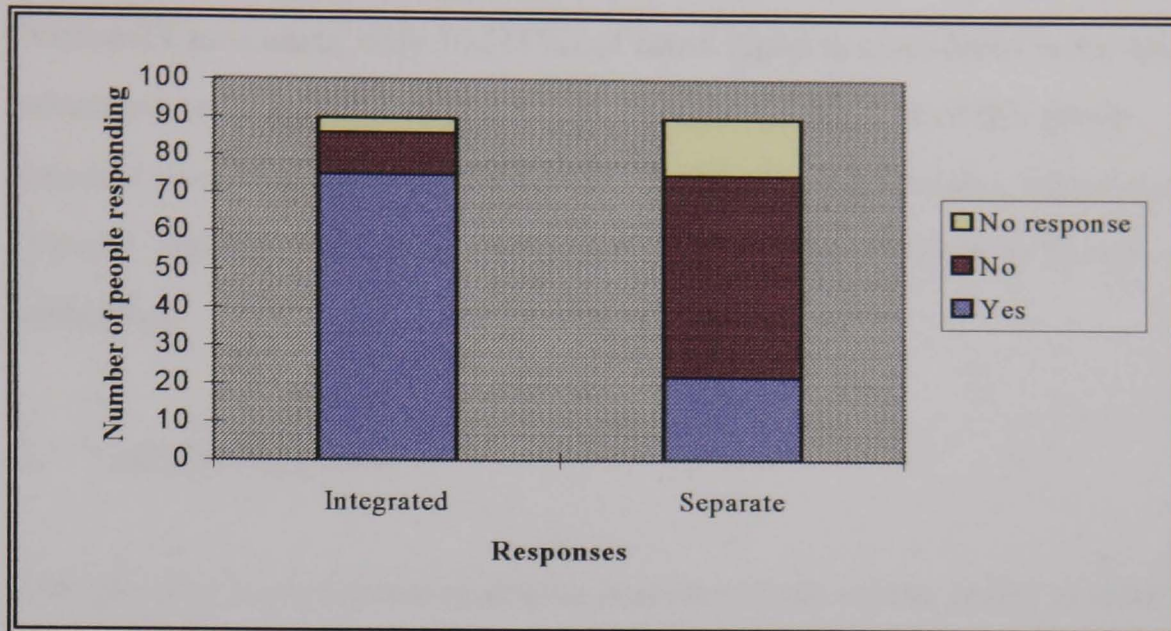


Figure 5 - Method used to embody work-related activities in the curriculum

Questioned as to whether the introduction of the National Curriculum had strengthened work-related education in primary schools only 29 (32%) of the respondents expressed the view that it had, with one person suggesting that the theme had been “re-instated due to OFSTED and HMI”. The most common conclusion, voiced by 48 (53%) teachers, was that it had not been beneficial and 13 (14%) declined to offer an opinion as shown in *Figure 6*.

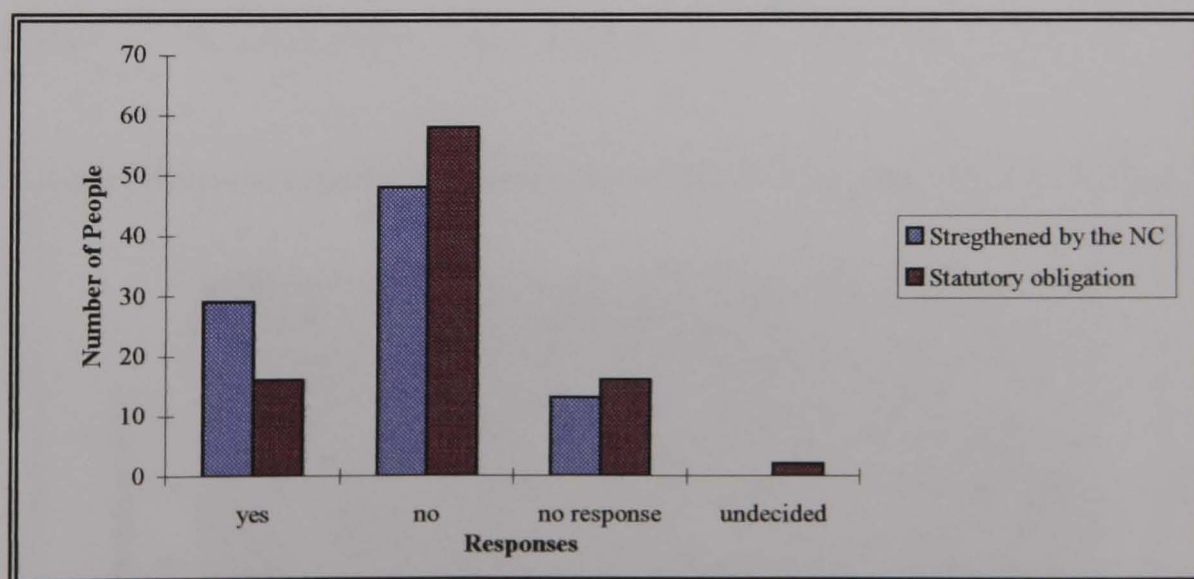


Figure 6 - Affected by Government policy

Despite the number who suggested that the topic had been strengthened by the National Curriculum, only 16 (18%) of those replying considered work-related education to be a statutory obligation, though one member of this group believed it to be even “more than this”. 2 (2%) were undecided, denoting a ‘yes-no’ answer. 58 (64%), were more definite in perceiving it to be non-obligatory.

2. Influencing factors

The fact that work-related education was part of the school policy in more than half the schools responding to the questionnaire must play some part in determining the extent to which it is undertaken. Nevertheless, explanations given by the respondents in the autobiographical statements for their involvement in work-related education were varied and provided some interesting information. A number of teachers referred to more than one significant influence. Comments very often revealed the rationale behind this, describing how particular elements were linked.

The maximum number of influences reported was eight by one respondent, with the remainder mentioning between one and six factors as is shown in *Figure 7*. The mean number of influencing factors was 3.4%.

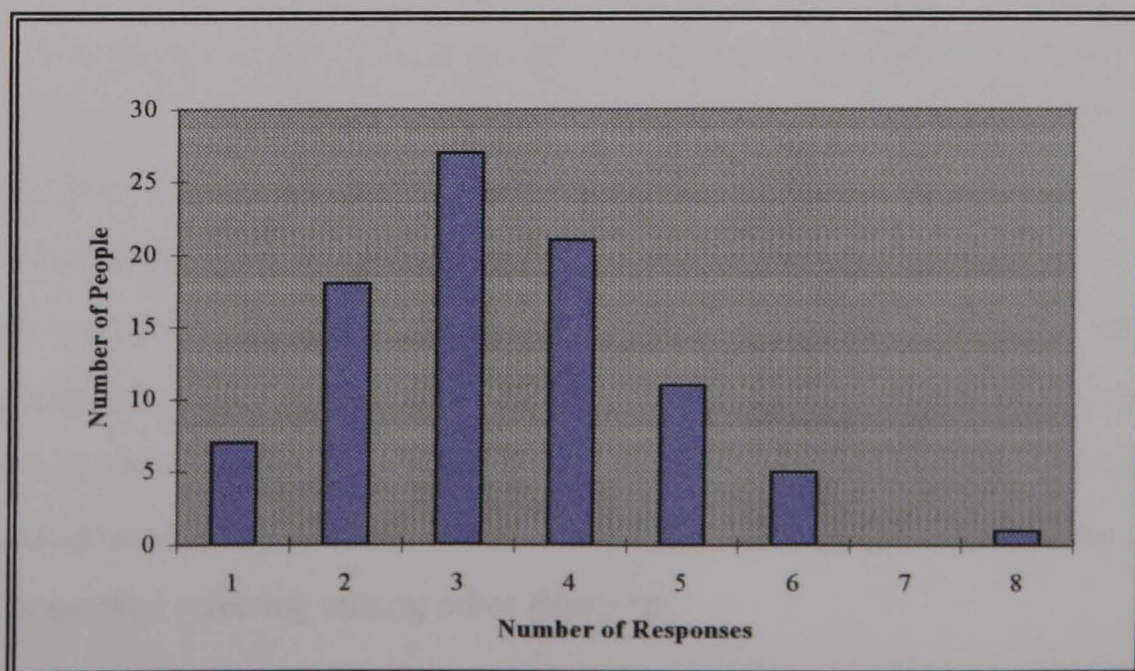
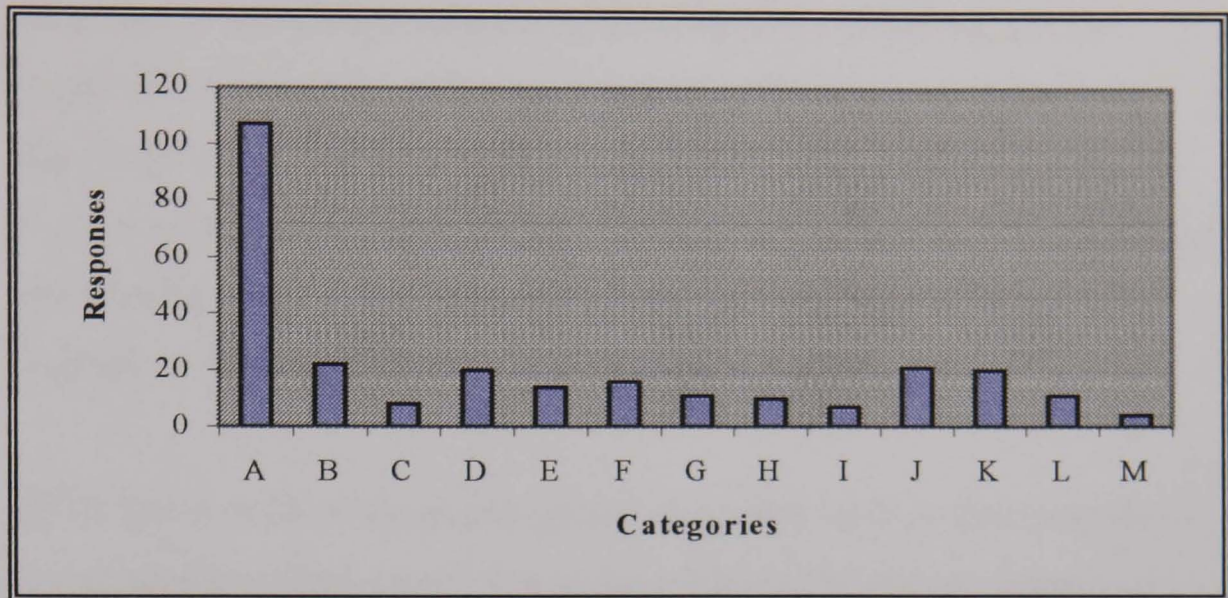


Figure 7– Number of factors mentioned by each person

Figure 8 presents a summary of the major categories of response indicating the predominant influences to include work-related education in the curriculum.



A	Changes in society and the need for improved educational development	F	Placement in business and industry	K	Community involvement
B	Careers	G	Staff skills	L	Imposed participation
C	School position	H	The influence of people outside the family	M	Funding
D	Employment in business and industry	I	Training courses		
E	Close family involvement in business and industry	J	Curriculum requirements		

Figure 8- Frequency of responses to major categories (n=90)

When asked about factors that had influenced their involvement in work-related activities in school there were a variety of explanations. Many of the teachers offered more than one explanation and very often these were connected. The recognition of changes in society and the need for improved educational development to support these changes was the most dominant reason given for engaging in work-related activities (A). 58 (65%) people referred to this reason 107 times. Within this overall number, 33 saw it as a means to “prepare young people for life in a fast changing world”. One teacher described activities as “a deliberate attempt to prepare pupils for the future”. Another teacher was of the opinion that “education needs to be recognised by the pupils and parents as preparing children for the future”. 30 teachers saw work-related education as a way to teach skills and attitudes which might otherwise be disregarded referring among other things to

presentational skills, organisation, and the ability to debate. 26 defined it as a means of offering occasions within the curriculum for active, relevant learning which was deemed essential in today's society. As one teacher pointed out "If education is for life then we must include real life experiences into our teaching and learning". 18 teachers looked upon it as a way in which to encourage pupil motivation saying things like "I think children need to be motivated to succeed". One of the benefits cited was the way "the standards achieved by children have been high when reporting back to people in industry.... they feel their work is actually being used".

Often linked to the changes taking place in society were the future needs of young people when seeking work and the desirability of them using their abilities in the best way possible. The need for career guidance for pupils was seen, therefore, as essential. Work-related education was viewed as an opportunity for pupils to learn about different jobs, and this was alluded to by 22 (25%) of the respondents (**B**). A typical observation was that "so many people seem to have 'wasted talents'. They always comment that they wished someone had helped them to make the wisest choice about their job or career". This appeared as a strong motivation to include work-related education in the curriculum, with remarks being made by 11 (12%) respondents about shortcoming in their own schooling, saying that they had travelled the academic route and had no experience of work other than teaching. The impression given was that they hoped to remedy this situation for children in their care. One teacher wrote, "I left school feeling I knew little about the world of work myself, wishing I had more experience to choose a career from". Another expressed the view that "a broad diversified education is needed at primary level bringing out the talents of all children. This was somewhat limited in my youth of eleven-plus days! For many people of my generation, we were driven along the academic path too soon and somehow made to feel that more practical tasks were less valued. Children should where possible be given the opportunities to link with the 'outside' world of work at an early age". Providing experiences of working environments were also

linked to definitions of the catchment area of the school (C) which inevitably included a large number of unemployed people. This provided the incentive for 8 (9%) teachers. The disadvantages of living in an area of social deprivation was clearly outlined by one respondent who revealed that in the catchment area of the school “the majority of parents (were) unemployed... the children have no experience of people from their community going out to work. The children have very low expectations of employment prospects and those they have are limited to traditional, cultural, acceptable stereotypical choices, and we are aiming to broaden their expectations.”

40 (44%) of the teachers referred to the three categories involving their own employment in business and industry. These three categories included: the teachers own exposure to business and industry through a job (D), close family involvement in business and industry (E), and exposure to business and industry through a form of placement (F). Of these 40 people, 20 (22%) said that employment prior to teaching or in the vacations had shaped their views positively, revealing the need for children to learn about the world of work; 14 (16%) cited family involvement, both now and during childhood, as raising their awareness to the need for work-related education; and 16 (18%) referred to a teacher placement or involvement during Industry Year.

Two of the group citing family involvement (**group E**) described incidents during childhood which had brought them into personal contact with business and industry as being particularly influential. One description clearly outlined an upbringing in India, and the impact made by a visit to a large manufacturing company there. “I was born and brought up in India and my father worked for a large international tobacco company. Consequently many of the ‘family and social’ contacts were in business, international and local, such as jute manufacturers and engineering and paper. I particularly remember a visit to Metal Box and the excitement of entering the world of work and seeing a huge busy factory ‘making’ things”. This respondent, who identified herself as a head-teacher, has clearly carried this exhilarating

experience through life, and is intent on providing the means for the children and teachers in her school to participate in similar events. The other account conveyed details of a comparable episode nearer home that had made an impressive impact - “In contrast to most of my peers, I have a working-class background and most of the significant adults in my life worked in factories. I was taken to visit these as a child and was affected by the contrast of the dull, blank grey exteriors, which most people see, and the wealth of interest within. (I can still picture the horizontal steam engine which powered the weaving factory)”.

The present day involvement of families and partners was another element that played a vital part in influencing teachers. 6 (6%) of the respondents in group **E** particularly mentioned their introduction to business and industry through their husbands, describing how this had led them to experience the needs of industry at first hand. It was interesting to note that no corresponding link was made by the male respondents as to any influence their wives or partners might have exerted.

Within group **F**, 12 (13%) teachers specified a placement in industry as being most influential, with one of them saying that this experience had revealed the potential for:

- a) curriculum enrichment
- b) understanding the mechanics of retailing
- c) green issues in a practical setting
- d) opportunities to bring employees to a better understanding of primary education.

The remaining 4 (4%) teachers in the same group (**F**) drew attention to events during Industry Year in 1986 as the catalyst for introducing work-related education into the curriculum. Activities undertaken during this period were cited as the foundation of their involvement. One teacher described how it

was “During Industry Year in 1986 I realised the enormous gap between pupils’ knowledge and industries’ expectations. I have been involved ever since.” He adds that as a result the school was recently commended by OFSTED on partnership links.

Allied to the comments made by some of the teachers with regard to their own lack of career guidance (**B**), there was some recognition that “most teachers follow a pattern in education which leads them to have little experience of business and industry”. In this respect, the improvement of staff skills and knowledge was highly regarded (**G**) being remarked upon 11 (12%) times. One respondent explained how he had five years of experience in industry before teaching and felt other teachers needed “to get this understanding in order to better equip children for later life” saying “many teachers go from being pupils themselves to university or college, then back to school as a teacher and have no real concept of what it is like to work, say, in a factory or an office. I see my role as developing teachers’ understanding of industry as much as children’s.” Another wrote “work-related education is essential for all staff at school in the climate of constant change which has existed in recent years”. A teacher who described her pupils as “having a parochial lifestyle” said “teachers should be prepared to step out of the classroom to educate children about the workplace”. In this respect, work-related education was viewed as vital for them as for the pupils.

People outside the family circle who were enthusiastic about work-related education proved to have provided a positive influence (**H**). Individuals outside the school were mentioned by 10 (11%) respondents, with explanations telling of how inspirational their encounter had been, spurring them on to become more involved. One teacher mentioned that her introduction to work-related education had been through a teaching practice student who had been assigned to her, and who undertook a module based on the world of work with her class. She described how she and the children “found it relevant, interesting and (how it) made the curriculum come alive”.

Influential people outside the school might also be considered when mentioning the attendance of training courses (**L**). 7 (8%) of the respondents claimed that this had been an inspiration saying that the courses had most often been linked to resource materials aimed at promoting work-related education in primary schools.

Another influencing factors was the need to address curriculum requirements (**J**) and this was referred to 21 (23%) times. Subjects particularly mentioned were Information Technology and Design and Technology with attention being drawn to “some of the important things...children will have to learn for use in the 21st century”, linking back to the changes occurring in society. Another school introduced work-related education to deliver environmental studies since this approach was considered to provide genuine situations. In addition, 20 (22%) teachers again identified the need for community involvement (**K**) suggesting that business and industry played a major role. One respondent said that by “Working with the local community and partners from industry the school will promote a wider awareness of the roles and responsibilities of the individual within society and the range of opportunities available”, once again referring to the need for careers education.

It was intriguing that 11 (12%) respondents claimed that their interest had come about through imposed participation (**L**), inasmuch as they had been asked to take over the area of activity by the head-teacher or attend a related course. These circumstances were often described as initially daunting but transforming in the end. One teacher explained that as a supply teacher she had been offered employment for a term only to find that the job included participation in an industrial liaison with the local chemical works. She says she “argued against it quite shamelessly” at first, asking if she “couldn’t do a nice literacy theme, or something she was used to” instead. She recalled how this had not been acceptable, and went on to describe how the industry project had taken place despite her misgivings. The account continued depicting her

ultimate enjoyment and satisfaction with the project. In an account written for colleagues, included with the questionnaire, she ends - "I just wish I could put my enthusiasm for this project in bottles and hand them out so that you could all share my joy in it."

Funding (**K**) was mentioned as the prime motivator 4 (4%) times but indications were that this consideration had since been disregarded with one respondent adding that she was now ashamed that this had been her initial motive.

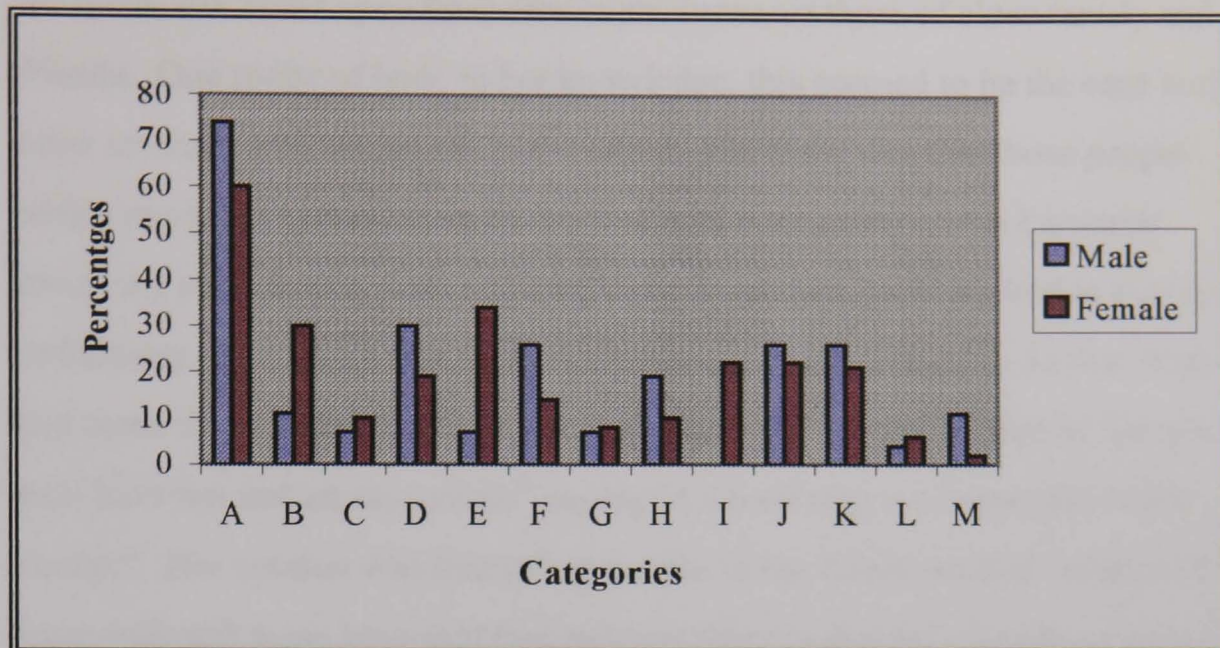
3. Age group and gender differences

Differences between age groups were difficult to establish due to the uneven distribution of responses across the three categories. What the percentage number of responses in each major category does reveal is that far fewer of the younger age group identified any personal link with business and industry as their greatest motivation, and there was no reference to work-related education in their own schooling. Only 1% of the group under 35 describes employment in business or industry as being influential compared to 17% in the middle age bracket. Similarly, the identification of close family links as a motivating factor are revealed as far less: 1% for the under 35s compared to 7% in the 35-50 age group and 8% in the 50+ group. The number of respondents influenced by other people outside the family circle was the most similar factor. Here there were 6% for both the under 35s and the 35-50 age group, with the over 50s registering this point in 4% of cases. Interestingly, it was only the middle age group which identified the opportunity of funding when linking with business and industry. The highest percentage shown in all the groups was the perceived requirement for improved educational development arising from the changes in society. These figures can be more easily distinguished in *Figure 9*.

Categories	Under 35	%	35 - 50	%	50 plus	%
Changes in society and the need for improved educational development	9	10	36	40	13	14
Careers opportunities	3	3	12	13	7	8
School position	1	1	12	13	7	8
Employment in business and industry	1	1	15	17	4	4
Close family involvement in business and industry	1	1	6	7	7	8
Placement in business and industry	2	2	11	12	3	3
Staff skills	0	0	8	9	3	3
The influence of people outside the family	1	1	12	13	7	8
Training courses	4	4	2	2	1	1
Curriculum requirements	2	2	11	12	8	9
Community involvement	1	1	12	13	7	8
Imposed participation	2	2	3	3	0	0
Funding	0	0	4	4	0	0

Figure 9 - Frequency of responses to major categories by age group

Gender differences were also difficult to distinguish given the small amount of male respondents. *Figure 10*, however, reveals there are some variations in the responses given. Although improved educational development is deemed to be the most important influence by both sexes this is more frequently mentioned by the males as the purpose of being involved in work-related education. The most obvious disparity is the way in which the female respondents claim to have been influenced by other people in more instances by both family and colleagues (**E and H**). First hand experience of business and industry is claimed to have been more influential by the male respondents (**D and F**) who also site funding and the need for staff development as significant inducements, maybe indicating a more pragmatic approach to the introduction of work-related activities into school.



A	Changes in society and the need for improved educational development	F	Placement in business and industry	K	Community involvement
B	Careers	G	Staff skills	L	Imposed participation
C	School position	H	The influence of people outside the family	M	Funding
D	Employment in business and industry	I	Training courses		
E	Close family involvement in business and industry	J	Curriculum requirements		

Figure 10 -Differences in responses according to gender

7.4 The Follow-up Interviews

1. Results

The 9 teachers interviewed had expressed a variety of reasons that had influenced their concern for work-related education in their autobiographical statements. When discussing these reasons in more depth, it became apparent, that whatever their initial motivation might have been, the majority of them were strongly committed to advancing the prospects of their pupils in future life, seeing work-related activities as a means of achieving this end. Alongside this desire was the potential opportunity to enrich the curriculum, which was considered to be essential. Some of the teachers talked of the necessity to acquaint pupils with some knowledge and understanding of the working world

for future life based upon their own experiences, or those of close family and friends. One spoke of how, to her knowledge, this seemed to be the case with other teachers with whom she had worked. Her view was that those people with a particular commitment to work-related education had backgrounds involving parents who were self-employed or partners who worked in business or industry. She added that another interesting factor seemed to be that “they had come through the hard way, not the easy way” or were related to “people who have not had an easy climb” saying “the hard slog is almost part of the course”. Her opinion was that young people of the future needed “stickability, teamwork and some hope that they will get there in the end, not giving up too easily”, and that working with business and industry gave them the opportunity to broaden their horizons and raise their expectations.

Two other teachers who recalled their work experiences prior to teaching reinforced this aspect of an early struggle to achieve against all odds. One spoke of a variety of jobs from the age of fourteen which, he reflected, had taught him a lot that could not be learned in school. His opinion was that “if you could get teachers with that sort of range of experience, or better than that, they would be in a better position to talk to children about the future...maybe...even affecting the way they educated children”. One teacher spoke of how primary school pupils already had ideas about jobs and what they would like to do, and was of the opinion that children needed to be introduced not only to work but also to the part played by learning in employment. Her conviction was that having a job for life had disappeared and that people needed to accept that they would change their jobs several times, interspersed with different kinds of learning or training, and that children needed to understand this.

Some teachers focused on the need to enrich the curriculum, showing the relevance of the learning, and giving the children experiences in a very direct way. This view was taken by teachers with contrasting catchment areas: one particularly describing pupils with many learning problems, coming from

deprived backgrounds, and another specifying a rather middle class area where children were given a great deal of parental support.

All of those interviewed voiced the prerequisite for active, real-life participation by the children, describing how this involved business and industry in the locality of the school. All spoke of their commitment to the approach for reasons described earlier, though it was evident from the conversations that this was not always the case with other staff members.

It became clear during the interviews that six of those involved were head-teachers who unreservedly confessed their influence in introducing elements of industry-education into the school. One head-teacher stipulated that “the head is the most important person in all initiatives” adding “it has got to come from the top”. Even so, one head-teacher admitted to be still having some difficulty in convincing her staff of the worth of such ventures, declaring that certain things she had tried to do were viewed by some staff members as “her little pet fad”. Another head-teacher acknowledged that there are those who “feel motivated by working with business and adding that dimension to their work, there are those who see it as something extra” reckoning that it was the older generation of staff who were more difficult to motivate. He described two of his staff members as still being in “reluctant mode”. All of the head-teachers admitted during their conversation that introducing work-related education sometimes proved difficult with some staff members.

Two of the three classroom teachers interviewed explained how their introduction to work-related education had come about as a result of the intervention of the head-teacher, with one of them declaring that head-teachers must be supportive. Her feeling was that the initiative could come from a member of the teaching staff, but that in order to make it work the head-teacher needed to be ‘turned-on’. This, she explained, might require the use of special tactics by the teacher, like drawing attention to recent changes in OFSTED guidelines in which community and industry links had been re-

prioritised, and pointing out how undertaking work-related activities could lead to good inspection reports. The one remaining teacher portrayed her teaching strategy as one which naturally looked for links with the world outside the classroom. Formalising this approach school-wide had been the idea of the head-teacher, in the belief that some funding might be forthcoming. This, she explained, had not been the case, though she had continued to pursue activities linked to business and industry for their own sake, opening up opportunities for other staff members when possible. These chances, she said, were viewed positively by her colleagues who were happy to be included, although they were reluctant to forge any links themselves. This disinclination to instigate links with industry by some staff members was not unusual, being commented on more than once. Reasons varied, but most often it was put down to the fact that classroom teachers had little time with the many other pressures put upon them, or to the fact that they had fewer contacts. It was recognised by one of the teachers that links of this type were hard work, with playtimes being spent making phone calls and sending faxes, but concluding that the satisfaction at the end was enormous.

The head-teachers indicated that they were happy to take on the responsibility of making links, or to support their staff in individual endeavours. The assistance available from outside agencies was seen as vital to efforts in this respect, and the benefit of these was commented on several times. Some lamented on the lack of such support mechanisms. It was obvious that different areas of the country experienced contrasting degrees of provision in this respect though variances were not recognised by the interviewees, rather each individual assumed that their position was a prevailing factor nationwide.

Another drawback that was mentioned frequently was the constraints placed upon schools by the National Curriculum. Some teachers saw this as exceedingly time consuming in the amount of paperwork it necessitated, and obstructive inasmuch as there were so many targets to work toward. There

was also the public image of the school to be considered which meant gearing everything that was going on in the classroom to SATs (Standard Assessment Tasks).

One head-teacher was of the opinion that “teachers in primary schools don’t necessarily have that wider view” of education which is essential when thinking of life in the next century, seeing their job only to deliver the National Curriculum. In this respect, it was considered necessary to educate the teachers. Another head-teacher considered that teachers “very often go for what they see as an easier option”, the implication being that introducing work-related education was ‘hard work’. His opinion was that industry links not only provided an easier option but was more exciting as well, and this view was echoed by others who saw the introduction of guidelines as a way in which work could be more focused, opening up possibilities for purposeful visits and interaction between education and the outside world. One comment was that “when you look at the National Curriculum you are looking at ways in which you can generate a positive feeling out of the work you do”.

The teachers and head-teachers questioned indicated that there were great advantages in involving pupils of every age group in primary schools in work-related activities, while recognising that the experiences and eventual outcomes would reflect the age group of the pupils involved. There were contradictory views on the disposition of business and industry toward working with primary schools. Some teachers were of the opinion that there was a movement towards a more general acceptance of primary school pupils in the drive to link with education. Others claimed some difficulty in persuading business and industry to work with young children. One explanation given for this was “because of the way things have been structured in the past. Business and industry don’t really think primary schools are important”. The general belief was that it was now easier to forge links than some years ago, though one head-teacher remarked that “until they (industry) have worked with them (primary schools) there will always be a question

mark". Another theory was that "some people did not see it as part of industry's role to support primary schools. It is all right at secondary level, but primary is not quite as important". This disaffection was considered to be most prominent with infant schools by one teacher who reflected that her experiences in dealing with Key Stage 1 pupils had led her to believe that this age group was looked upon as the poor relation in the area of industry links. This, in her view, has resulted from industry seeking outcomes that are considered best nurtured with older pupils.

A difficulty with arranging visits into industry with younger pupils was the obstacle most often cited. It was suggested that problems often hinged around health and safety issues, and attention was drawn to rules and regulations which, in some instances, excluded children under seven years old. Whether these were company regulations or a law of the land was unclear.

The large corporations were sometimes considered to be more accommodating toward primary schools since they usually had a clear mandate for working with education. One head-teacher, however, expressed the feeling that in some cases the large companies were not keen on allowing "hands on (experience)... they would rather keep us at a distance". He maintained that they produced a lot of resources, which were very useful, but did not want any close contact. By contrast, one teacher was of the opinion that when considering links between education and business and industry there were fewer obstacles at primary level since the intent of industry was more often altruistic with pupils of this age, whereas at a higher level industry was becoming involved "because of a dissatisfaction with GCSEs (or) certain university courses". He was of the conviction that "they are pumping money into universities hoping to help students in certain faculties to be prepared more precisely for the kind of employment in their firm, which they see as important".

It was obvious by comments made by those interviewed that they were not oblivious to some of the underlying reasons which might prompt business and industry to become involved with education. Some spoke of a “hidden agenda” but there was no conflict with this approach. Rather there was agreement that links should be a two-way thing, with each gaining some advantage. Despite this sentiment, there was a strong feeling that industry, in many cases, did not really know what they wanted from working with education, and a variety of suggestions were put forward for dealing with this situation. Some teachers were of the opinion that the aims and objectives should be agreed at the outset; others suggested that ideas often materialised as the partnership progressed.

The lack of knowledge and understanding of recently qualified staff with regard to work-related education was a particular concern with the head-teachers who were interviewed. There was an underlying assumption that those more recently trained should have been introduced to elements of economic understanding and industry links in their college course, given the focus placed on work-related education in recent years. One head-teacher was concerned that nothing seemed to be happening in Teacher Training colleges, and another commented on the amount of effort needed to initiate young teachers to this work. A suggestion from one teacher who fell in the younger age bracket (20-35) was that the best time to introduce teachers to business and industry links was when they had been teaching for two years. She admitted to having had a small amount of instruction during her training but confessed to some apprehension at the thought of approaching industry at that time, when she had so little classroom experience. Her advice was “to grab them two years in, when the motivation (was) still there”. She thought it was more important to allow trainee teachers some time in industry as part of their career development as this would not only change the way in which they perceived themselves, but would affect the way education was perceived and maybe their future performance.

Time in industry for teachers was mentioned frequently. This was sometimes in the form of placements that were considered to be very valuable on the whole, while at the same time being costly and disruptive to the school. One notion was that “teachers are no different to pupils” because they “are cut off from experiences of work outside as much as the children”. The recommendation put forward here was that teachers should be allowed sabbaticals, to keep up to date with the latest academic initiatives and to sample other forms of work.

There was also a strong conviction that representatives from business and industry should reciprocate these placements, coming into school to see the work that was being undertaken there for themselves. Moves were being made in this direction by some of those spoken to, with mentoring schemes being planned in two schools and a work-shadowing visit for a manager from business in another.

Finance was often high on the agenda. Only one teacher indicated that this had been a reason for becoming involved, but others mentioned that this was a strong incentive when considering working with business and industry. It was not suggested that money would provide a motive for the work being carried out, rather that it would make visits more possible since the funding was not always available in school. Financial help was considered as the ‘icing on the cake’.

7.5 Concluding Comments

The information revealed here results from data collected from a small number of teachers who were known to have shown interest in work-related education. Because of this it is recognised that the findings are limited. Nevertheless, some interesting details are revealed and it might be argued that the conclusions serve to confirm many of the findings and trends reported by other

researchers earlier in the study. A number of possibilities for further investigation are also evident. These might include, for example: some comparison with teachers who have had no documented involvement in work-related activities; a closer inspection of all the staff in the schools responding to the survey; and an exploration of teachers in schools working in different types of catchment areas. Whilst it is acknowledged that such investigations would add important dimensions to this study, present time and space has not allowed for their inclusion.

Turning then to the present findings, it was mentioned in Chapter 2 how Jamieson (1985) describes groups involved in work-related education as being united only in the most general sense. This is evident in the responses reported here which reveal a variety of purposes and a range of motivations for becoming involved. Despite their common interest in work-related education it was interesting to learn that the teachers concerned do not popularly consider the topic to be mandatory as far as government legislation is concerned. Nonetheless, more than half of the schools include it in their written policy. It is hardly surprising that work-related education is regarded as an important aspect of education by the teachers involved in the survey since the members of the group targeted were presumed at the outset to be positively biased. Nevertheless, the fact that motivation for involvement in work-related activities cited by the 99 per cent of teachers who claimed to be practically involved, are for purposes other than statutory obligation provides a valuable insight: supporting the view put forward earlier by Woulfe (1994) that there is a need for teachers to value the work in question, an attitude which Morrison (1994) considers to be particularly important when reflecting on the delivery of non-statutory aspects of the curriculum.

It might be suggested that the motivation to engage in work-related education has emerged as a result of the school ethos concurring with the view put forward by Osborne *et al* (1996). However, the information gathered here suggests that the recognition of the value of work-related education has come

about as the result of a variety of factors which have influenced the teachers' attitudes and beliefs, leading them to incorporate this aspect of work in the curriculum. Despite the many demands placed upon them work-related education plays a part in the curriculum, confirming the point made in Chapter 3 concerning the extensive opportunities for teachers to embody elements of work-related education in the curriculum if they choose to do so (Harris 1994).

The study reveals that an awareness of the changing social and economic climate is a powerful determinant for the teachers involved and the evidence suggests that the majority of teachers pursue this policy because of a fundamental concern for the pupils they teach, and to enhance their prospects in life in the years ahead. This is made evident in the way in which 65% of the respondents referred to the ongoing social and economic changes taking place in society and the need to reflect these movements in education. It is evident that high on the agenda of all the teachers concerned in the study is the need to involve pupils in learning situations which reflect real life, including economic situations. The need for practical activities and hands on experience is deemed to be essential with pupils in every age group. This is contrary to the view expressed earlier that some primary school teachers consider work-related education to be ideologically unacceptable in primary schools, being more suited to secondary education. Employing a method of teaching that incorporates practical involvement in real life situations is believed to engender a true understanding of curriculum matters in the children, increasing their motivation to learn while preparing them for adult life. It might be argued that this approach reflects how the teachers concerned perceive education and its purpose (Lawton 1989), having an educational philosophy which sees the involvement of work-related education in the curriculum as a means of helping children to achieve their potential in the years ahead. Rather than perpetuating any system of cultural reproduction (Bourdieu and Passeron 1977), it might be suggested that their aim is to prevent the possibility. This aim is also indicated by comments made by those teachers who refer to their own educational experiences and the desire to open up greater opportunities

for their pupils. Occasional remarks made about the catchment area of the schools and the social conditions that pervade also communicate a desire to expose children to possibilities which would otherwise be outside their everyday experiences.

It is clear that in a number of cases the life experiences of the teachers themselves have had a direct impact on the methods they employ supporting the view put forward by Goodson (1988), and concurring with the theory of Biott and Nias (1992) who indicate that new ideas can only be incorporated when they are supported by personal experience. The greater number of older teachers who refer to previous experience, apparently having had more opportunities reinforces this view. Unlike theories put forward suggesting that teachers can be disillusioned by their experiences (EATE 1991), these teachers reveal the positive affects of previous exposure to business or industry. No doubt this is once again a reflection of the particular sample used in this study. Comments made by some of the respondents with regard to the need for other staff to be educated in the practices of business and industry, indicate that some personal involvement is considered by the teachers themselves to be most influential in order to stimulate interest, and raise awareness of the possibilities that links can provide. Remarks also implied the need for teachers to overcome a fear of the unknown. Statements made concerning the academic route which many teachers have followed tie in closely with observations made by other authors referred to earlier (Francis 1989, HMI 1982), and the way in which many teachers go from school to college and back into school again is considered to have an undeniably negative effect. A number of respondents perceive their own inadequacies in this respect but have been prudent enough to make efforts to overcome these. Linked to this is the concern that too little is done in their teacher training to influence teachers' thinking. There is little suggestion from the younger teachers that their training had any influence at all. Even though there is some suggestion that teachers in linking with industry and business require an element of confidence, the insinuation is that some preparation is necessary in order to

promote positive thinking, adding significance to the argument which encourages teacher placements in business and industry.

The influence of other people in generating enthusiasm for work-related education is closely associated with the role of personal experiences. This is evident in the way in which 28 respondents (31%), the majority of whom are female, claim to have been inspired by either family members or individuals, both inside and outside of the school, which might endorse the premise that women are more people oriented. These occurrences have provoked some reflection on behalf of the teachers with regard to the needs of young people in the future, and have opened up the potential for some exciting learning experiences for their pupils. Placements in business and industry have also provided a positive incentive, confirming the value to teachers development through relevant industry experiences, despite the concerns which have been voiced with regard to the benefits these might convey (Jamieson 1993, DTI 1990).

The area in which the school is situated was referred to earlier. This also appears to play an important part in determining whether work-related issues should form part of the curriculum, confirming the view of Osborne *et al* (1996). Social deprivation and high numbers of unemployed parents have raised some teachers' awareness to future needs. This has motivated those concerned to seek active ways for children to be introduced to work-related issues which might otherwise be neglected. These opportunities are also regarded as indispensable in order to equip children with useful work-related skills and knowledge about business and industry. Even some of those teachers in more affluent, middle class areas recognise the inevitability of a more complex employment structure in the future, and introducing children to work-related issues from a very early age is seen as one way in which they can be prepared to cope in the next century. The aim is not to produce 'factory fodder' as has been suggested by some nor is it connected to low level skills and occupations for less able pupils (Jamieson 1993). The view is that by

teaching children about the world of work and encouraging skills and attitudes that are thought will be useful in the future, children will be empowered to participate.

The activities undertaken are often very closely linked to the local community and are employed as a means of 'getting the children out of the classroom' into the local environment, and providing opportunities for them to see the significance of their learning. Linking with the community is also seen as a way of satisfying the requirements of the National Curriculum. As a result of these encounters it is considered that pupils will gain some knowledge about the world of work, directly or indirectly. Even where work-related activities are not part of the schools' written policy it is suggested that elements of work-related education are considered as the norm. While this attitude could well be regarded as laudable it might be argued that no official recognition of work-related education as part of the curriculum could lead to a random approach, leaving open the possibility of such activities being omitted entirely if the staff are not convinced of the benefits.

The attitude of business and industry toward primary schools is not always considered to be as satisfactory as it might be when work-related activities are proposed. Some comments concerning the difficulties encountered when trying to arrange activities, and the remarks made regarding the amount of time required for negotiations gives some indication that a great deal of persuasion is often necessary. With the lack of time enjoyed by primary school teachers, this could prove to be a deterrent to those considering the option. It might conceivably cause some teachers to abandon their efforts altogether, especially those not confident with the idea of work-related education, resulting in the loss of any potential 'new recruits' to the industry-education scene. It also transmits negative feelings to educationalists and could cause them to reflect that industry does not want to work with them. Does business and industry *really* want to work with primary schools?

Chapter 8 considers this question.

CHAPTER 8

Responses to the Industry Survey

8.1 Introduction

This chapter gives details of the information gathered in **part two** of the survey, the methodology of which was described in Chapter 6. The enquiry, which was directed towards a number of leading businesses and industries, aimed to uncover their policy and practice. Data was collected through interviews held with ten company representatives. A summary of the information gathered is presented and some conclusions are drawn. Some specimen transcripts of the interviews can be found in **Appendix 9**.

8.2 Responses

Representatives of all ten companies involved in the survey proved to be helpful and forthcoming and the general attitude was of a dedicated interest in working with education. When asked if the company had a written policy for their educational involvement eight of the ten answered yes. Even those without a written policy declared that working with education was part of their brief and was included in the community policy. Activities came under different headings. These comprised:

- Community support.
- Community relations - Youth development.
- Education.
- Community relations - Education liaison.
- Recruitment.

- Community work.
- External relations policy.
- Education liaison department.
- Community affairs.
- Human resource strategy.

Working with education was not considered to be mandatory in any of the companies, rather it was promoted as a worthwhile activity and employees were encouraged to work with schools and colleges.

Responses to the question asking if the company had a policy for working with education usually involved examples of what was undertaken and it was evident that each of the organisations tended to have an individual approach. There were, nevertheless, many overlaps and some common features. The understanding was that employees were encouraged to work in the development of special projects and with individual schools at a local level, while a more general approach was undertaken nationally.

Company representatives referred to the way in which their company policy had been approved at board level, but pointed out that the procedure used to arrive at the criteria had involved many other people. All those interviewed suggested that the process had started within the Community Affairs Department, with three companies acknowledging the use of consultants to assist with the development of a strategy. The consensus was that it was necessary to involve discussion in the development of such criteria, and each representative revealed that debates in association with company employees and other organisations involved in industry-education work had helped them to come to a firm decision as to what should be included. Despite this, comments from three of the representatives indicated that a strong personal commitment to the endeavours and certain ideals might have helped shape the approach. All of the policies had evolved over a number of years, each having

a different focus with distinctive purposes. Some policies had been instigated more recently than others.

One company representative revealed that the movement to link with education had begun as far back as 1974 when it had tended to be the enthusiasts who promoted activities. While this policy had, of necessity, changed over the years, becoming more clearly defined, the spokesman declared that there had always been a strong commitment within the company to human development. He pointed out that there was a coincidence with efforts during the 70s “in terms of government policy, particularly the DTI Enterprise White Papers ” and the emergence of their education work, saying how “at that time the company had close relations with government and was seeking to present a positive image of itself”.

There was some recognition by all of those interviewed that change was necessarily ongoing since nothing stood still, least of all business and industry where the demands made were increasingly more profound. Efforts when working with education were said to have become more proactive rather than reactive.

There was obviously a desire on behalf of the companies to help and support the communities within which they traded. Many of the explanations given for involvement might be deemed altruistic, centring upon concern for the quality of education and the need to raise standards in education generally. Despite this, it was evident that the need to promote activities that would be most useful to the company was significant. It was clear that critical to the endeavours of each company was a concentration on the business needs of the organisation, and the requirement to strengthen future recruitment demands. This sentiment came through distinctly on every occasion, though it was not always declared explicitly, and indications were that this objective was of primary importance. The aim was very often to increase interest and expertise in particular subjects that would be beneficial to the company involved in the

long term. Reasons given for this focused on recruitment in years ahead. Curriculum areas particularly mentioned were science and technology. Languages were the focal point of one company's interest. Other areas of study focused upon were health education, environmental education, citizenship and information technology. Two company representatives referred to the requirement for key skills¹ or 'employability skills', with one interviewee saying that the company placed as much emphasis on these as on academic qualifications when offering employment. These skills were considered to be generic, and as such, beneficial to any business or industry. One representative said that it was his personal opinion that an ideal which concentrated on recruitment matters was the "worst manifestation" of education-industry links, saying it was "the kiss of death". More importantly, as far as he was concerned, was the need to "create positive expectations of the need to go on learning on a lifelong basis (getting) away from the notion that learning takes place in the classroom or institute" and creating "positive expectations".

Educational Aims	Companies									
	1	2	3	4	5	6	7	8	9	10
To promote science	✓					✓				✓
To promote technology	✓					✓	✓		✓	
To promote maths	✓									
To give careers advice	✓	✓						✓		✓
To encourage core skills		✓		✓	✓					✓
To promote languages		✓								
Increase community involvement			✓				✓			✓
Promote goodwill and the company name			✓			✓	✓	✓		
Increase future recruitment possibilities	✓	✓	✓	✓				✓		✓
Encourage informed decision making				✓					✓	
Upgrade teacher knowledge and skills	✓			✓	✓					✓
Increase knowledge about business and enterprise						✓				
Improve education quality						✓				✓
Promote citizenship						✓	✓			
Assist with environmental education	✓					✓	✓			✓
Provide GNVQ support			✓					✓		
Encourage company staff development					✓	✓		✓		
Promote lifelong learning									✓	
Encourage pupils' personal development									✓	
Encourage positive expectations of pupils			✓						✓	
Promote engineering and manufacturing	✓							✓	✓	✓
Assist with health education							✓			
Achieve indirect marketing		✓	✓				✓			
Promote equal opportunities		✓								

Figure 11- Aims of education links as indicated by each company representative

Promoting the company name was seen as a goal by two of the companies involved. The remainder were more intent on promoting the image of the sector of commerce in which they were involved, or to increase the status of business and industry in general; to communicate their activities more widely, and with greater understanding. This was particularly the case with the engineering and manufacturing industries that have suffered a decline in recent years and where public awareness raising is considered to be essential. A more precise definition of the points made by each company representative can be found in *Figure 11*. A definition of the business focus of each company (1-10) can be found in **Appendix 6**.

The policy involving the way in which some of the industries worked with education appeared to have undergone some recent change. Indications were that initiatives in the past had been more countrywide, and that more emphasis

was now being placed upon 'local' links and partnerships. Nine of the companies declared that their policy was to effectively encourage links with education at a local level, that is, with schools within easy reach of their divisional bases. The remaining company also advocated locally based work, but characterised local activity as work with educational establishments close to head office rather than their national outlets. Initiatives promoted nationally were still carried out, but these were of a different nature. One company representative described how they had recently delegated responsibility for many of their activities to individual sites, retaining control of only a limited number of projects at a national level. Another company representative also described this approach to industry-education links, saying that little work was carried out at a national level. Despite this, she said that there were no resources as such at their thirty bases, with only a small amount of funding being provided. Yet another company with a similar policy of encouraging locally based work told of how no finance was provided to local sites, saying, "the principle is that each site should establish and operate an education-business partnership centre. Not a bean comes from the centre (meaning head office). We don't provide a penny. It has to be locally owned. If it is not locally owned they would simply see it as a head office initiative and would simply play lip service to it and wouldn't have the sort of commitment or sense of ownership that would be essential for its success". The method generally subscribed to for local initiatives was that schools should approach the sites individually with topics in which they were interested. National initiatives concerned subject matters which were more generic and which could be approached more consistently from the centre. Assistance with the delivery of GNVQs (General National Vocational Qualifications) was included in national initiatives along with a wide range of teaching and learning resources which had been produced over the years. These resources included materials which aimed to help teachers deliver aspects of the National Curriculum, to encourage children to learn about business, and develop enterprising skills.

The most common feature of education links described by companies involved in the survey was support of staff to be school governors, with eight companies subscribing to this strategy. This arrangement was seen as a practical way in which schools could be supported. One company representative said that this was their most successful project with sixty per cent of governors in their employ operating in primary schools. Another quoted a figure of forty per cent, saying it was through these links that primary schools most often became involved in the company's local initiatives. Attention was drawn to the way in which employees wishing to become school governors were given the necessary training and time off with pay in pursuit of their duties. A small grant was usually allocated to the schools concerned by all of the companies involved. One company mentioning their commitment to this trend told how employees who were school governors were enrolled as members of the National Association of Governors. In addition to this, workshops were held to introduce subjects such as 'Marketing Your School'; 'School Development Planning'; and 'Issue Relations in a Crisis'. Employees who were school governors were invited to participate along with the teachers. These sessions were claimed to be very well attended. Encouraging staff to become school governors was seen as a way of empowering employees who were, as a result, more fulfilled and contented. At the same time gains were considered to be made by the community as a whole.

When asked if the company specifically promoted work with primary schools, one representative stated that this was written into their brief. Another comment was that "now it is fashionable to work with primary schools and this has been added". The remainder said policy was more general, indicating that links should be made with all age groups. Everyone said that work with primary schools was undertaken, but in some instances admitted that in reality this consisted of only a very small part of the work. The majority of interviewees maintained that they personally felt that working with primary schools was of the utmost importance since it was here that the greatest

influence could be made. One typical comment was that “if we don’t get it right in the primary schools then we are chasing our tails later on in secondary or FE or HE. We very much subscribe to the policy ‘right first time’. The difficulty is it is a far longer lead time, and there is some difficulty in persuading colleagues that working with primary schools is going to give us benefit.” His opinion was that “if we lose the child at an early age... we will never get them back”. Convincing colleagues of the value of working with primary schools appeared to be a stumbling block in a number of cases, and was described in one account as an “internal communication difficulty, with some colleagues having a much more narrow business focus who needed to see immediate returns say in recruitment benefits”.

One company representative was of the opinion that the reason for less work being carried out with primary schools was that employees did “not know how to”. The answer to this was seen as producing resource materials for staff which would assist in this process, the philosophy being that if there was something tangible which could be used it would provide a foundation for building the self-confidence of employees. Lack of awareness in the field of primary education was cited as widespread, as was the difficulty of “getting the language right” to get the concepts over. Some companies felt that the way to surmount this was to work directly with teachers who were experts in putting ideas across to the children. The predicament perceived here was that with concepts in science, for example, many teachers themselves were not scientifically literate. It was believed that the solution to this was to seek ways in which teachers could be better educated or assisted in their endeavours. One company had overcome the dilemma by using seconded teachers on their sites. These teachers were selected for their expertise, and their salaries paid for by the company, thus ensuring that teachers could work with teachers. This was a manoeuvre which was claimed to have worked well. One company representative said that though they liked to work with primary schools a broker was necessary since “there are so many of them”. She added, “there are more expectations with primary schools which need regular contact... If you

can't go in for any reason after you have promised, you feel you have let them down and the school feels let down". She pointed out that she was in a "busy business", concurring with the viewpoint of another representative who said, "business is the priority".

There were a number of education initiatives considered to be successful. These included the production of resources and programmes, some as the result of a small initiative which had become more widespread. Others initiatives had been specially generated with the aim of targeting them nationally, usually as a result of working in partnership with another organisation.

Various methods were used by all the companies involved to disseminate the work being carried out, with use being made of the network of organisations concerned with industry-education links, conferences and workshops. What appeared as a frustration on behalf of some of the company representatives interviewed was the vast number of primary schools and the difficulties involved in targeting them all, let alone reaching them. One representative claimed that his greatest disappointment was the ability to reach the teaching force effectively. He said, "if we could wave a magic wand and simply get all teachers to be aware of the resources we have produced or even sponsored, that would be a major step forward. All the research we have done shows that about point one of the teaching force even know about them, let alone use them". Accent was placed upon how every endeavour was made to promote initiatives extensively and to communicate with schools through educational publications and organisations, but the feeling that came through was that often it was the same schools who participated again and again. The dominant feeling was that little could be done to involve every school, and some interviewees took a more pragmatic approach, reasoning that "it would not be possible to provide a full range of partnership activities for more than a minority of schools" anyway, with the resources available to them. As one interviewee said, "there is a limit to the amount of people you can work with".

Still, the feeling was that it would be encouraging if more teachers and schools showed an active interest. One method of rectifying this situation was believed to be some interjection at Teacher Training level which would acquaint new teachers with work-related education, opening up the possibilities to them. Three companies showed interest in this approach, and one of these was already working with postgraduate student teachers in their local university.

A concern voiced by one interviewee was the lack of statutory support given to these endeavours. He stated that in his opinion there was “total confusion” at present in the field of industry-education work, with the emphasis being on “discrete activities”. What he felt was required was some “overarching framework.... It needs to be clear to every primary teacher and every primary head what the primary school should be aiming to do explicitly to prepare young people for adult and working life”. The influence which industry could bring to bear on government was seen as a way this could be achieved, and indications were that efforts were being made. Indeed, more than one of those interviewed mentioned involvement with government organisations where matters of this type were discussed, and their bids to influence the situation were insinuated. How profitable these efforts had been was unclear.

All in all, every initiative in which the companies had been involved was believed to have been successful, to a greater or lesser extent. The way in which these activities were evaluated, however, varied. Evidence suggested that there was an increasing awareness of the shortcomings in this area, though one company claimed to have recently hired an agency to carry out an evaluation of their education activities. Another two companies disclosed they had, in the past, used an organisation to conduct an evaluation of some of the work that had been carried out. Modest attempts had been made by some of the companies to obtain feedback through questionnaires and reviews, but it was admitted that the results had been limited. Three companies maintained that evaluation was something that was now being considered more seriously

since recent events had led their programmes to be more focused, the premise being that there was now more at stake. One contrasting view given was that evaluation was something of which to be wary, since it could be inclined toward recruitment issues. Indeed, there was some acceptance of how difficult it was to know what to evaluate and how, since many of the intended outcomes were long-term. One company representative described how they were moving into a situation where they would aim to agree the key performance indicators at the commencement of each programme. This, they anticipated, would enable the deliverables to be revealed at the outset, allowing the quantitative and qualitative elements to be distinguishable, and therefore more easily evaluated. The difficulty here was the number of projects involved and the limited amount of time available.

8.3 Concluding Comments

The information gained from each company representative demonstrates a strong personal desire to assist with educational development and this is reflected in the efforts being made. There is also a clear commitment through the policy of the companies to the goal of linking with education successfully, and to the development of partnerships with education which will benefit each in his own way. It is evident that particular aims vary as shown in *Figure 11* and this might be explained by the way in which the educational activities are situated in different areas of company procedure. That is, for example, how some organisations place the educational focus within human resource development and others position activities within community affairs, resulting in an automatic concentration on particular elements. Conversely, it might be argued that each company's policy is dictated by the outcomes required, with activities placed strategically within the area they seek to promote.

The most common aim is to help teachers in subjects which are deemed to be deficient in the education system as it stands, i.e. science, technology and

maths; subject matter around which their businesses evolve. The urgency for some redress in certain subject areas on behalf of the companies lies unmistakably in future recruitment and this is acknowledged in the majority of cases. Despite a widespread desire to contribute to society as a whole, the foundation of work being carried out is inevitably grounded on the requirements of each individual organisation, and is centred on their own expertise and business obligations. This might be considered self-serving by some, but the reasoning behind this can be easily understood given the difficulties they proclaim in securing qualified staff. It might be argued, however, that the efforts by some companies to promote the more universal skills and attitudes associated with employment are more valid since they are relevant not only to occupations but also to adult life. Current thinking suggests that it is these attributes which are more sought after by employers. Brown (1997), for example, tells us how there is a requirement for workers to have good personal and social skills alongside the technical skills and that there is “an expectation that they will be able to work in a rapidly changing environment, to engage in ‘rule-making’ rather than ‘rule-following’ behaviour, to work in project teams... depend(ing on) the interpersonal skills of negotiation and teamwork”. This theory is supported by evidence collected through surveys carried out with businesses in the United States. Statz (1997 p.206) draws upon the work of Bikson and Law (1994); Cappeli *et al.* (1992); Natriello (1989) which indicates that academic subjects are peripheral to the more generic skills which are required for employment, “like problem solving and communications, and in work-related attitudes”.

The consensus of opinion was that the vast majority of work undertaken by each company involved in the survey has, to date, largely focused on secondary schools and higher education establishments. Nevertheless, all the representatives agreed that efforts needed to begin with younger children. The view put forward by the company representatives is that more attempts are currently being made in this area but the writer’s own experience doubts the efficiency of this boast. Implications made during the interviews suggest that

working with primary schools is more rewarding and more effective in the long term, but these messages are considered difficult to convey to other company members who are not necessarily conversant with educational theory. As a result, linking with secondary schools is often more acceptable to company personnel and it is this which still takes precedence.

Even though many of the company representatives talked about the difficulties involved in reaching schools the practicalities of working with twenty five thousand primary schools in England and Wales alone was recognised. It is apparent that human resources are limited in the education sector of individual companies, often relying on one person or a small team to oversee the proceedings. The base for most of the education departments within the companies is in the company headquarters. In six of the ten cases this is in London. Co-ordinating the task of linking with schools and colleges in such circumstances is without doubt a forbidding task, and is something which would frustrate the most dedicated professional. Consequently, it might be reasoned that the design to work with other organisations to achieve their aims nationally is the only way forward, together with the proposal to work locally with schools where possible. Lack of funding might thwart efforts in the case of some of the companies concerned, since there is usually a specific amount reserved for all education purposes. It might be argued that if companies are intent on their purpose to involve primary schools in link activities some enduring financial investment is necessary with some proportion allotted to primary school projects. Programmes to support the involvement of company staff as school governors are considered to be the most successful means of linking with primary schools. When working with schools locally it was indicated that links which had already been established with schools, such as those with governors, are most often used. In other cases the companies usually rely on approaches being made by the school. It is hardly surprising, therefore, that few additional schools become involved since experience tells us that those who have already shown an interest in work-related schemes will return. What is necessary is a more concentrated effort to raise teachers'

awareness to activities related to business and industry and the benefits which can accrue. It is the thought of the companies themselves that this might best be done through some government legislation or through Teacher Training but it might be argued that if business and industry are resolute in their proposal to link with education, primary schools especially, they should take matters into their own hands.

Rather than working individually with every school, it might be contended that what most companies are seeking is a wider acknowledgement by the teaching profession of the attempts being made to establish a closer working partnership for the good of all. It might be suggested that a combined effort on behalf of business and industry to raise awareness to the many teaching resources and training programmes available would provide a stimulus. It is evident that a good many companies in establishing links with education have invested a large amount of resources, both financial and human. Some return for their efforts is necessary if goodwill is to continue and the industry-education movement is to endure.

¹ The key skills (sometimes referred to as core skills) as defined by QCA (Qualifications, Curriculum and Assessment) are: communication, application of number, information technology, working with others, improving own learning performance and problem solving.

CHAPTER 9

Conclusions, Issues and Recommendations

9.1 Introduction

This study aimed to investigate what motivates primary school teachers to become involved in work-related education and to gain insight into the way in which aspects of this work is approached in the respondents' schools. It also sought to determine the aims of corporate business and industry with regard to working with education, especially primary schools. This chapter summarises the results of both parts of the survey carried out to address these aims and discusses the issues which have emerged. Some recommendations are made and a plan of action to introduce work-related education into primary schools more effectively is suggested.

9.2 The Teacher Study - A Summary of the Conclusions and the Issues

It is acknowledged that the samples of both teachers and business and industry used in this survey are small. It is also recognised that the teacher sample used was biased in favour of work-related education in primary schools.

Nevertheless, some interesting and useful facts have emerged with some common threads being identified. A summary of the evidence provided by the study carried out reveals that:

- The recognition of changes in society and the need for improved educational development, linked to career guidance is the greatest motivation for teachers to introduce work-related education in primary schools.

- Teachers involved in work-related education are usually self-motivated and it might be argued that this is greatly encouraged by personal experience of business and industry.
- Work-related education is documented in the written policy in 54% of the schools surveyed. Of the remainder, 38% indicate that it is part of the regular school procedure though it is not a written requirement.
- The most general approach is to incorporate work-related activities into other curriculum areas, with 83% saying this is the case.
- The requirement to work with the local community, which might include business and industry, is regarded as a more explicit requirement.
- The introduction of the National Curriculum is seen to have downgraded work-related education rather than promoting it, and it is not considered to be a mandatory part of the curriculum.
- It is recognised that a great deal of time and effort is needed to forge links with business and industry in order to pursue work-related activities.
- There is some difficulty in encouraging teachers not already involved in work-related education to take this approach on board.
- It is claimed that the arduous task of initiating young teachers to include work-related education in their timetable could be rectified if teacher training was better ordered to introduce elements of work-related-education.

This thesis maintains that the values, attitudes and beliefs of teachers have a critical effect on the provisions made to introduce work-related education into primary schools. It might be argued that the evidence derived from teachers involved in this survey reinforces this hypothesis.

Despite the many initiatives to encourage work-related education which have been introduced by government organisations together with those instigated by

business and industry, activities identified with this subject area are not considered to be essential in order to fulfil the legal requirements of the primary curriculum. Moreover, the data indicate that recent modifications in the National Curriculum have led to a dismissal of the subject area, rendering it as insignificant rather than promoting it. This makes it difficult to involve teachers who consider their role to be transmitters of the prescribed curriculum, or whose educational ideology does not include a strong belief in the desirability of work-related education with young children, endorsing the view put forward by Morrison (1994) who believes that decisions involving non-statutory subjects are potentially value laden.

Although work-related education is acknowledged by most of the teachers as being outside the legal requirements it is recognised that activities can easily be incorporated into National Curriculum subject areas, thus promoting the development of knowledge and skills which might otherwise be excluded. Indeed, it is reasoned by some that work-related education is essential in order to give meaning to the subject areas. This argument supports the point put forward by Fullan and Hargreaves (1992) who suggest that the National Curriculum can be viewed as an “oppressive constraint or a constructive opportunity, depending on one’s viewpoint” (p. viii).

The study shows that the majority of teachers involved in work-related education are largely self-motivated, and the range of activities described as taking place in schools confirms the belief that there is some admirable work involving commerce being carried out in the primary phase. It is evident from the descriptions that these efforts are supported by the companies with which the schools are working, but comments made by the teachers suggest that activities have resulted from their own instigation and individual efforts. Furthermore, there is no evidence to support the notion that activities are profoundly driven by business or industry, even through their staff who are school governors, despite the high value placed upon this initiative by the companies. Indications are that teachers are motivated to introduce work-

related activities by their own perceptions of how education should be organised, and what should result from it. That is, to enhance the educational development of pupils, subject knowledge should be closely linked with business and industry, giving relevance to the learning and increasing opportunities in adult life. This belief is considered to be particularly relevant in the light of current changes in society, and there is some concern that pupils should be prepared in the best possible way for life in the next century. This philosophy is recognised by supporters of work-related education as something which is an essential part of schooling for all age groups from reception class onwards, endorsing the point made by Hargreaves and Fullan (1992) that “teachers’ purposes motivate what teachers do” (p.29).

The necessity for links between primary schools and business and industry, and the value to be gained through elements of work-related education at an early age is reinforced by all those who have positive experience to draw upon. The data suggest that a number of teachers have developed an awareness of the value of work-related education from their own experiences of life, supporting Goodson’s theory (1988) referred to previously, which indicates that the previous career and life experiences of teachers are instrumental in the way education is interpreted and delivered. The fact that the majority of teachers responding to the survey were in the older age brackets might be considered as significant. A variety of life experiences are indicated which are, perhaps, instrumental in developing a more pragmatic approach to education, resulting in the ideal to develop the whole child and to equip pupils for their lives in the years ahead.

21 (23%) teachers acknowledged they had acquired an appreciation of the value of work-related education through people outside their own families and from participating in courses, revealing that consciousness can be raised through a variety of circumstances. It is also evident from the accounts written by the teachers that the ethos of the school plays an important part in the promotion of work-related education. How much of this ethos derives from

the head-teacher is uncertain, but it is interesting to note that six of the nine teachers interviewed held this position and that two of the remaining interviewees declared that the head-teacher had been the greatest influence in initiating work-related education in school. This serves to confirm that the head-teacher is a driving factor as Mills (1996) suggests, and it would have been useful to discover the status of all those responding to the questionnaire.

Comments concerning the need to educate staff as well as children in aspects of business and industry also indicate that the respondent was often the head-teacher. Raising teacher awareness is considered to be essential, alongside the need to enlighten business and industry of the importance of involving primary schools in work-related education. In secondary schools these issues are easier to explore since teachers are cognisant to the fact that pupils are approaching the age of career choice and employment. Even those teachers who have no direct experience of business and industry at close quarters realise that young people must contemplate their futures, and studies reviewed in Chapter 4 show how teachers of this age group are more receptive to work-related education. In primary schools the notion of employment seems a long way off, and as such can be dismissed as irrelevant at this stage.

Encouraging teachers in primary schools to develop an understanding of the need for work-related education through awareness raising and the dissemination of good practice would be preferred. However, experience tells us that numerous attempts have been made over the years with schemes that seek to demonstrate the value of the work under discussion, and little progress has been made. Also, the possibility of providing some exposure to business and industry which might be inspirational for the vast numbers of teachers employed in primary schools seems unfeasible. The Teacher Placement Service has proved (in some instances) to be beneficial in the past, allowing teachers to experience other forms of work, although Abbott *et al* (1996) tell us that “despite the increased numbers of primary school teachers undertaking a placement the evidence suggests significantly less involvement with industry

in the primary sector and less positive attitudes” (p.41). This argument is supported by figures from the DfEE (1996) quoted earlier, which inform us that there are still less than a third of primary schools involved. If this is the result of efforts over twelve years or more, it may be that more assertive action is needed in order for effective progress to be made. The possibility of enlisting the support of head-teachers to drive work-related education forward is more realistic and could, in the light of the information gathered here, be most profitable although Abbot *et al* (1996) warn us how head-teachers are predominantly a masculine group which might lead to gender problems, “with pupils seeing this kind of activity as mainly men’s work” (p. 41).

Lack of resources in primary schools is sometimes regarded as a hindrance to the introduction of work-related activities. As used here, the term resources includes not just financial resources but also human resources, since the majority of primary schools do not have a designated person to oversee work-related issues, unlike many secondary schools where they are part of the agenda. It is because of this situation in primary schools, that some head-teachers say they undertake the task of interfacing with business and industry themselves. This is an indication of the significance of the role played by the head-teacher in the introduction of work-related education. Remarks about the need for communication between education and companies are linked to comments concerning how difficult this can be. The view sometimes expressed is that business and industry are not always as forthcoming as they might be. Lengthy negotiations are often necessary, sometimes making it impracticable for primary school teachers to be involved since they already have many commitments on their time. This inertia is also considered, in some instances, to be a drawback which can discourage those teachers who are not wholly committed to the purpose.

It is interesting that none of the younger teachers refer to any experiences in their own schooling which might have led them to recognise the importance of work-related education, and the fact that only two mention incidents in their

training confirms the assessment of how little instruction is apparently given in Initial Teacher Training establishments. Substance for this belief is provided by comments from the teachers who refer to the effort needed to initiate young teachers to incorporate work-related activities into their curriculum. It would be useful to determine the extent of instruction given in Initial Teacher Training establishments relating to work-related education.

9.3 The Industry Survey - A Summary of the Conclusions and Issues

While a comparatively small number of companies were involved in the survey, they do represent a good percentage of the larger corporations who, unlike the small and medium sized enterprises, tend to be more actively involved in education-industry links (Iredale 1996). The information obtained indicates that:

- Company policies have evolved over the years with business and industry claiming to have become increasingly proactive, rather than reactive.
- Although there is a desire to help and support the community, the overarching aim is to promote the company, and satisfy the needs of the business.
- Key areas of concern focus upon the subjects essential to their business, and this is followed by the encouragement of core skills.
- Awareness raising on behalf of the company, or for the area in which the company trades, is also highly regarded.
- Primary schools are considered by the educational representatives to be an essential part of their remit, but only one company's policy mentions primary schools specifically.
- The involvement of secondary schools is more common. The incognisance of the workforce regarding the benefits of working with primary schools sometimes results in fewer links.

- Local involvement is often considered to be the most accepted form of links with primary schools, though some national work is undertaken with more general industry-education activities.
- The most common feature of education industry links in primary schools is the encouragement of company staff to be school governors.
- There is some difficulty in attracting more teachers to be involved in industry-education links. Lack of statutory support is deemed to be a contributory factor as are deficiencies in initial teacher training.

From the point of view of business and industry, it would appear that if the companies involved in the survey reported here represent business and industry as a whole, the involvement of primary schools is a prerequisite for long-term change. Company representatives speak of their eagerness to work with primary schools, and stress the unparalleled value of involving young children. It might be argued, however, that the representatives spoken to are not a true illustration of business people as a whole, since they, unlike many of their colleagues, are well versed in educational theory, and are perhaps more conscious of the benefits which can accrue from this strategy.

It is obvious from the comments made by some company representatives that other staff members are not so well disposed toward primary school activities, being unable to see the long term good. Despite the rhetoric it is evident that there is no particular drive to focus on company involvement with primary schools, with only one of those involved in the survey reporting a policy which specifies this responsibility. Rather than an active scheme to incorporate primary schools specifically, the option is made available, and those who recognise the advantages or feel comfortable working with young children are free to make use of the opportunity. Like education, business places no obligation on its staff to be implicated in work-related education and

the data reveal that those staff, like teachers, who have no experience to draw upon are less likely to see the value of such an exercise.

Nevertheless, it is evident that business and industry promote many activities with primary schools, and that a number of these are considered to be highly successful, the most prominent example being the school governor programme. It might be argued that the reason for its success is because programmes such as this are clearly defined and well organised, with staff being given training and financial support. In such a programme employees at every level, together with teachers, are able to recognise the benefits. Business members are able to identify their role precisely, and understand their contribution to education rather than struggling to visualise the outcome, and staff in schools can see their purpose. It is interesting to note, however, that no mention of school governors was made by any of the teachers. This might cause us to reflect on the impact being made with regard to work-related education in primary schools and to consider how the reality compares to the companies' perception of the impact school governors are making.

Company representatives admit that link activities still focus in the main on secondary schools, and that primary schools remain on the periphery of their agenda. The companies claim that more links would be instituted if primary schools were to take up what was on offer. The major criticism from companies is that they and other organisations in the field cannot reach teachers effectively despite a great deal of effort. There is some concern that those schools which endorse links continue to be implicated repeatedly, rather than the industry-education network being extended more widely to incorporate new schools and teachers.

Some of the remarks by the company representatives suggest that until there is some firm commitment from government, and some legislation determining a requirement for primary schools to link with business and industry, the movement will never gain momentum. If these mechanisms are seen to be a

solution to some of the problems, and if there is a common aim on behalf of business and industry to involve primary schools in work-related education, it might be argued that business and industry are best placed to resolve the dilemma. From their position as employers and wealth creators and given their active participation in decision-making groups, they are in an unrivalled position to promote change in government thinking. If the desirability of incorporating work-related issues in schools is truly considered to be fundamental in changing attitudes toward business and industry the movement could be propelled forward.

The question remains: how can education and industry come together, with teachers and business personnel being enlightened as to what opportunities are available, recognising the long term benefits which might be gained?

9.4 Towards an Action Plan

The core conclusions of this study lead to a series of recommendations which follow in 9.5.

Having considered the main issues which emerge from the study it is concluded that:

- Encouragement for primary schools and industry to work together through a variety of disconnected initiatives is only partly successful.
- The lack of some common understanding is an obstacle.
- Raising the awareness of the benefits of work-related education through personal experience with the many teachers in primary schools, together with the many employees in business and industry would be impracticable.

- The restrictions of the National Curriculum are sometimes used as justification for non-involvement in work-related education.
- There is inadequate support from government.
- Student teachers are inadequately prepared.

Clearly, there is no obvious answer to the question of how primary school teachers might be best motivated to include work-related education in the curriculum. It was suggested at the outset of this thesis that the lack of support for work-related education in primary schools has its foundations in a number of different spheres. The evidence, which has been gathered here, supports this theory, indicating that the introduction of work-related education in primary schools continues to rely on the ideology of teachers.

The work of Jamieson (1995) cited in Chapter 2, comments on the fact that there have been a variety of initiatives to introduce primary school teachers to work-related activities, drawing our attention to how these initiatives have different aims and objectives. The lack of some common understanding of work-related education in primary schools could partly result from this. Remarks from the teachers, especially the head-teachers involved in the survey indicate that a general lack of awareness of the purpose of work-related education with young children is a significant issue. This appears to be the case in the companies as well as schools. As a result it is suggested that staff who are unfamiliar with the concept or have no experience to draw upon are disinclined to engage in activities. It must be acknowledged that the benefits which can be gained from the development of work-related education are much more easily recognised in the secondary school phase, while the value of this area of study in primary schools is not always so apparent. Where there is some recognition of the value work-related education brings to the primary school, attempts are made to include it in the curriculum.

One of the issues demonstrated by this study is that teachers involved in work-related education have an educational ideology, which determines schooling, from the earliest age, as preparation for life. Even teachers who acknowledge their uncertainty about what will be required in the future declare that their greatest motivation is to prepare children in the best way possible to succeed in a world which is changing rapidly. Their philosophy is to help children relate to the wider world and to see the relevance of the subject matter taught in school, inspiring them to use their abilities to the greatest advantage. It might be argued that this philosophy needs to be transmitted to every teacher for as Kerr (1994) suggests teachers need to discern the benefits, and recognise work-related education as part of their responsibility. This study shows that a most effective way of raising awareness of the benefits of work-related education is through personal experience. However, it might be argued that attempting to employ this method with the many teachers involved, together with the many staff in business and industry would be impracticable. Also, history and personal experience reveal that a variety of discrete approaches to awareness raising have been tried, and they have not been largely productive.

It has also been implied that as a result of the introduction of the National Curriculum, lack of time is a major problem. To some extent this is true, most especially in the primary phase, where teachers are required to teach numerous subjects. However, this study has established that this need not be a hindrance since teachers have revealed the possibility of delivering the core curriculum while incorporating work-related activities. It has even been argued that such activities enhance the subject matter, suggesting that in some cases the justification for work-related education once again relies upon the philosophy of the teacher concerned. It might also be argued that enabling teachers to include work-related education in the curriculum through the freeing up of time is not the answer either since a recent reduction in statutory requirements in primary schools has not brought about a substantial increase in work-related education participation rates.

The study has revealed some concerns about the type of activities, which might be appropriate with young children. Such concerns emanate from the teachers and the company staff alike who indicate that a lack of guidance in this area causes a lack of confidence. As previously mentioned, it is sometimes difficult to recognise how work-related education relates to young children. It might be argued that lack of support by government could add to this difficulty since activities are not clearly defined within the educational process. With so much emphasis being placed on core subjects, teachers are often reluctant to undertake activities, which are seen to be outside of their responsibility. Affirmation by government of the desirability of this area of study could influence primary school teachers and those in business and industry to consider work-related matters as part of their task. More importantly, such a statement from government could also sanction head-teachers to endorse work-related activities in schools. This action could prove to be most profitable since the study shows that head teachers are particularly influential when encouraging staff to participate. In a similar way staff in business and industry could be more motivated to be involved through schemes sanctioned by the company. According to one comment made by a company representative, companies are often keen to “present a positive image” in the eyes of government.

The study also indicates that student teachers are not adequately prepared to teach work-related education in primary schools. Aspects of work-related education are not new in teacher education as references to the programme to introduce enterprise awareness (EATE) imply. However, there is no evidence to suggest that this initiative which ran for three years has had any significant impact on teacher training, although there are some teacher training establishments that are known by the writer to include work-related activities. A statement from government could generate some action, bringing this subject to the forefront of the debate on teacher-training curriculum once again.

9.5 Recommendations

If teacher motivation to include work-related education in the primary curriculum comes in the form of an enlightened educational ideology as this study suggests, it is unlikely that any radical change might be envisaged in the foreseeable future. Therefore, assuming that we will prepare our children better for the next century, which is almost upon us, by including work-related education in the curriculum it might be maintained that more direct action needs to be taken. It seems apparent that in order for effective progress to be made in the drive to introduce work-related education into primary schools there needs to be:

- A declaration from government which would testify its commitment to primary school involvement in work-related education.
- Discussion involving all parties concerned resulting in a clear understanding of what is required and some agreement of appropriate activities.
- A clear definition of what work-related education involves and aims to achieve.
- A national programme designed to help staff in business and industry and teachers appreciate the benefits of work-related education in primary schools with examples of how it might be introduced. Parents might also be included in the process, and familiarised with the procedure.
- A system to introduce student teachers to work-related education.

It might be argued that this procedure could result in a common acceptance of the policy affording every child the opportunity to be involved in work-related education.

Figure 12 provides a simple process model of the approach suggested to initiate progress, indicating some key practical steps.

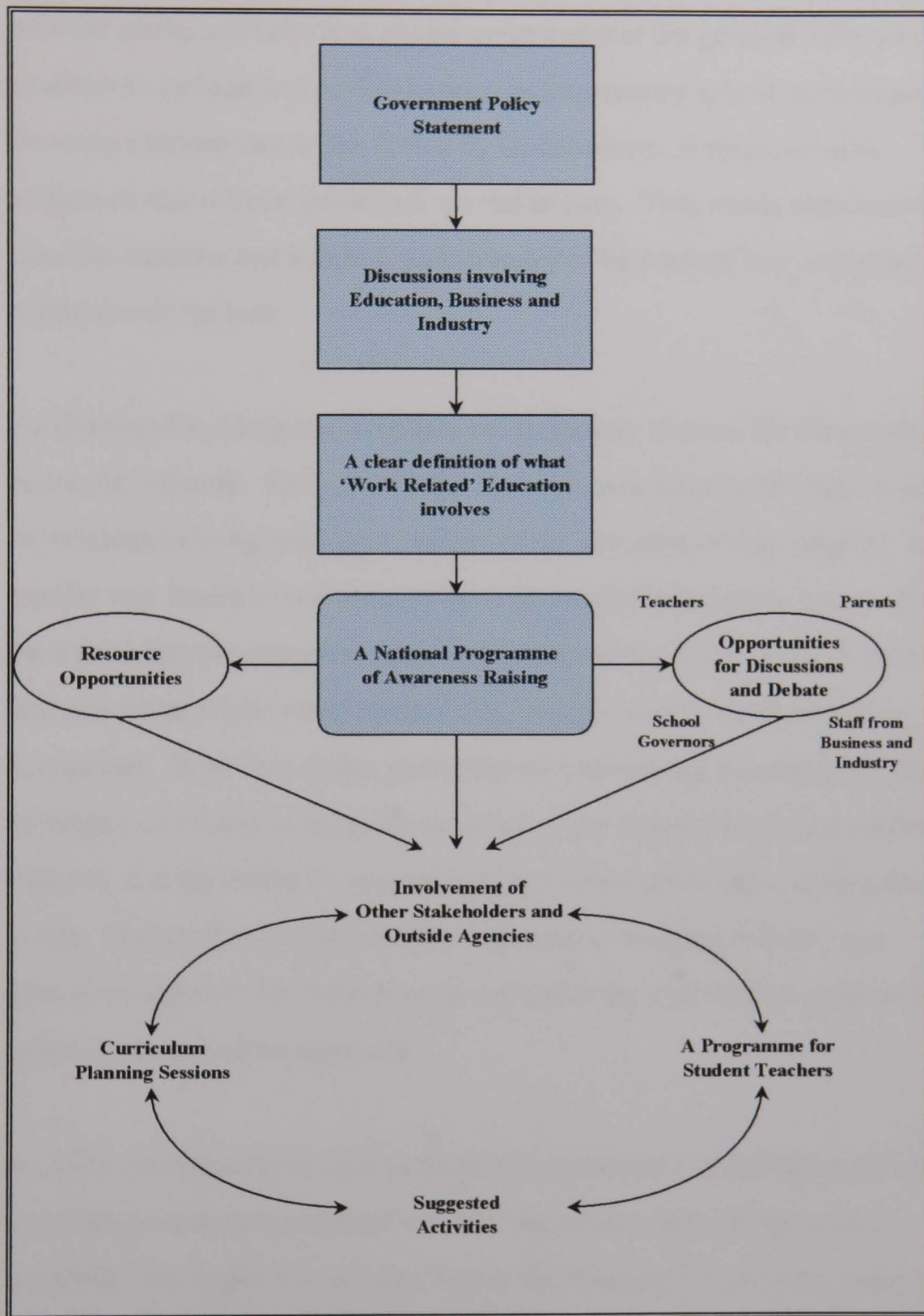


Figure 12 - Action recommended to promote the introduction of work-related education in primary schools

It is concluded that a series of recommendations might be considered. These incorporate three aspects:

1. Government policy (a focus on 'why' teachers might engage).
2. Aims and objectives (a focus on 'what' to engage in).

1. Government Policy

Considering that a major shift in attitude of the many teachers in primary schools seems unlikely, it might be suggested that the greatest motivation for teachers to include work-related issues in the primary school curriculum would be some endorsement of the theme by Government. It might even be suggested that official guidelines are the answer. This would eliminate the need for teachers and business and industry to be coerced into action providing a framework for both.

As discussed in Chapter 2, teachers are frequently blamed for the country's economic failures. How can this be the case when there is no legal obligation on teachers to bring economic matters to the attention of their pupils? In a similar way business and industry have no established aims to target. It might be argued that the imprecise suggestions concerning ways in which industry and education might work together will go little way towards achieving what is required. If, as they claim, government-members are so concerned about the relevance of education to the future lives of our young people, the needs of industry and the country's economic future, there needs to be some positive action. Rather than the half-hearted attempts at bringing industry and education together that have been generated in the past what is proposed is a centrally co-ordinated approach.

A policy statement from Government might include a re-definition of what constitutes work-related education after discussion with all the parties involved. Strategies for delivery within the National Curriculum subjects would also be advantageous. Education in Scotland has already moved in this direction. A recent paper published by the Scottish CCC (Education for Work: Education Industry Links in Scotland, 1999) presents a national framework describing how "Education for work is a major priority for all sectors of education" (*ibid.* P. 2), offering an education rationale and setting out a framework of progression from pre - 5 to 18+. It points out (*ibid.* p.3) that:

Education for work is one of the key purposes of the school curriculum, enabling and preparing young people:

- to face the challenges of life in a rapidly changing society
- to live successful lives both now and in the future
- to operate confidently and effectively in the changing world of work and the flexible labour market of the future.

Insight tells us that a move to introduce an element of obligation linked to work-related education could create some difficulties in schools. However, this study has shown that teachers who have been subjected to some demand to include work-related education in the curriculum have reacted positively, substantiating the claim that involvement leads to greater appreciation as discussed in Francis *et. al.* (1989).

2. Aims and Objectives

Indisputably, there is a need for all sides to come together and agree some common aims. Discussion should determine what education aims to achieve and would provide some positive objectives with regard to work-related education at every level of schooling. Such action would introduce an element of ownership for both education and also business and industry, thus heightening awareness and understanding of the needs and responsibilities of all parties. Clearly, there should be mutual benefits and joint commitments. Some work has already been carried out concerning the scope for the delivery of work-related education through National Curriculum Programmes of Study in different subject areas. Further research would assist in the process of determining what other form of framework might be commensurate with the needs of business and industry, and education.

The involvement of large companies incorporates a negative factor in that they all appear to function in isolation of each other, working toward their own individual ends rather than sharing a common strategy. The obligation by each company to promote specific areas of study is not disputed. It might be

argued that this need not detract from an over arching agenda, which would serve to communicate to primary schools what might be gained from introducing work-related education. A recent initiative to promote engineering¹ has proved that joint ventures have more success. A similar tactic adopted by business and industry as a whole, focusing for example, on key skills², might prove to be equally effective. Skills and attitudes which writers like Brown (1997) and Statz (1997) deem to be essential to everyone could be promoted from a very early age rather than being introduced in secondary schools as they are at present. While this approach might find favour with the larger companies, the small and medium enterprises which have less resources to offer might still be disinclined to participate, as was previously commented on in Chapter 5. This difficulty might be partially resolved if work-related education in all phases of education was considered the norm, with a range of suggested activities being offered. Government might also offer some incentive to companies who participate, such as schemes in the USA³.

3. Management

Given the concerns that have been voiced regarding teachers and change, a national programme based on the nature and rationale for work-related education in primary schools could prove to be beneficial. If, as Nias (1989) points out, talking about their work helps teachers to develop and change, it might even be argued that such a programme is essential. Teachers could be provided with structured opportunities for discussion and debate, enhancing staff development and understanding alongside company personnel. A key element might be to encourage some recognition of the changing needs of society. This factor proved to be a significant cause of motivation to teachers involved in this study and a greater understanding of changing requirements could provide a positive incentive to others. Identifying the potential for introducing work-related education into the curriculum would also be necessary within this framework with examples of how it might be done.

Encountering good practice could assist in the process enabling teachers to envisage how activities might be developed within the timetable, a prerequisite according to Jamieson (1993). Many communities are already well acquainted with the exigency for education to work closely with business and industry arising from their social and economic circumstances. Their shared vision of what education should comprise adds impetus to their endeavours and gives rise to more effective delivery. Experiences such as these could be a valuable source of inspiration to others since this study has proved that participation is a profitable form of motivation. Also, there are a variety of organisations and professional practitioners already in place who could contribute to this effort. Greater use of their roles and expertise could be made more explicit. A variety of programmes and resource materials concerned with work-related education are readily available and more use could be made of these. Awareness raising might also include school governors who have an increasingly significant role and it would also be valuable to garner the support of parents, raising awareness of future educational requirements. Liaison between groups would be desirable. The means to co-ordinate this at a local level is already in place through the Education Business Partnerships which can also provide useful resources. The programme could also be structured to involve student teachers, enabling them to become familiar with the practice and the methods employed.

9.6 Concluding Comments

It might be argued that if the prosperity of a country is dependent upon its workforce which provides its wealth, then presumably it is the responsibility of the government to ensure that industry and education are brought together in order to maximise the full potential and benefits for all parties involved. While such an intervention by Government could be viewed as indoctrinatory or propagandist as was discussed in Chapter 3, none of the objections raised in the survey mentioned this as a concern. However, it must be remembered that

all those involved were considered to be in favour of work-related education at the outset. The majority of constraints here focus on the demands of the National Curriculum; teachers whose beliefs do not embrace work-related education as a significant curriculum component; and the complexity of persuading business and industry to comply. It is suggested that many of these obstacles could be overcome with endorsement from government and a firm commitment from business and industry, sanctioning action. Combined with a national programme of awareness raising providing insight into the purpose of work-related education and suggested activities grounded in National Curriculum requirements, confidence and motivation could be increased. As a result, pupils could engage in a variety of undertakings which would lay the foundations for the provision of valuable knowledge, skills and understanding, essential for adult life. At the same time, business and industry would be in a position to play an active part in the education of young people, investing in their own well being as we move into the next century.

¹ YES is a scheme part of Engineering Success and is currently supported by 36 companies to promote engineering in schools and colleges.

² The key skills, as mentioned earlier, are: communication, application of number, information technology, working with others, improving own learning and performance and problem solving.

³ A number of schemes are in operation in the USA. Details can be obtained from the Academy for Educational Development, Washington, DC.

BIBLIOGRAPHY

Abbott, I., Campbell, R. J., Merson, M. W. and Neill, S. R. (1996) Bridging the Historical Divide?: An Analysis of Teacher Placement in Industry, British Journal of Education and Work, Vol. 9, No., 1, pp. 31-41.

Acker, S. (1990) Teachers' Culture in an English Primary School: Continuity and Change, British Journal of Sociology of Education, Vol. 11, No. 3. pp. 257-273.

Ahier, J. (1996) Explaining economic decline and teaching children about industry: some unintended continuities, in Ahier *et al.* (1996) Diversity and Change: Education, Policy and Selection, Routledge, London.

Ahier, J. and Ross, A. [Eds.], (1995) The Social Subjects Within the Curriculum, The Falmer Press, London.

Ahier, J., Cosin, B. and Hales, M. [Eds.] (1996) Diversity and Change: Education, Policy and Selection, Routledge, London.

Alexander, R. J. (1984) Primary Teaching, Cassell, London.

Allport, G. W. (1954) The Nature of Prejudice, Addison Wesley, Cambridge, Mass.

Anderson, J. and Huddleston, P. (1993) Teacher Placement Service Evaluation Project Interim Report, UBI Teacher Placement Service, Solihull.

Andrew Irving Associates (1990) Department of Trade and Industry: Enterprise and Education Initiative - Teacher Tracking Study. Report of Findings.

Apple, M. W. (1988a) Teachers and Texts, Routledge, London.

Apple, M. W. (1988b) Facing the Complexity of Power: For a Parallelist Position in Critical Educational Studies, in Cole, M. [Ed.] (1988) Bowles and Gintis Revisited: Correspondence and Contradiction in Educational Theory, The Falmer Press, London.

Apple, M. W. (1990) Ideology and the Curriculum, Routledge, Chapman and Hall, London.

- Apple, M. (1995) Education and Power, Routledge, London.
- Appleton K, and Garbutcheon Singh M, Teacher Education, Schools and Industry Links, A paper presented at the Australian Teacher Education Association 24th Annual Conference, Brisbane, 3-6 July 1994.
- Archambault, R. D. [Ed.], Philosophical Analysis and Education, Routledge and Kegan Paul, London.
- Arnot, M. And Whitty, G. (1982) From Reproduction to transformation: recent radical perspectives on the curriculum in the USA in British Journal of Sociology of Education, Vol. 3, No. 1, pp. 93- 103.
- Bainbridge, J. (1991) Student teachers making industrial contacts, Primary Teaching Studies, Vol. 6, No. 2, pp. 143 - 149.
- Baker, R. (1993) Enterprise, economic and industrial awareness and primary Teacher Training, Early Child Development and Care, Vol. 94, pp. 21-26.
- Ball, S (1992) In Search of Authenticity: learning to be a head teacher in Chawla-Duggan, R. and Pole, C. J. [Ed.] (1996) Reshaping Education in the 1990s: Perspectives on Primary Schooling, Falmer Press, London.
- Ball, S. (1987) The Micro - Politics of the School, Methuen, London.
- Ball, S. J. (1990) Politics and Policy making in Education, Routledge, London.
- Ball, S. J. and Goodson, I. J. [Eds.] (1985) Teachers Lives and Careers, The Falmer Press, East Sussex.
- Banks, O. (1968) The Sociology of Education, B. T. Batsford Ltd., Great Britain.
- Bartlett, S. (1993) Consortium Working: The benefit for EIU, Economic Awareness, Vol. 5, No. 2, pp. 24 - 29.
- Beard, R. M. (1971) An Outline of Piaget's Development Psychology, Routledge and Kegan Paul, London.
- Bell, J. (1989) Doing Your Research Project - A Guide for First-Time researchers in Education and Social Science, Open University Press, Milton Keynes.

- Biott, C. and Nias, J. [Eds.] (1992) Working and Learning Together for Change, Open University Press, Buckingham.
- Blandford, D. and Jamieson, I. (1989) Building Partnerships with Education, CRAC, Cambridge.
- Bloomer, G. (1991) Industry - related Work in Initial Teacher Education: a decade of development, British Journal of Education and Work, Vol. 4, No. 2, pp. 11-19.
- Bloomer, G. and Scott, W. (1993) Economic and Industrial Understanding, The Bassett Press, Southampton.
- Bloomer, G. and Scott, W. [Eds.] (1993) Partnerships in Teacher Education: Economic and Industrial Understanding, The Bassett Press, Southampton.
- Blunkett, D. (1997) We need business to help us raise standards, TES Business Links, June 1997, p. 3.
- Blyth, A. (1990) Making the Grade for Primary Humanities, Open University Press, Buckingham.
- Blyth, A. (1992) Beyond Economic and Industrial Understanding in British Journal of Education and Work, Vol. 7, No. 1, pp. 11-17.
- Blyth, A. (1994) EIU-The Mini-market in Hall, G. [Ed.] (1994) Themes and Dimensions of the National Curriculum, Kogan Page, London.
- Boud, D. Keogh, R. and Walker, D. [Eds.] (1985) Class, Codes and Control, Vol. 3, in Jamieson and Harris (1994) Can Schools Prepare Young People for Adult Life? Economic Awareness, Vol. 6, No. 3, pp. 19 - 24.
- Bourdieu, P. (1997) The Forms of Capital in Halsey, A. H., Lauder, H., Brown, P., Wells, A. S. (1997), Education - Culture, Economy, Society, Oxford University Press, Oxford.
- Bourdieu, P and Passeron, J-C. (1977) Translated by Richard Nice, Reproduction in Education, Society and Culture, Sage Publications, London.
- Bowles, S. and Gintis, H (1988) Contradictions and Reproduction in Educational Theory in Cole, M [Ed.] (1988) Bowles and Gintis Revisited: Correspondence and Contradiction in Educational Theory. The Falmer Press, London.

Bowles, S. and Gintis, H. (1976) Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life, Routledge and Kegan Paul, London.

Brown, P. (1997) The 'Third Wave': Education and the Ideology of Parentocracy in Halsey, A. H., Lauder. H., Brown, P. and Stuart Wells, A. (1997) in Education Culture, Economy, Society. Oxford University Press, Great Britain.

Brown, P. *et. al.* (1997) The Transformation of Education and Society: An Introduction in Halsey, A. H., Lauder. H., Brown, P. and Stuart Wells, A. (1997) in Education Culture, Economy, Society. Oxford University Press, Great Britain.

Bruner, J. S. (1960) The Process of Education, Oxford University Press, Gt. Britain.

BP Educational Service, (1995) BP in the Community: International Report, England.

Bullock, K. M., Goodfellow, M. and Scott, W. (1991) The Enterprise, Economic and Industrial Dimension of Initial Teacher Education in the UK, British Journal of Education and Work, Vol. 4 No., pp. 5-10.

Bullock, K. M., Scott, W. A. H. and Waite, P. E. (1993) Economic and industrial understanding in the primary school: An overview, Early Child Development and Care, Vol. 94, pp. 11-20.

Burroughs, G. E. R. (1975), Design and Analysis in Educational Research, Educational Review, University of Education, Birmingham.

Business in the Community, (1992) The Imperative for Developing Partnerships, BITC, London.

Business in the Community, (1997) Aim High, BITC, London.

Cadbury, D. (1997) It's not skills we lack - it's attitude, TES Business Links, June 1997, p. 26.

Caird, S. (1990) What Does it Mean to be Enterprising? British Journal of Management, Vol. 1, pp. 137-145.

Callaghan, J. (1976) Ruskin College Speech, delivered at Ruskin College Oxford, 18th October.

- Callaghan, J (1991) Times Educational Supplement, October.
- Carlgren, I., Handal, G. and Vaage, S. (1994) Teachers' Minds and Actions: Research on Teachers' Thinking and Practice, The Falmer Press, London.
- CBI (1994) Creating a Learning Community: A CBI review of education business links, CBI, London.
- Charles, C. M. (1995) Introduction to Educational Research (second edition), Longman, USA.
- Chawla-Duggan, R. and Pole, C. J. [Ed.] (1996) Reshaping Education in the 1990s: Perspectives on Primary Schooling, Falmer Press, London.
- Cole, M [Ed.] (1988) Bowles and Gintis Revisited: Correspondence and Contradiction in Educational Theory. The Falmer Press, London.
- Cook, R. (1989) Education Industry Links. An overview of evaluation findings, TVEI. London.
- Corson, D. [Ed.] (1991) Education for Work, Multilingual Matters, England.
- Costello, P. J. M. (1992) Down to Business: Economic understanding and critical thinking in the primary school in Hutchings and Wade (1992), Economic and Industrial Understanding in the Primary School, PNL Press, London.
- Craft, A. (1995a) Cross-Curricular Integration and the construction of the self in the Primary School in Ahier, J. and Ross, A. [Eds.], (1995) The Social Subjects Within the Curriculum, The Falmer Press, London.
- Craft, A. (1995b) Indoctrination or Empowerment? The Case of Economic and Industrial Understanding in Ahier, J. and Ross, A. [Eds.], (1995) The Social Subjects Within the Curriculum, The Falmer Press, London.
- Crompton, K. (1987) A curriculum for enterprise; pedagogy or propaganda? School Organization, Vol. 7, No. 1, pp. 5-11.
- Cuban, L. (1993) Computers meet classrooms: classroom wins, Teachers College Record, 95 (2), pp. 185-209.
- Cullingford, C. [Ed.] (1997), The Politics of Primary Education, Open University Press, Buckingham.

- Dale, R., Esland, G. and MacDonald, (1976) Schooling and Capitalism, Routledge and Kegan Paul, London
- Day, C. Calderhead, J. and Denicolo, P. (1993) Research on Teacher Thinking. Understanding Professional Development, The Falmer Press, London.
- Dearing, R. (1994) The National Curriculum and its Assessment: Final Report, SCAA, London.
- Denzin, N. K. and Lincoln, Y. S. [Eds.] (1994) Handbook of Qualitative Research, Sage, Thousand Oaks, CA.
- DfEE (Department for Education and Employment), Survey of School-Business Links in 1995, Statistical Bulletin Issue No. 3/96, HMSO, London, March 1996.
- DfEE (Department for Education and Employment), The Effectiveness of Education Business Link Mechanisms: Supplementary study, 1997, DfEE, Sheffield.
- DES (Department of Education and Science), (1980) A Framework for the School Curriculum, HMSO, London.
- DES (Department of Education and Science) (1981) The Practical Curriculum, HMSO, London.
- DES (Department of Education and Science) (1983) Primary Practice, HMSO, London.
- DES (Department of Education and Science) (1985) Better Schools, HMSO, London.
- DES (Department of Education and Science) (1987) Working Together for a Better Future, HMSO, London.
- DES (Department of Education and Science) (1988) Education Reform Act, HMSO, London.
- DTI (Department of Trade and Industry) (1988) DTI - The Department for Enterprise, HMSO, London.
- DTI (Department of Trade and Industry) (1989) Education - Your Business, HMSO, London.

DTI (Department of Trade and Industry) Enterprise and Education Initiative - Teacher Tracking Study, (1990) Report of Findings Andrew Irving Associates, London.

Devlin, T. and Warnock, M. (1977) What Must We Teach? Temple Smith, London

Drever, E. (1995) Using Semi-Structured Interviews in Small-Scale Research: A teacher's guide, SCRE, Edinburgh.

DUBS (1994) A Study of Small and Medium Enterprise (SME) Partnerships with Education on Teesside, Unpublished Report, Durham University Business School.

EATE Research Report No. 1. (1991) Student Primary Teachers: their economic background, understanding and attitudes. An investigation. EATE Research and dissemination programme, University of Bath.

Education Group II [Ed.], (1991) Education Limited. Schooling, Training and the New Right in England since 1979, Unwin Hyman, London.

Engineering's five-year mission, The Engineer, 22 January 1988, p. 2.

Evans, J. and Davies, B. (1990) Power to the People? The Great Education Reform Act and Tomorrow's Schools: A Critical and Comparative Perspective in Lauder, H. and Wylie, C. [Eds.] (1990) Towards Successful Schooling, Falmer, London.

Fields, J. I. (1993a) Citizenship for Tomorrow, Early Child Development and Care, Vol. 94, pp. 1-4.

Fields, J. I. (1993b) Primary Perspectives: The Supporting Role of Economic and Industrial Understanding, Early Child Development and Care, Vol. 94, pp. 5-9.

Finegold, D. (1992) Breaking Out of the Low Skilled Equilibrium, National Commission on Education, London.

Forbes, S. and Miller, J. (1988) What should employers ask of the education system? Personnel Management, March, 1988 pp. 32-36.

Francis, E., Jarvie, M., Sinclair, A., and Smith, C. (1989) Making the Rhetoric Real: A Study in the perceptions of Enterprise Education, Moray House College, Edinburgh.

- Fullan, M. and Hargreaves, A. (1992) What's Worth Fighting for in Your School? Open University Press, Buckingham.
- Gall, M., Borg, W. and Gall, J. (1996) Educational Research; An Introduction, Longman, USA.
- Goodson I. F. and Walker, R. (1991) Biography, Identity and Schooling: Episodes in Educational Research, The Falmer Press, London.
- Goodson, I. F. (1988) The Making of the Curriculum; Collected Essay, The Falmer Press, London
- Goodson, I. F. and Hargreaves, A. [Ed.] (1996) Teachers' Professional Lives, Falmer Press, London.
- Goodson, I. F., Anstead, C., and Mangan, J. (1998) Subject Knowledge: Readings for the Study of School Subjects, The Falmer Press, London.
- Gott, R. and Duggan, S. (1996) Primary Science in the Mid 1990s: Grounds for Optimism in Chawla - Duggan, R; Pole, C J [ED], (1996) Reshaping Education in the 1990s: Perspectives on Primary Schooling, Falmer Press, London.
- Graham, D. and Tytler, G. (1993) A Lesson For Us All: The Making of the National Curriculum, Routledge, London.
- Grant, B. (1986) Capability, Enterprise and Entrepreneurship, The Vocational Aspects of Education, Vol. XXXVIII, No. 100, pp. 55-66.
- Hall, G. [Ed.] (1994) Themes and Dimensions of the National Curriculum, Kogan Page, London.
- Halsey, A. H., Lauder, H., Brown, P., Wells, A. S. (1997), Education - Culture, Economy, Society, Oxford University Press, Oxford.
- Halstead, J. M. (1996) Liberal Values and Liberal Education in Halstead, J. M. and Taylor, M. J. (1996) Values in Education and Education in Values, Falmer Press, London.
- Halstead, J. M. and Taylor, M. J. [Ed.] (1996) Values in Education and Education in Values, Falmer Press, London.
- Hameyer, U. (1996) Profiles of Productive Schools: Processes of Organizational Self-Renewal in Chawla - Duggan, R., and Pole, C. J. [Ed.]

(1996) Reshaping Education in the 1990s: Perspectives on Primary Schooling, Falmer Press, London.

Hamilton, S. F. and Crouter, A. C. (1980) Work and Growth: A Review of the Impact of Work Experience on Adult Development in Jamieson, I. and Harris, A. (1994) Can Schools Prepare Young People for Adult Life? Economic Awareness, Vol. 6, No. 3, pp. 19-24.

Handy, C. (1984a) The Future of Work, Basil Blackwell, Oxford.

Handy, C. (1984b) Taken for Granted? Understanding Schools as Organizations, Longman, York.

Hargreaves, A. (1994) Changing Teachers, Changing Times, Cassell, London.

Hargreaves, A. and Fullan, M. G. (1992) Understanding Teacher Development, Cassell, London.

Hargreaves, A. and Reynolds, D. (1989) Education Policies: Controversies and Critiques, Falmer, New York.

Hargreaves, D. (1994) The Mosaic of Learning: Schools and Teachers for the Next Century, Demos, London.

Harris, A. (1995) Teaching approaches in enterprise education: a classroom observation study, British Journal of Education and Work, Vol. 8, No. 1., pp. 49-58.

Harris, K. (1994) Teachers: Constructing the Future, The Falmer Press, London.

Hillage, J. Hyndley, K. and Pike, G. (1995) Employers' Views of Business Links, The Institute of Employment Studies, Report 283, University of Sussex, Brighton.

HMI, (Her Majesty's Inspectorate of Schools), (1982), Preparations for Working Life, HMSO, London.

HMI, (Her Majesty's Inspectorate of Schools), (1991), Economic and Industrial Understanding 5 - 11, HMSO, London.

Hillage, J. (1994) Progress in Partnership; follow-up study, Institute of Manpower Studies, Brighton.

Hodkinson, S. and Waite, P. (1991) Enterprise, Economic and Industrial Awareness: making the links in initial teacher education - two case studies, British Journal of Education and Work, Vol. 4, No. 2, pp. 43-53.

Holland, G. (1995) Are we Really Educating for the 21st Century and the Needs of Tomorrow's Workforce? FMI, London.

Holroyd, S. (1990) Children's Development in Socio Economic: Some Psychological Perspectives, in Ross, A. [Ed.] (1990) Economic and Industrial Awareness in the Primary School, PNL Press, North London.

HRH The Prince of Wales (1997) The Race between Education and Catastrophe in Business in the Community, Aim High (1997) pp. 4-5.

Hughes, M. (1996) Teaching and Learning in Changing Times, Blackwell Publishers Ltd., Oxford.

Hutchings, M. and Wade W. [Eds.] (1992) Developing Economic and Industrial Understanding in the Primary School, PNL Press, London.

Industry in Education (1996) Towards Employability, Industry in Education, London.

International Association for Children's Social and Economic Education, Proceedings of First Conference, June 1990, North London Press

Iredale, N. (1993) Enterprise Education in the Primary School, Durham University Business School, Durham.

Iredale, N. (1996) School Industry links at the Primary Level: Engaging the Small Business, Children's Social and Economics Education, An International Journal, Vol. 1:3, pp. 236-249.

Jamieson, I. [Ed.] (1985) Industry in Education, Longman, Great Britain.

Jamieson, I. (1993) The Rise and Fall of the Work-Related Curriculum, in Wellington, J. [Ed.] (1993) The Work Related Curriculum, Kogan Page, London.

Jamieson, I. (1996) Developing Economic and Industrial Understanding in the Curriculum-a review, The Curriculum Journal, Vol. 7 No. 1 pp. 114-115.

Jamieson, I. and Blandford, D. [Eds.] (1986) Education and Change: Can you afford to ignore it? CRAC, Cambridge.

Jamieson, I. and Harris, A. (1992) Evaluating Economic Awareness Part 1: Management and Organisation issues, Economic Awareness, May 1992, pp. 17-21.

Jamieson, I. and Harris, A. (1994) Can Schools Prepare Young People for Adult Life? Economic Awareness, Vol. 6, No. 3, pp. 19-24.

Jamieson, I. Miller, A. and Watts, A. G. (1988) Mirrors of Work: Work Simulations in Schools, The Falmer Press, London.

Kelly, A. V. (1989) The Curriculum Theory and Practice (3rd Edition), Paul Chapman Publishing Ltd., London.

Kelly, A. V. (1990) The National Curriculum: A critical review, Paul Chapman Publishing Ltd., London.

Kerr, D. [Ed.] (1994) Developing Economic and Industrial Understanding in the Curriculum, David Fulton Publishers, London.

Kogan, M. (1971) The Government of Education, Macmillan London.

Kogan, M. (1978) The Politics of Educational Change, Manchester University Press, Manchester.

Laney, J. D. (1993) Economic Concept Acquisition: Experiential Versus Experience Based Learning and Instruction, National Council for Social Studies Conference Proceedings, Nashville, Tennessee.

Lauder, H. and Wylie, C. [Eds.] (1990) Towards Successful Schooling, Falmer, London.

Lawrence, I. (1992) Power and Politics at the Department of Education and Science, Cassell, London.

Lawton, D. (1980) The Politics of the School Curriculum, Routledge & Kegan Paul, London.

Lawton, D. (1989) Education, Culture and the National Curriculum, Hodder and Stoughton, London.

Lawton, D. (1992) Education and Politics in the 1990s: conflict or consensus, Falmer, London.

Lawton, D. (1994) Education Culture and the National Curriculum, Hodder and Stoughton, London.

Leith Schools Project, (1986) Opportunity Knocks, Unpublished.

Levin, H. M. and Kelley, C. (1997) Can Education Do It Alone? In Halsey, A. H., Lauder, H., Brown, P., Wells, A. S. (1997), Education - Culture, Economy, Society, Oxford University Press, Oxford.

Lortie, D. (1975) School Teacher: A Sociological Study. Chicago, Chicago University Press cited in Fullan, M. and Hargreaves, A. (1992) What's Worth Fighting for in Your School? Open University Press, Buckingham.

Maclure, S. (1992) Education Reformed: a guide to the Education Act, Hodder and Stoughton, Great Britain.

Marsden, C. (1988) Why Business Should Work With Education, BP Educational Service, London.

McBride, P. and Powell, L. [Eds.] (1996) Education and Training, Vol. 38. No. 7, pp. 3-7, MCB University Press.

Miller, A. (1993) Building Effective School Business Links, Westex Publication Centre, London.

Miller, A. Cramphorn, J. Huddleston, P. Woolhouse, J. (1995) Making Education Our Business, University of Warwick.

Mills, J. [Ed.] (1996) Partnership in the Primary School, Routledge, London.

Moore, R. (1988) The Correspondence Principal and the Marxist Sociology of Education in Cole, M [Ed.] (1988) Bowles and Gintis Revisited: Correspondence and Contradiction in Educational Theory. The Falmer Press, London.

Morrison, K. (1994) Implementing the Cross-Curricular Themes, David Fulton Publishers, London.

Morrison, M. (1996) Cross-Curriculum Perspectives on Eating: A Hidden Curriculum for Food in Chawla-Duggan, R. and Pole, C. J. [Eds.] (1996) Reshaping education in the 1990s: Perspectives on Primary Schooling, Falmer Press, London.

Morrison, P. (1986) Beyond Industry Year, in Jamieson, I. and Blandford, D. [Eds.] (1986) Education and Change: Can you afford to ignore it? CRAC, Cambridge.

National Commission on Education, (1993) Learning to Succeed, Heinemann, London.

National Curriculum Council, (1990) Curriculum Guidance 4: Educating for Economic and Industrial Understanding, York.

Nias, J. (1989) Primary Teachers Talking: a study of teaching as work, Routledge, London.

Nias, J. Southworth, G. and Campbell, P. (1992) Whole School Curriculum Development in the Primary School, The Falmer Press, London.

OECD Documents, (1995) Learning Beyond Schooling: New Forms of Supply and Demands, OECD, Paris.

Osborne, M. Abbot, D. Broadfoot, P. Croll, P. and Pollard, A. (1996) Teachers Professional Perspectives: Continuity and Change, in Chawla-Duggan and Pole [Eds.] (1996) Reshaping Education in the 1990s: Perspectives on Primary Schooling, Falmer Press, London.

Palmer, J. A. (1993) Development of Concern for the Environment and Formative Experience of Educators, Journal of Environmental Education, Vol. 24, No. 3, pp. 26-30.

Palmer J. A. and Suggate, J. (1996) Influences and Experiences Affecting the Pro-environmental Behaviour of Educators, Environmental Education Research, Vol. 2, No. 1, pp. 109-121.

Partnership Points, Spring 1997, Business in the Community, London.

Peters, R. (1970) Education and the Educated Man. Proceedings of the Philosophy of Education Society of Great Britain, IV: 5-20, pp. 49-58.

Phillips, J. L. (1975) The Origins of the Intellect: Piaget's Theory, W. H. Freeman, San Francisco.

Pollard, A. (1985) The Social World of the Primary School, Cassell Ed. Ltd., London.

Price, J. (1996), Primary UK Conference Report, John Price Associates.

Pring, R. (1984) Personal and Social Education in the Curriculum, Hodder and Stoughton, Great Britain.

Pring, R. (1996) Values and Education Policy in Halstead, J. M. and Taylor, M. J. [Ed.] (1996) Values in Education and Education in Values, Falmer Press, London.

Ramsay, M. (1993) Economic and Industrial Understanding - The Problems and Challenges, Early Child Development and Care, Vol., 94, pp. 27-32.

Raven-Hill, D. (1996) Introducing Economic and Industrial Understanding in the Primary School, in Education and Training Vol. 38, No. 7, pp. 30-36. MCB University Press.

Riley, J. (1990), Getting the most from your data: a handbook of practical ideas on how to analyse qualitative data, Technical and Educational Services Ltd. Bristol.

Rogers, V. (1968) The Social Studies in English Education, Heinemann, London.

Romanowska (1990) in Links with schools: 1 developing a strategic approach, Industrial Relations Review and Report, March, No. 460, 1990, pp. 5-9.

Ross, A. [Ed.] (1990) Economic and Industrial Awareness in the Primary School, PNL Press, London.

Ross, A. (1991) Student Primary Teachers: their economic and industrial background, understanding and attitudes, an investigation. EATE Research, Dissemination and Publishing Programme, Bath.

Ross, A. (1995a) The Rise and Fall of the Social Subjects within the Curriculum in Ahier, J. and Ross, A. [Ed.], (1995) The Social Subjects Within the Curriculum, The Falmer Press, London.

Ross, A. (1995b) The Whole Curriculum, the National Curriculum and Social Studies in Ahier, J. and Ross, A. [Eds.], (1995) The Social Subjects Within the Curriculum, The Falmer Press, London.

Rowe, G. Aggleton, P. J. and Whitty, G. J. (1993) Subjects and Themes in the School Curriculum, Working Papers of the ESRC Project, Assessing Quality in Cross Curriculum Themes, London Institute of Education.

Rowe, G. and Whitty, G. J. (1993) Five themes remain in the shadows, Times Educational Supplement, June 9th, P. 8.

Saunders, L. (1993) The Work-Related Curriculum: The New Entitlement? British Journal of Education and Work, Vol. 6, No., pp. 75-89.

Schools Consortium (1997) Please, miss, help me pack my message, in TES Business Links, June 1997, p. 8.

Schug, M. C. and Walstad, B. (1992) An Overview of teaching Economics at the Elementary Grades in the USA in Hutchings, M. Wade, W. [Eds.] (1992) Developing Economic and Industrial Understanding in the Primary School, PNL Press, London.

Scottish CCC (1999) Education for Work: Education Industry Links in Scotland. A National Framework, Scottish CCC, Dundee.

Short, G. (1991) Children's Grasp of Controversial Issues in Woodhead *et al.* [Eds.](1991) Growing Up in a Changing Society, Routledge, London.

Simon, B. (1991) Education and the Social Order: 1940 - 1990, Lawrence and Wishart, London.

Smith, D. (1986) Industry Education in the Primary School: Case studies from the national primary school competition 1986, the Schools Curriculum Industry Project, University of Warwick.

Smith, D [Ed.] (1988) Industry in the Primary School Curriculum, The Falmer Press, London.

Spencer, H. (1861) Education; Intellectual, Moral and Spiritual in TVEI Developments 14, Industry Links, (1991) The Employment Department, Sheffield.

Statz, C. (1997) Do Employers Need the Skills they Want? Evidence from technical work, Journal of Education and Work, Vol. 10, No. 3, pp. 205-223.

Stenhouse, L. (1975) An Introduction to Curriculum Research and Development, Heinemann, London.

Stone, N. (1991) Does Business Have Any Business in Education? Harvard Business Review, March-April, pp. 4-13.

Stonier, T. (1983) The Wealth of Information: A profile of the post industrial economy, Methuen, London.

The Employment Department, (1991) Technical and Vocational Education Initiative: Developments 14, Industry Education Links, Moorfoot, Sheffield.

Times Educational Supplement, Business Links, June 1997.

Turner (1990) Industrial Relations Review and Report Links with schools: 1 developing a strategic approach, Industrial Relations Review and Report, March, No. 460, 1990, pp. 5-9.

UBI Annual Report (1996) CBI Education Foundation Council of Management, London.

Vallance, I. (1997) in Aim High, Business in the Community p. 2.

Van de Vliet, A. (1994) Industry Enters the Classroom, Management Today, April, pp. 70 - 72.

Walker, R. (1991) Biography, Identity and Schooling, the Falmer Press, Hampshire.

Wallace, G., (1992) Managing Economic Awareness across the Curriculum: 'A personal viewpoint', Economic Awareness, Vol., No. 3, pp. 26-30.

Wanless, D. (1997) What people say in Aim High, Business in the Community, pp. 6-7.

Warnock, M. (1989) A Common Policy for Education, Oxford University Press, Oxford.

Warnock, M. (1996) Moral Values in Halstead, J. M. and Taylor M. J. [Ed.] (1996) Values in Education and Education Values, Falmer Press, London.

Warwick, D. (1991) Patterns for Partnership: the industrialist's role in initial teacher education, British Journal of Education and Work, Vol. 4, No. 2, pp. 79-89.

Wellington, J. [Ed.] (1993) The Work Related Curriculum, Kogan Page, London.

Whitty, G. (1989) The New Right and the National Curriculum: State control or market forces? Journal of Education Policy, Vol. 4, No. 4, pp. 329-341.

Wiener, M. J. (1981) English Culture and the Decline of the Industrial Spirit, Cambridge University Press, Cambridge.

Wilkins, A. (1990) "Can't Use Tanks Like Ice Cream": Industry Education and Controversial Issues in Ross, A. [Ed.] (1990) Industrial Awareness in the Primary School, PNL Press, London

Williams, M. and Jephcote, M. (1993) Economic Awareness as a Curriculum Entitlement in Wales, University College of Swansea.

Woodhead, C. (1995) A Question of Finding the Balance, POLITEA, London.

Woodhead, M. Light, P. and Carr, R. [Eds.] (1991) Growing up in a Changing Society, Routledge, London.

Woulfe, D. (1994), Aspects of School-Business Co-operation: A study in Great Britain, Unpublished.

Wringe, C. (1991) Education, Schooling and the World of Work in Corson, D. [Ed.] (1991) Education For Work: Background to Policy and Curriculum, Multilingual Matters Ltd, Clevedon.

Young M. A. (1996) Curriculum for the twenty first century? Towards a new basis for overcoming the academic/vocational divisions in Ahier *et al.* (1996) Diversity and Change, Routledge, London.

Young, M. F. D. (1988) Curriculum and Democracy: lessons from a critique of the new sociology of education, University of London.

APPENDICES

APPENDIX 1

The Teacher Questionnaire

THE DEVELOPMENT OF CONCERN

FOR WORK-RELATED EDUCATION IN PRIMARY SCHOOLS

The School Position

Please identify how work-related education is perceived in your school:

In my school work-related education is perceived as:	YES	NO
• a general school policy		
• an activity open to individual teachers or pupil groups		
• integrated into curriculum subjects		
• a separate activity		
• strengthened by the introduction of the National Curriculum		
• a statutory obligation		
• a means of developing links with industry and the wider community.		

Would you please indicate your sex and your age bracket.

Age: 20-35 35-50 50 Plus

Sex: Male Female

	YES	NO
As a means of augmenting this information a number of interviews will be carried out. Would you be willing to participate in these?		

THE DEVELOPMENT OF CONCERN

FOR WORK-RELATED EDUCATION IN PRIMARY SCHOOLS

Formative Influences

Please write about your life experiences and formative influences which you feel might have contributed to your concern or interest in work-related education in its many forms and the most important influencing factors, giving some details of your current involvement.

APPENDIX 2

The Informal Interviews

Interviews with primary school teachers prior to the formulation of the survey questionnaire.

Interviews were carried out informally with a group of primary school teachers to gauge the responses which might be obtained from the questionnaires. They were semi-structured with the basis for the questions being:
How would you describe work-related education in the primary school?

Do you think this is important?

Why?

Do you incorporate any aspects in your lessons?

What has influenced you?

Interviews

Interview one - reception class teacher.

How would you describe the work-related curriculum in primary schools?

*I don't know what you mean by the work-related curriculum
For the children?
Is it going out into work?*

Yes. Anything to do with work. If I said the work-related curriculum that does not mean anything to you? Industry related then.

Yes that's fine I understand what you mean. With reception trying to get them to be independent and plan their own work and be responsible for their own learning. The scheme we use will hopefully help them to plan their own projects later. The enterprise type situations which schools use which help children prepare for situations, the idea of work, planning costing. The young children getting them used to thinking for themselves, working for themselves should provide a good sound basis for something to be developed later on in school.

Do you think this is important that the children do this sort of thing?

I personally think it is a valuable thing to do because you can draw all their strengths together and different aspects of the curriculum and integrate them

and they can see a reason for their learning. I think a lot of exercises in books put some children off and bringing in these enterprise types of activity they see a reason for it and it fires children who might have otherwise been turned off and it gives them a focus.

Do you feel that this kind of work is encouraged in school?

I think that it is not since we are still getting to grips with the National Curriculum and with the changes there have been to try and get all the topics covered in the time allocated it has been pushed to one side. There was a time when we did a lot of this type of work and now that we are coming to grips with what is expected and covering topics we are once again finding that we do have time and there are places where it can be slotted in. It was encouraged at one time and it has slipped back but now I think the tide is turning and people realise in school that the curriculum need not be driven by the National Curriculum. We can use aspects of it to develop things which we would like to do. When we get new documents we feel oh, we have got to do this and we have got to do that, we must do history we must do geography but we are slowly slipping back to using it to our advantage rather have it dictate to us.

You say that you are starting to incorporate it more into the curriculum, is there anything in the school policy which relates to this sort of work or is it just something which teachers might do individually?

I think it depends on the individual teacher, it's not written down anywhere, it's not in the school policy. The teacher who wants to do it will find time to do it. In this school I don't think it would be put back. There would be no blocks put in your way if you wanted to develop it.

What about the cross-curricular themes? There was one on Economic and Industrial Understanding. Is that highlighted anywhere?

Not that I am aware of. Ideally it could come into upper KS2 but I don't think it is there.

The school has just undergone an OFSTED inspection. Was there any mention of it then?

Not in the feedback we got. We have just had the outlines and the full report is not published yet. It may have been highlighted to management in their feedback but it certainly was not to the Governors. They did remark that the children listened well and responded well to adults and when questioned could answer quite nicely. That's an ideal basis to build on.

What do you think has influenced you to develop this sort of approach in school if it is not in the policy?

I think it goes back to the time when I was trained. It was all very much cross-curricular links and looking at the community, using the community and I have always had that sort of philosophy if you like. When I first started teaching the school encouraged these sorts of activities. Even basic baking, costing out and buying the ingredients and it seemed that when you had a little more flexibility within the school timetable you could take children to the shops and such and the money was there in school to go and do it. I always had a club in school which the children paid to come to and then were involved in the spending of the money and saw what was happening to it. That resulted in the parents becoming more involved too. I did attend a DUBS course too as you know and it was nice to see it all written down, the essence of it and activities to use with the children. I tried to use that type of thing with the reception children and found they responded very well to it.

Interview two - supply teacher who has experience of primary and secondary school teaching.

I intend to send out a questionnaire to teachers and these interviews are to give me some initial ideas of the wording which might be used. Sometimes teachers might not understand what is being asked, this will help me to use the correct vocabulary. The questionnaire is about work-related education in primary schools. How would you interpret that?

Well I know what it means in secondary schools, work-related education, children visiting factories, work placements, bringing people in to talk to the children. That's how I would interpret it.

So if I asked you about work-related education in the primary school what would you consider you might do in that respect?

I would bring people in to talk to them, have workshops, that sort of thing. There is a lot. I would take them on visits, get parents to come in to talk about their work, demonstrate what goes on.

Do you think it is useful?

Oh yes. I do actually. Its very useful to get them into that environment. Anything. Theatre groups anything which the children might be involved with. A lot of them haven't a clue of how things work. Take the basic things like fathers who don't have jobs, the children have no experience.

What do you think has influenced you to think this way?

Six children...You can talk to them as a parent but it does not have the same impact as direct experience. Children in school are channelled into specific areas.

Interview three - teacher of upper infant and lower junior school pupils.

The questionnaires that I am sending out are going to be based upon work-related education in primary school. What does that mean to you, work-related education in the primary school?

Well do you mean like work experience, coming in to see what it is like on the other side of the fence and the practicalities of coming in and working with other people and helping. It all depends on what the students want, what they want to get out of it. I'm not sure what you mean.

If it was concerned with the children here and your children what do you think you might be doing? Do you think you do any work-related education?

Not with little ones. Well we do, do you mean like people who help us and things like that? Well we do but we wouldn't call it that. It would be for example like in geography we have been looking at shops this term, we have been doing traders. We wouldn't call it work-related education but we would be covering that.

What would you do for that? Would you be going out to look at shops. Would you get a shopkeeper in?

Mostly go out and look. We have been doing goods and services. We've been looking at the differences.

Would the children be made to realise that the people who work in the shops are doing a job and earning money. All the different aspects of buying goods to sell?

That's right.

So is this part of your curriculum policy?

It's in the National Curriculum. It's down as part of the geography.

Do you think this is useful to children?

It is. It's more useful than some of the things that we teach them because it's something that they all know. They can all relate to it, they all do it. Whether it's Winners down in Birtley or Bainbridges in the Town, everyone shops at their own level.

And you would consider that this is something they need to learn about?

Yes and it helps to learn about money as well. It all links in. It's good. It gives them a broader outlook, especially when they are older they understand where they are going and what is needed of them when they leave school or what happens because I think they all have this image that it is all very nice. What do you do when you leave school? You just pick something and that is it.

I started off by asking about work-related education. How would you describe this sort of work if not work-related education? What heading would you give it?

I thought you said these questions were easy.

This is the difficulty I am having. Work-related education to me would include the type of work you are describing but to anyone who has not come across this term before it is difficult and they immediately clam up.

I'm pleased someone else has trouble. I thought it was just me.

No you're not. What I am trying to identify is how I should describe it, if it's not work-related education how do I describe it and make teachers understand what I am talking about?

I can see your problem.

There are a number of different terms which might be used; industry education....

Community links.

I do not want to explain to the teachers everything which might be included. I want some of the feedback to come from them so that they might say oh yes, in this area we do.....but if they don't understand the question I am going to get nothing. It is trying to understand how they might best understand.

I would call it community links and with teachers of younger children I feel this is where you would get the most response. I know with the reception class they bring a lot of people in, the fireman, policeman, baker.

I know for years this has been part of infant teaching but is this referred to as work or it is just people who help us?

We don't go into any further than that. I am trying to think. It is mostly in geography that we do it. We have done work on the jobs people do in the school, what their parents do and the industry around the school.

So this would all be under geography, the local area?

Yes. This would be more under industrial links.

Do you have a specific policy for industry links or would this be left to the individual teacher?

It is in the scheme of work but I don't think it is in the policy.

(Some investigation into the policy found that nothing specific was laid down but some aspects of the curriculum were worded in such a way that a teacher interested in developing links could do so.)

Interview 4 - Junior school teacher at present teaching a mixed age class.

How would you describe work-related education in the primary school?

Is this work that the children are going to be aiming to be doing when they leave school and how we are helped in the primary. To be honest we are not helped at all.

But would you understand what was meant by work-related education in the primary school?

Yes I understand it. You mean enterprise. I know how I would do it if I had a free hand but unfortunately nowadays in education you don't have a free hand at all. You are told in so much detail and planned to the nth degree that what used to make you a good teacher, that thing that you did which was different to other people that has almost been annihilated and squashed out. There is just no time to do those sort of things in primary school now.

Do you think they are important?

I think they are very important but I think a lot of the things I have had to stop doing because of the time allocation because of the percentages that I am told I have to perform to each week in each subject. Even with the Dearing report which was laughingly supposed to give me twenty percent of time for free choice which has been eaten up by members of staff within school who say but from your twenty percent I insist you do such and such and when it comes down to it, if I manage to get a half an hour quiz session with my class in a week as my choice I am lucky. In the past I have organised lots of events and done them in an enterprising way. Toy and book sales involving the nursery. KS1 and KS2 children have planned and they have evaluated, correcting any mistakes they might have made. I've looked upon it as very good work

through cross curricular links using all subjects but I must say that I cannot envisage doing this again within the present set up in our school.

So there would be nothing in the policy or the scheme of work?

There is nothing in the policy or the scheme of work which specifically stops you from doing it but there isI think it also because we are a large school we have a large staff and every member of staff is to be seen pulling in different ways for their area and their commitment to that area. This can happen easier in a school where the staff maybe cover two or three subjects, they would be more prepared to be more tolerant. I feel that as a profession we are all becoming less tolerant and it is pressure from above which comes down like a death knell.

Do you mean from the head-teacher?

No. I mean from Government, then LEAs and then management in schools.

If the head-teacher had a leaning towards any particular area would you say you would have more opportunity to teach that aspect of the curriculum?

Yes definitely. The head would need to be a strong head. But I could argue that if I felt a very strong commitment towards something I would make the time but having seen in the past how this has worked against us in this school whereby as I have already said we are planned to the nth degree whereas before I might have felt happy to take half a day to cover one subject from the curriculum, let's say RE session doing assessment tasks instead of doing little bits over six weeks I would do it all together in one afternoon. I don't feel I can do that any more because I feel that at any moment someone can come in and say 'according to your half-term planning sheet, this is what you are supposed to be doing' and this has happened to us. Not to me personally because luckily I was doing what I was shown to be doing but several members of staff were greatly criticised by an LEA adviser for not following through when she came in to look around, they were not doing the lesson they were down to do. We have always had that freedom in primary in the past. We are now in straight-jackets and it is destroying the enthusiasm of committed teachers and those teachers who are just coming into education are not seeing what I consider to be good teaching, they are seeing mediocre teaching. That is what it all is. For children it is to raise the level of the lowest. In raising the level of the lowest I see that the attaining children are pressed downwards and it is the same with teaching. I see those teachers who have flair and up to now have had commitment, they are losing their flair and they are losing their commitment. What we are being asked to do more and more is transmit knowledge rather than teach. When I think back to parents who have come back to me in later years and said A while ago I was having a coffee in the shopping centre and a parent came up and said "I've not seen you for years but I want to thank you for not only having taught my

son his maths and English but thank you for giving him a love of nature, developing his interest in music, gardening... and the extra things. It was the extra things that this parent had noticed because the others are taken as a matter of course but when you look around school now I'm afraid it is the extra things that have gone and these are the things which are often of most value in life. These were also the things which contributed to making many of the children who were not academic feel worth something.

You have told me of some of the reasons why you think the way you do but do you feel there are any other reasons which have shaped your view?

Having taught for thirty five years I have never been someone who has been frightened to take on change. I've seen a lot of changes and I've gone with the changes which in my view have been beneficial to the children and I have quite firmly resisted those which I have felt were not in the children's best interests but now I can no longer do that because I can no longer fight against the flood. The pressure is such that individual teachers cannot do that and I am afraid that management in schools is more concerned with managing finances, keeping on the right side of parents and somewhere way down the list the word child might appear. I've always put children at the top of my list.

APPENDIX 3

Accompanying Letter for the Teacher Questionnaire

Our Ref: NI/216

January 1997

Direct Line (0191) 374 2221
Fax Number (0191) 374 2206
E-Mail: Norma.Iredale@durham.ac.uk

Dear Colleague

I am writing to you in your capacity as someone who is closely involved or interested in aspects of work-related education in the primary school in the hope that you will agree to contribute to a national research project which I am undertaking. This seeks to determine the attitudes, values and beliefs of primary school teachers to enrichment of the primary curriculum using business and the wider world of work. As someone who has shown interest in this area of work I hoped that you might be willing to spend some time in assisting me in my efforts. It is hoped that the findings will help to promote this area of study through the development of a greater understanding.

The information which I am seeking concerns events, policy decisions and/or life experiences which have influenced or contributed toward the perceived need for children in primary schools to be involved in work-related activities often pertaining to all manner of initiatives. If work-related education in its many forms is considered to be beneficial then it is imperative that educators know what influences might play an important part in shaping favourable attitudes. With this in mind I would like to ask that you describe, if you can, what has been significant in promoting your interest in work-related education and how it is perceived in your school. I would appreciate a reply in two sections and sheets are enclosed for this purpose.

I appreciate that a request of this nature requires time and that the task must be accommodated within an already busy schedule but I would be grateful if you would be kind enough to spend a few moments composing a reply which will form part of the overall data collected. I am sure that you appreciate the need for as large a sample as possible if the study is to be of any value.

Please feel free to write as much or as little as you wish. Obviously the more information which can be collected the better but a brief response would be perfectly acceptable and would certainly be preferable to none at all! The information you offer will of course be treated in confidence and your reply can, if you wish, remain anonymous.

Your response might include:

1. An autobiographical statement in which you try to identify and describe your understanding of work-related education;
2. The factors which have most influenced your commitment to work-related education and the impact these have had on the approach used;
3. Why you consider work-related education to be important and to whom;
4. The activities in which you are engaged and how these have developed;
5. The outcome sought from involvement in these activities;
6. An indication of the age when you consider activities of this type are most beneficial;
7. The type of area in which your school is situated (for example, rural, inner-city).

I stress that a brief response would be very acceptable and while I appreciate how very busy you are I would ask that you respond and return the questionnaire before July 18th 1997. A stamped addressed envelope is enclosed for your convenience. Your help will be of great significance.

Yours sincerely


Norma Iredale
Manager, Primary School Programmes
Enterprise & Industry Education Unit

APPENDIX 4

Revised Accompanying Letter

Our ref: NI/232

11 March, 1997

 0191 374 2221

Fax 0191 374 2206

E-Mail: Norma.Iredale@durham.ac.uk

Dear Colleague

I am writing to you in the hope that I can persuade you to **return the questionnaire which I sent to you some time ago**. I appreciate how busy you are but the information you can provide is essential to complete the research project in which I am engaged. You will appreciate how much effort, time and money has been spent in taking the research this far. All this will be lost without the responses. *Please* find time to complete both pages of the questionnaire. I would be very grateful. In the event that you have misplaced the original a duplicate questionnaire is enclosed together with a Freepost envelope.

Every school responding will be entered in a draw to receive a free set of DUBS resources. I look forward to hearing from you.

Yours sincerely

Norma Iredale
Manager, Primary School Programmes
Enterprise and Industry Education Unit

APPENDIX 5

Schedules and Transcripts of Telephone Interviews with Teachers

Interview Schedule 1

CE Infant School
Solihull

I was interested in your comment saying “it is not work-related education as you see it”. What did you mean by that?

Why do you do it?

You mention industry not having the same commitment to KS1. Can you explain this view?

You say how other staff take what is offered, but won't take any responsibility themselves. Why is that?

Can they not envisage links?

Can't be bothered?

You feel it has not been strengthened by the National Curriculum. Why?

Do you feel activities are approached discreetly, or highlighted as links with industry?

What do you consider might be the best way to involve teachers in work-related education?

Telephone Interview 1

Infant School - Solihull

Q. You commented that your view of education was not the same as mine. How would you describe work-related education?

A. As a link with encouraging children to go forward more..... Mine is more on the community side and building up their work on the environment. It's not the work experience or the work-related where we can get sponsorship or take children out into industry and that's what I thought was the purpose of business links.

Q. My view would be that it involves all of these aspects and would include some opportunities for the children to see what business and industry is all about?

A. I can see that and we are busy doing something at the moment in geography. It is very important that we actually take them out, it is all right having all these class based lessons but we have been out several times to the local high street and gone in shops and interviewed people so I am doing what I can in that area.

Q. Reading through what you had written I felt your views tied in very much with mine. I was also interested in the way you talk about industry's lack of commitment to key stage 1.

A. I think health and safety has taken a big decision in that now because seven is the cut off point. We used to go out often especially to Land Rover and it was wonderful to see what was actually taking place. We used to go to Severn Trent and actually see the whole cycle of the sewerage. It was fascinating for the children who got a lot out of it but the cut off point is now seven. We cannot take the children out there now. The children here are quite a bright lot and I am getting a lot more out of them than children I have taught in other schools. They are capable and they say it is not the case of ability, it is the legal side.

Q. I have not heard of this particular rule before.

A. We can take them into the educational centres. For example Land Rover but not onto the site.

Q. Have you worked with any other industries apart from these?

A. I have links with the local supermarket, Safeway, and I had a week's placement there and I have taken children round the supermarket. I can still do that.

Q. How do you feel they react to primary school children? Are they keen to encourage them?

A. Yes they are because it is all PR for them. They give the children little handouts and it is all a way of getting to parents. We can do that. Shops are no problem at all. They will just accommodate us in their way. I think all heads are after a little bit more. They are all looking at the budget and would like more in the way of sponsoring or more help to the school in a practical way. This is why I was asked to forge links but it is not working in that way.

Q. So you are looking for financial help?

A. I think more schools are at the moment. I have just taken that on board that it is not going to be. I am doing it more for the benefit of the children and what they get out of it.

Q. You have responsibility for industry links in school? What about the other staff? You commented that they were eager to take links you had forged but won't take responsibility themselves.

A. I think with a lot of teaching at the moment there is so much going on in a school with targets. All staff have to do what is prepared for them.

Q. It is not part of your policy in school to forge industry links?

A. No. It is just if there is any benefit from it then I will pick it up. The staff are very good. If I give them the opportunity to go out, and Severn Trent come into school and the whole school will have some workshop with them. We have recently had the brass rubbing centre from Stratford.

Q. You obviously feel that this type of work has not been strengthened by the National Curriculum.

A. No I don't. I think because of the public image we have now and the league tables everything has to be geared toward what is going on in the classroom and getting the so called best in SATS. If you are going out on educational visits all the time, I think it adds to what is going on in the classroom. It does cut into the timetable and also it is expensive now. Booking coaches, we have cut down an awful lot. By the time we have got a coach with seatbelts and paid the insurance it is a lot for parents to pay two or three times a year.

Q. What type of area is the school in?

A. It is a town on the outskirts of Birmingham which lots of fathers move into who work in Birmingham. It is a very pleasant suburb to live in. Rather middle-class, a good residential area. We have parents who expect quite a lot. We are talking about the average child. They are very aware parents. On the

whole they are very supportive. Children cope very well. I would like to take them out more but I feel that the finance is the restriction to taking them out in excess.

Q. What do you think might be the best way to motivate teachers to get involved in this type of work?

A. I think it is actually the enthusiasm you bring into it yourself. If you talk about it within the staff and the benefits, people will give it a go. I try to incorporate a lot into geography. We have to because the document says we have to do local studies, field studies and we have actually progressed a lot in the last few years. We do go out more and that is the whole school. Even if reception only go around the grounds or to the local church we are getting outside the classroom far more than we used to.

Q. I feel that the activities are discrete rather than highlighted as industry business links. Would you agree with that?

A. Oh yes I do.

Q. Do you think there is any match between the outcomes required by education and industry?

A. Yes I do. I still see it as working with older children. Land Rover, which is the major industry in this area, have wonderful links with schools, Governors etc., there is lot going on but in the main it is with secondary schools, occasionally with junior schools and that is where they are nurturing all their input. They prefer to work with older pupils.

Q. What do you see as the outcome they are seeking?

A. I think they are keen to foster an understanding with education. I think they want children to be aware of what goes on in industry and they have developed resources a lot. When they come into school there are obviously teachers who have helped them to provide materials which is focused around science and D and T. I use worksheets which deal with materials and the design of cars so I think they are willing to develop their side of it and make it applicable to schools. I just feel that this work is not for Key Stage 1. Also when you are just a staff member it is more difficult to make links than if you are head-teacher.

Interview Schedule 2

Primary School
Bath

You begin your statement by saying that you don't fully understand the term work-related education. Can you explain what it is you don't understand?

You mention taking children to places of work. What would the objective be? Would it be made plain to the children about jobs, that this is where people work, why people work etc.

Would you say this work was approached discretely?

You say "when I have done topics" and you did not say whether this work was part of the policy. Is anything going on at the moment - is there an ongoing focus of this type of involvement?

You give no indication of what might have brought about your interest in these types of activities. What stimulated your interest?

Are there any other teachers in the school involved in this area of work?

What age of children do you teach?

Does the head-teacher promote this aspect?

What do you think would motivate teachers to become involved in links with Business and industry?

Telephone Interview 2

Primary School
Bath

Q. The first thing you mentioned was that you did not understand the term work-related education. In what way did this confuse you?

A. When I think about it, it could be two things. It could be children learning about the world of work and children being involved in industrial type projects, although I suppose they are the same type of thing. When I think about it they are same.

Q. You've obviously done quite a bit of this.

A. Yes, we have and still do. Whenever we feel it is going to be of benefit to the children then people do get invited into school or we go out.

Q. What would the objective normally be if you were to involve the children in this kind of work?

A. Well it would be linked. It would only be done if it was relevant to something we were already doing in school and would enhance the work they were doing and make it more understandable. For example we sometimes do assemblies on work in the community so we invite all sorts of people in to talk about their jobs.

Q. Would you say this work was approached discretely? Is the direct link to industry and business made clear?

A. Well certainly, for an assembly type it is rather discrete. Or sometimes we get people who ask if they can come into school and talk to the children about.....possibly it is not quite work-related, it might be the work of the RSPCA or Doctor Barnado, that sort of thing. Again it is rather discrete, not linked to anything in particular but is something they should know about.

Q. You don't give any indication on the questionnaire of what attracted you to this type of work in the first place. Can you identify what it was?

A. I just feel that the children should know what goes on outside the school, that there are people out there working, what their jobs are and how it helps them.

Q. You do not say if it is part of the policy. Is anything mentioned which encourages work-related education?

A. No. We have never stated work-related, really it is just in-built into the school but we invite people in if it is going to enrich the curriculum. It is really part of the ethos of the school. We all do it and it has always been the case as long as I have been here.

Q. Other teachers are involved?

A. Oh yes.

Q. How did their motivation come about?

A. Again it is a wish to extend the children's knowledge. They are doing it to make it more real to them, by bringing people in or taking children out.

Q. What do you think would most motivate teachers to introduce work-related education into the curriculum?

A. In our case it is the enthusiasm of the teachers and we do lots of extra curriculum type things, enrichment things. We have theatre groups and all sorts of things going on. It is just part of the school so I don't know how you would motivate the teachers to do it. My teachers are just motivated to do it. Sometimes you get things coming around, say the fire people. They have information they want to bring into school. If it looks like it would be interesting for the children to know, I would ask at staff meeting and usually there would be full agreement. In fact we have someone from the RSPCA coming in this week.

Q. What age of children would be involved in this sort of work?

A. Right from 4 to 11.

Q. How do you feel industry or business regards working with primary schools?

A. It is interesting you should ask that. They are probably getting a lot better. When I first used to do this I took some children to the local cheese factory because we were looking a how cheese was made. We were the first group of children they had ever had around. They had to go out and buy the special hats for us. Again we have got a cheese factory next to this school and at the moment they are not terribly welcoming to children I have to say. I think at the moment I don't know that industry values it as much as they should. That is generalising of course.

Q. Why do you think they are not welcoming? Is it health and safety, the fact that you are a primary school?

A. I know in one case we wanted to go around a local printers and they could not have parties of school children because of health and safety issues but they

came into the school to talk to the children. It was not the same as seeing the big machines but was the next best thing. I think adults are often frightened of working with young children. When we have people in school they are often quite nervous until they get going and then they realise how wonderful young children are, and how much they know, and how much they want to know.

Q. What do you think is the best thing you have ever done?

A. My mini enterprise and I would have loved to have watched that group of children go through and have more experience of working with local industry. It would have been a very interesting exercise.

Q. Do you think there is any match between the outcomes looked for by education and the those looked for by industry?

A. I don't know what industry are looking for. I mean - in my experience unless they have written a personal letter to the school wanting to come, wanting to spread a message, but when we have invited people in they probably see it as answering our needs. Whether they think beyond that I don't know.

Q. In your experience they don't ask what you want out of it?

A. Well sometimes. We were doing work on eggs. We went to a farm where they had battery and free range. The children asked all sorts of searching questions and the man there did ask if he could come into school and see what work they had been doing. It was the time of the salmonella scare. The children had gone around asking what people would prefer, free range or battery. They had quite strong views. He took the tape away and we never got it back.

Q. It is a good example of how any project can be two way.

A. It should be. Even if before they came they had no objective. I would like to think that they went away thinking it was a very worthwhile experience.

Interview Schedule 3

Grant Maintained Junior School
Essex

You have obviously been influenced by your own educational experiences, or lack of them and this has impelled you to try and rectify the situation for the school you are involved with. You mention giving staff and pupils a wider understanding. How do the staff react? How do they view school business links? Are many involved?

You say you are trying to do this and would like to do that, also you indicated that work-related education is not part of the school policy. Is this something you are just introducing?

How long have you been involved?

You talk of a mentoring scheme. Could you explain this?

You don't feel these activities have been strengthened by the National Curriculum. Why?

What do you consider is the best way to motivate teachers to become involved in education industry-links?

Telephone Interview 3

Grant Maintained Junior School
Essex

Q. Looking at your responses, you say that your own careers guidance is what coloured your views on work-related education.

A. Yes. I think primary school children already have ideas about roles they are going to play. Some may have ideas about jobs and what they would like to do. They are not always realistic but they are certainly beginning to think about the future. I think it is really important, that the way things are going to be in the next century, that they have got to be introduced a lot sooner not just to work but learning. I think that will change tremendously as well. The whole business of a job for life has absolutely disappeared and people will have to accept they are going to change their jobs several times. Interspersed they are going to have to do some different kind of learning or training. I think it is important that children understand that.

Q. You say that you are just trying to introduce work-related education. How do the other staff react to this?

A. That is one of the battles. I feel that teachers in primary schools don't necessarily have that wider view. They see their job very much as delivering the National Curriculum these days. I don't think they always have a broader view of what is needed.

Q. You are championing this?

A. Yes. I think it is important that all staff come on board. Some of the things I have tried to do, they think it is my little pet fad.

Q. What do you think is the best way to try and motivate teachers?

A. What I must do and what other head-teachers must do is develop a policy. I think I have tried in the past to tack things on. It has to be part and parcel of what we are doing all the time.

Q. You obviously don't think that these sorts of activities have been strengthened by the National Curriculum?

A. I think because of the testing we are driven down the route of just delivering the NC. A lot of our staff time and training has been looking at our test results, analysing our test results, making sure they are better next year. At the end of it I think that all that will happen is that standards will rise on paper but it won't be the education which has risen. It will just be that we have taught our children to take tests. I really do think there is tremendous pressure

on staff because now there are these national targets of literacy, especially in the area that we are in (Outskirts of London). We are not in a nice middle class area where they are achieving those kinds of figures.

Q. Do you think there are any problems in primary schools working with industry?

A. I think very often because of the way things have been structured in the past business and industry don't really think primary schools are important. I think they channel their efforts and interests into 14-15 year olds because they see that as the imminent workforce instead of taking a step back and looking further back down the line. A lot of the sponsorship, for example, that secondary schools can feed into, we can't. They are not there for us. I think that a tremendous amount, millions and millions of pounds are wasted by industry and business. They send us packs of stuff that never really get used although they might have been trialed against the National Curriculum, it is not really what we want. There needs to be a much better network set up for closer working between business and commerce with primary schools actually getting in there and seeing what it is all about. A mail-drop of this and that is no good.

Q. Could you suggest a better way of getting things into school?

A. There should be some kind of body, I don't know who would take the responsibility, to look at the whole business.

Q. It might be suggested that one problem is the number of primary schools.

A. Surely there could be ways of linking industry in one region with the schools or the town.

Q. Have you done anything with industry locally which might be a good example?

A. This is a small town. I have joined the Chamber of Commerce and I find that those people are so busy trying to keep their businesses afloat that they maybe have not got the time or inclination to get themselves involved with primary schools but that is where it has got to start. I just can't make them understand that there are 200 children in this school, 400 parents who go into town and the children are the customers of the future. The only place that I have been able to make some leeway is with the Midland Bank who have set up a bank in school. That was a palaver because it is something usually done in secondary schools and took a while to get off the ground. It is the lack of manpower in primary schools. In secondary schools you usually have members of staff who can go out there and be meeting business and commerce, who can be setting up initiatives. In primary schools there is me or my equivalent. There is not enough people to take things on board. Everyone is in the classroom, doing the National Curriculum, everybody has SATS at

the end. Who is going to do it ? It is going to be me and I have not really got the time. Arranging teacher placements is a nightmare because you have your 5 days supply cover to think about.

Q. You mentioned a mentoring scheme. Can you explain this?

A. This is usually a secondary school initiative but I came across it in America. I thought I would like to try it here but I have had trouble getting the mentors. These are representatives from business and industry who would come in and act as a mentor with a small group of children. I was hoping to start a couple of weeks ago but I have not been able to get the mentors. I would like to think that work-related education becomes much more part and parcel of what happens in primary schools. I sometimes think that I have wasted a lot of time and energy and have done it the wrong way round. I've tried to put all these experiences into school where maybe if I had started with the policy first....I don't know.

Q. What about CG4. The EIU document. Does that play any part in what goes on?

A. No I don't think so. Another problem is the new staff. I don't think it is happening in teacher training colleges. It is a bit late for me but I get no indication that the new ones get any training. Everything focuses on literacy and numeracy which is fine. Children do need the skills but they need wider things.

Interview Schedule 4

Primary School
Whitby

I'm obviously most interested in what aroused your initial interest and you infer that the fact your parents were self employed had a strong bearing. Would you say this was true?

You say you have strong beliefs about promoting the life chances of pupils and you obviously believe that working with business and industry will help in this respect. How?

You mention entitlement and your involvement in CG4. Obviously you think the NC has done nothing to promote work-related education. What are your views on the standing of CG4 now?

As a head-teacher, would you say you had been largely influential in promoting these activities in school?

How do the staff respond.

Is this work carried out with all age groups?

Are work-related activities highlighted as such or approached discretely?

What do you consider is the best way to motivate teachers to become involved with business and industry?

Are there any problems or issues when working with industry?

Telephone Interview 4

Primary School
Whitby

Q. What I am most interested in is trying to find out what motivates teachers to introduce work-related education. You indicated that it was the fact that your parents were self-employed.

A. Yes and it certainly seems to be the case with other teachers with whom I've worked here, who've had a particular commitment to do that type of work.

Q. Maybe they have had similar backgrounds?

A. Yes and the employment of their partners as well. I've got a teacher who has a partner in British Steel. Another an engineer in Boulby Mines another is self-employed. A lot of backgrounds are self employed or works in industry. They have come through the hard way, not the easy way, that is another interesting factor. They are related to or married to people who have not had an easy climb. The hard work or the hard slog is almost part of the course.

Q. You feel this had made them realise that children need a wide view?

A. And they have got to have stickability, teamwork and some hope that they will get there in the end, not giving up too easily.

Q. You obviously have strong beliefs about promoting the life chances of pupils, and that working with business and industry helps.

A. It helps them broaden their horizons on the whole and raise their expectations. I think the expectations of some of the parents in our particular area seem to be low, especially for girls, which is against the national trend, and that is borne out by middle and secondary schools saying the same thing as well. We are an all female staff, not that there are many men in the profession in the primary sector. We find ourselves working in an area where traditionally there has been a long history of the girls not reaching their full potential and we are, if you like, outsiders come to work in Whitby, and there are a few from the area, who bring a different aspect a different culture to do with the expectations of girls. It does give a clear indication, come on you can do this, to the girls. We hope this will help. It takes a long time to evolve. We do see flashes of change. It is about people using their talents. All these things we do are part of a bigger thing.

Q. You say the other teachers support this approach?

A. Yes because we don't see education as a pocket on its own separately as it was when we started teaching. You didn't ever discuss at this level the sort of working life as we do or how the workforce is organised and discussions about profit and cash and money was not mentioned at all. This was considered to be your role. This has changed tremendously over the last twenty, thirty years.

Q. Work-related education is part of the school policy. Would you say that you had been largely influential in promoting that?

A. Yes. The head is the most important person in all initiatives. It has got to come from the top. You can sometimes get away with a deputy or someone with a strong personality but all our research writing for SCIP and the 5-13 project indicates the same thing. The case studies which involved about 13 schools, the same messages came out all the time and we have a very strong formula of three key teachers working at it. One has just gone on to be a head. The deputy and myself have been the spearhead, with the backing of the governing body and the community. It is a whole approach in the end, it has to be.

Q. You mentioned your involvement in CG4. You say the National Curriculum has done nothing to strengthen this approach. What are your views of the standing of CG4 now?

A. There has been nothing to strengthen it. I would say most people don't know what it is now. All those cross-curricular themes, packages and pamphlets - nobody uses them as far as I know. Unfortunately when the folder changed over, they were probably jettisoned at the same time. We still have ours. There was some very good stuff in there.

Q. The National Curriculum. How has that affected things?

A. In this school it has not affected it one way or another because it is a belief and it is something which we have worked on prior to that and we see the benefits and we have a belief in this then we are less likely to drop it off. We are more likely to keep going. It is still very strong. We work with North Yorkshire Business Links Partnership. We participate wherever we can. We are just preparing an Enterprise 98 for next summer's exhibition in Yorkshire. We will probably work with Fortune's Kippers - a Year 5 project. The infants have just been out working with a builder, laying bricks and things. It is part of our work, quite a strong part which we try to generate and keep going.

Q. I was going to ask if all age groups were involved. They obviously are.

A. There are so many pieces to focus on, that's the problem. It's keeping all these things going.

Q. Would you say work-related education is integrated tightly into the curriculum?

A. Yes. It is not bolted on. Its very motivating, its the wider world, getting people out of little boxes and getting people in. The people involved are different characters and the work generated is different, it is exciting, it is motivating. Then we use it as a way of motivating children with their other work. I can see that working with the Fortunes Kipper people is going to generate a lot of IT work, English. Through the five generations of the family and the firm, there are international links, food production, technology. There is going to be, maybe, the production of a recipe book which introduces another aspect, the enterprising bit. Maybe a mini-enterprise and we see what the profit is and can sell a few copies. There is masses so it is very easy to tap into the ethos and the way we work.

Q. Have you faced any problems as a primary school working with industry?

A. No. It is easier now than when we first began. When I say that, the school has always has an attitude which involves first-hand experience, so we were working with people other than teachers for some considerable time. I feel it has just sharpened and focused over the time. I think it depends on what industry or business you choose and the understanding you bring in. Your understanding of the other world of work and bringing interface between the two making use of it. I never think of taking from the other side. I was thinking of it as a partnership and we must try to do something for them. It may be motivating them in the workplace, sometimes we do that. In the heavy industry. There is very little in this area, but there was one manufacturing industry which we did work with - we did a survey and interviewed the workforce and we asked the workforce what they would like to do; their attitudes towards women in the workplace and we fed the results back to the management of the company. They had no idea of how the workforce felt and as a result made some changes. It makes their work more interesting sometimes. It does not necessarily pay in a financial way but it can repay in motivating them in their work. They can get an enjoyment from working with youngsters and get some satisfaction.

Q. I was going to ask how you thought the outcomes looked for by education match those looked for by industry?

A. Sometimes industry don't know what they want out of it. They just want to help and things just develop and evolve. Sometimes when you get partly into it they come up with other things. I think a lot depends on you and your approach from the educational side. Some firms, like the industrial plant are very difficult to get into especially with younger children. Once they understand what it is all about and what your intentions are and who you are, you can generate a bit of trust and the world is yours.

Q. Are there any particular rules and regulations from industry?

A. Yes, especially from production. The firms very often impose their own restrictions or they are dictated by insurance cover. Food handling sometimes and there are rules and regulations you have to find out about and accommodate. Things change all the time and need to be checked out. These things require effort, it is not just sitting about and getting up and delivering the National Curriculum. We are working as teachers creatively and it demands a great deal more of you as people but it is a good deal more interesting and you get more return in the end from the job. That is the bargain but you need teachers with some enthusiasm to do it and some experience and clout. You need a certain formula to work, I think, to make it go well. I am always pushing and doing even if I am not particularly involved.

Q. The teachers do go out and do things themselves?

A. Yes but they know I am going to support them and sometimes that is all they need to do it. I am sometimes the motivator. That is my role. It is how I see my role.

Q. What do you think is the best way to motivate teachers to be involved?

A. The key is the head. Top down or supportive around.

Q. What about teachers coming out of college?

A. You have a lot of work there!

Interview Schedule 5

J and I School
Barnsley

You mention you own work experience. Was this prior to teaching?

It would seem that your own involvement began in Industry Year. Was your involvement imposed upon you or did you volunteer?

You are obviously very involved and encourage your teachers to be involved also. How is this viewed by staff members?

What do you consider the best means to encourage the motivation of staff to become involved in industry education links?

You say how you feel it is applicable to all ages. Do activities take place in every class?

You do not feel it has been encouraged by the National Curriculum. Why?

Telephone Interview 5

Primary School
Barnsley

Q. I am trying to discover if there is anything in particular which motivates teachers to introduce work-related education into school. You mentioned your work experience. Was this prior to teaching?

A. I did do work experience before I started teaching. From 14 years old I did a number of jobs, mainly because I did not have any money but it did seem to me to be very useful in my own education of the world at large. When I came into teaching I was able to look back on that and think how valuable that was to me as a person. So I was an ice cream man and I had a cafe and I worked with some dolphins one year and I was a dustbin man. All sorts of little jobs and they have taught me a lot that you do not really learn in school.

Q. You think this motivated you?

A. It seemed to be important. If you get teachers with that sort of range of experience or better than that, they would be in a better position to talk to children about the future and maybe it would affect the way they educated children. That is the theory in the first instance.

Q. It is part of the school policy. Is it something which you have encouraged?

A. Now I have to push more strongly than I used to have to do because teachers seem to have so many pressures on them to fulfil so many requirements. They are less likely to go for an adventurous project linked with some industry than getting it over and done with. The National Curriculum has been a bit of a downer as far as that is concerned. It is in our curriculum framework. Teachers are supposed to carry out an industry linked project at least once every two years. We try and stick to that. It does not come as naturally as it did. At one time I could show them that by linking with 'X' industry it would enhance their project, the delivery of it and maybe a couple of visits, people coming into school could make it really exciting. The limitations they seem to feel they have got under the National Curriculum seem to be making it more difficult in their eyes.

Q. There are differing views. Some teachers feel the NC has prompted industry links.

A. I am sure that the National Curriculum is good for what it is supposed to be good for. What we have got here is a very small school with very large classes so it has meant a lot of other issues apart from just covering the curriculum. Teachers very often go for what they see as an easier option. I feel that an industry link probably is the easier option, more exciting as well.

Q. What do you feel might be the best way to motivate teachers?

A. What I do - I have a collection of things which I have done over the years with industry and every so often we have a staff meeting where I get all of the stuff out and have look through it and try and inspire them with some examples of things I have done. Another thing I do is try to encourage them to go on teacher placements. I say to them you can go on a teacher placement to anywhere you would like to go and I don't care if you don't do anything with the children. Normally that does not happen. Teachers are naturally looking for ways in which they can use whatever they see out of school in the classroom. Quite often they come back from teacher placement and want to do a project linked with wherever they have been. I think teacher placements are essential in getting teachers to want to be linked with industry. I try and guide them into certain places rather than letting them go off on the QE2.

Q. You said that your own involvement began in Industry Year. Did you volunteer or were you coerced?

A. I was quite enthused by the idea of Industry Year but at the same time I was very sceptical. I honestly approached it as a very adventurous project to see if industry would take us on. The project title was 'Our friends in Industry'. The children were encouraged to write to 30 or 40 industries trying to find out if they would host a visit of children. We made it easy for them by saying we would arrange for a small group to come rather than the whole class. The next thing was that those people who responded. I arranged to go and talk to them to put their minds at rest. The result was about 25 visits over a term with small groups rather than the whole class and we created an overview of industry in our area and a lot of very good work came out of it. It did not have any more specific focus than that. It was very interesting. We were able to do it because we had help in that someone looked after my class while I took the small groups out to industry. A number of parents and governors also helped so it was easier for the host to accept these 9 year olds in small groups. Some really interesting visits that were really interesting to me as well as the children. Things which I never thought I would experience and I was really enthused by it all. At the end we invited all the people who had hosted us. The group included two trade unionists. They came to a big exhibition at the end to look at all the work the children had done and if they wanted anything they were able to take it. From their responses they seemed quite amazed by the standard of work that had been done by these 9 year olds.

Q. The next question I was about to ask was how you felt industry regarded working with primary schools?

A. Until they have worked with them there will always be a question mark. I think that at that particular time we had two very significant visits. One was to Stocksbridge Steelworks where there was a lot of very dangerous equipment around, the other was to Avesta Steel in Sheffield which was a really big

steelworks in Sheffield where there were all sorts of dangerous looking stuff around. There was a bit of apprehension before we went, but after the visit they were amazed at how much the children had taken in. How well they had behaved themselves and how successful the visits had been. We were invited back to both. I think once they have tried it they feel a lot happier about it. Last week I was invited to go and talk to the Chamber of Commerce about primary schools and partners in industry. Having spoken to them, particularly in Barnsley now I know there is real will to want to help primary schools in whatever way we want. The only reservation that anyone had at that meeting was the size of the groups that they might be coming to talk to or host. I did make it clear to them and they quite liked the idea that we should get people to come into school to get an idea of how we work and to see how clever children are and how sensible they can be.

Q. What kind of industries would be involved in the Chamber of Commerce?

A. Mainly small businesses from Barnsley though there are some large businesses.

Q. Do you have any involvement with the big corporations?

A. At the moment no.

Q. How do you think they approach this issue?

A. To me they do appear to produce a lot of support material but in terms of letting us get hands on they don't, they would rather keep us at a distance. It is just a feeling I have got, it is not substantiated by going asking. There is a local firm which is large. They let me go and have a look around to see what happens but they did not want any children. They are probably one of the biggest employers in the area.

Q. Any reason why?

A. They said they did not want to start a steady procession of people writing letters for visits to their factory. Did not think they had time. I have had health and safety reason and the age of the children but this is the first time I have had this reason. I have a diary of names and addresses of people whom I have met and will work with us. If any teacher in school wants for example, someone who makes clothes then I just get my diary out and look down the list. There is a person in the Chamber of Commerce in Barnsley who can be rung up and you ask 'can you find me a firm who will....' They are very keen in Barnsley where there are problems of regeneration. Everybody is trying their utmost to regenerate and get a workforce of high quality and so the involvement of industry in education is quite high profile at the moment.

Q. Do you involve every age group?

A. Yes, We have projects which involve all the classes (5).

Q. One last question. How do you think the aims of education match those of industry?

A. That is a difficult one. I am sure some people have a hidden agenda. We want to enhance the provision we are giving our children and if that can be achieved by offering first-hand stimulus that we wouldn't otherwise be able to give, then fine. I think what we all want is to raise awareness of what each is doing. Talking to the Chamber of Commerce last week they agreed. They would like an opportunity to come into schools and see what schools are doing so that they have an understanding of where we are coming from. We in schools would like to give them that opportunity but we would like the chance to go into industry and see what the world of work is all about. Mainly as an awareness raising exercise so that we all become aware of what one another problems or areas of expertise are. I think that is probably the only joint vision we have apart from a place like Barnsley there is obviously a will for employers to want to get a workforce that is worth employing in the end and obviously we as educators want to be able to equip our children to do that. There are lots of other little things going on where there is joint interest and it is refreshing local industrialists who are willing to be mentors in schools, some in primary schools I believe. They actually volunteer to come in talk to groups of children and be their mentor. We have an offer from the local TEC - it is for local students to come in and act as mentors as part of their development. They want us to join in. We might. It would be nice to have industrialists to do this with groups of children. If local industry were given accreditation for doing this it would be easier. The Chamber are looking at this. When it comes to what the children learn, I am not sure that the industrialists are too bothered about that, so long as they can do the basics when they get to them. They just want to be involved and be aware of what sort of children we have got and if they can play a small part in that then fine.

Interview Schedule 6

Primary School
Penarth

You say you became involved by default (attended a course due to illness of another teacher) and you mention that work-related education is part of the school policy, so does this mean that other teachers in the school were already involved in activities?

Is the head-teacher supportive of this type of work; does s/he promote it strongly?

You have some very strong views on what best motivates teachers. How do you think this could be achieved on a national basis?

Do you think it should be part of initial teacher training?

How do you consider OFSTED has raised the profile of work-related education?

Telephone Interview 6

Primary School
Penarth

Q. You made it very clear that you were involved by default. Were other teachers in the school already involved in work-related activities?

A. It began as an initiative for heads and deputy heads who went on a placement then a course. The deputy head was involved for part of this time and I was asked to be involved. This was through the county. As a result when I came back full of ideas they were very supportive.

Q. Has this then permeated to other members of staff?

A. Yes. This year I have a young teacher, two years into teaching who has been put onto the Whitbread project. I am going to support her this year. We are concentrating now on bringing the young ones up but other members of staff have had some form of work placement or a day out or some chance to go into industry.

Q. It is a primary school so does this work take place with all age groups?

A. There have been some infant and junior initiatives but it is mainly the juniors who have participated. There is a member of the infant staff that we are desperate to get in but it is getting supply cover to allow her to get out. Other schools in the area are very good. Bryncellan have done a lot of work with the whole school and they make working with infants seem like a piece of cake.

Q. You talk about motivating the young teachers. Do you have any experience of them coming out of college with knowledge of work-related education?

A. They have *some* knowledge. I had 2 lectures on industry education and I know new teachers have had the same. Not a lot but they are aware. I don't think they would know how to start, who to go and see. I think that is the kind of thing they need to know. I remember thinking how am I going to do industry projects when I have not even had my own classroom. That is why I think it is important to grab them say two years in when the motivation is still there.

Q. You said you have produced some guidelines for teachers going on an industry link.

A. I did some for the county. You could have a copy of those.

Q. Because you have strong views on what motivates teachers, how do think it could be approached nationally?

A. I think it needs someone from the government to get behind it. You need to make sure someone in there knows what is going on and get them on your side. I think the TECs and EBPs need to work together. They are all working in completely different ways and there has to be some co-ordination. I know there is one national conference to celebrate good practice but there needs to be a national way to disseminate that apart from SCIP. I know some EBPs have news letters and such but I don't know how many of those get into new schools, they stick with the schools that they know. There needs to be set courses in each area which are the same nationally. You speak to the authority and say we would like a slot in your year, this is what we can offer and you do it in conjunction with the authority rather than try to do it privately and hope schools can find the money. It needs to inform teachers what is available in their area which means researching. They need to be told. Most of these things are not done because schools have no funding for supply. They need to be told ways round this. Nitty gritty everyday practicalities. You could also do part of the theory, the philosophy behind it and say the outcomes are this, this and this. You need to choose the people who present the course. You need them to be buzzing, you need people who can present well. Some people may have all the knowledge and experience in the world and they switch people off.

Q. Many teachers feel that the National Curriculum has weakened work-related education. You don't feel that it has been encouraged but mention that OFSTED has raised its profile.

A. Yes that is the other direction you have to take. If you want head-teachers to be involved you have to show them that the new inspection has been re-prioritised and this is what it can do for your inspection report and your school. You have to turn the heads on then they will support those doing the projects.

Q. OFSTED commented on your links?

A. They were very impressed.

Q. Isn't the way OFSTED look for links erratic?

A. There was a revamp Feb. March which has a paragraph with its own heading, community and industry links. It appears that they don't just want part time links, they want things that can stay. My other philosophy is that we need industry coming into school. We are going out. Who is going to come in and shadow our head or a teacher. By getting them to understand what we are doing it is getting them to raise our profile as a profession. Industry can then see how they can help schools without the money. Industry is not about money and the quicker you get out of this idea the more you get out of it. We

have someone from the airport coming in to shadow in our school, through a personal link. She said she would like to come and see for herself. We are happy to have anyone as long as they are willing to fit in. We have nothing to hide.

Q. What do you think the children get out of this?

A. Oh I could go on for years about that. They get a feeling of self worth, they can see the relevance. The curriculum now has become learning in isolation, because of statistics and SATS and you have got to cover this during the year and this term. The kids, the relevance of it all, where it is going. They learn soft skills, orientation skills, communication skills, interactive skills. Things that in the classroom, if you are talking about moving toward class based, the child's interaction is getting less and less because you are trying to get through all the time. They need to think: if they are going to present themselves, what do you look like, how do you get your voice to go as far as you want to, who is going to show which diagrams where. If you are going to have a rap is it just music. It becomes so cross curricular and they really get into it. At the moment I am doing a presentation with my children for Ford. We have a link with Ford at Bridgend. We have cut the timetable down for four days. We are doing a design and technology project and we are designing a car for a star. We talked about the outside of the car, what special features would there be if you were designing it for the Spice Girls or Animal Hospital or something like that. We are practising the presentations which they will do to some outside guests, parents maybe and they will choose the best three to go to the design team in Bridgend. Those kind of skills they don't get out of any normal lessons.

Q. Where do you think the objectives of education and industry meet in such links?

A. I think you have to sit down together and discuss this at the outset. If the outcomes are not met automatically, is there a way in which they can be addressed and are there areas which cannot be addressed and we may have to accept that. It is up to the individual partnerships and is important. The other thing is a school has to be seen...we have a chemical industry here who is keen to be seen as green. You have to know your own moral attitude to things and are you prepared to do something but not others or say that is an area I am going to steer clear of because we don't want our children being involved. I am very aware of press use. There may be the opportunity to let the children have their say and to put over their own point of view. We had a debate here with Year 6 about a new supermarket which has been built locally. We discussed the impact on the locality. That came out of geography. If you have to teach in a subject based way there are ways of getting around it.

Q. Are there any problems of a primary school working with industry?

A. I think the staff must want to do it. You need to choose your industry carefully and liaise with the person you are going to be dealing with. You need face to face contact. You need to meet regularly. The project needs to be put into the year plans. It is not something which can just be tagged on, it needs more planning. Teachers need to realise that it will be a hard half term's work but that the satisfaction at the end will be enormous. Playtimes will be spent on the phone and sending faxes. Meetings will be held outside school. You need also to look carefully at health and safety issues. Find out if the industry will let you visit, can you visit with children and if you can't go can they come into school.

Q. Have you ever experienced any difficulties?

A. Not personally because I have always worked through the EBP who have helped. One I set up with the forces. They had never worked with primary schools, only secondary and were very dubious. I had to have several meetings with them and show everything I wanted and show them what their input would be. Once I got them in they were completely amazed. Could not believe how positive the children were. It's down to people. If you are enthusiastic and have some ideas.

Q. Have you anything to add?

A. I think that teachers who have been straight through the system must have as part of their career development some time in industry. I think this changes the way in which they perceive themselves, their job and the way education is perceived. I feel the only way at the moment to make teachers feel good about themselves is to get people from outside in and you need support from the top.

Interview Schedule 7

Primary School
Stamford

I was interested in how you pointed out that your own background was from a family of teachers. I would have thought that this might have directed you away from business and industry rather than toward it.

How influential was the time you spent abroad?

You also mentioned financial gains for the school. Did this have any significant affect in encouraging you to be involved?

Have you been the main influence in encouraging education-industry links in school?

You say that *many* of your teachers build links into their planning, yet it is part of the school policy. How do these two agree?

You infer that such work has been strengthened by the NC. How?

What do you consider is the best way to motivate teachers to engage in links with business and industry?

Telephone Interview 7

Primary School
Stamford

Q. You have indicated that your background was a family of teachers. How do you feel that this has steered you towards work-related education?

A. Well I suppose it is because I was concerned that I did not have any contacts with industry, though I had friends and colleagues who did. Through that I established a link. Also my brother had been a professional footballer and I had links with that. I had also taken them to professional football games which they loved. I had also taken them to local industries when I taught in Glasgow, established some links with industry there and I felt it was important to do that. Then when I went abroad to the forces school it was a completely new ball game and I found it fascinating that children could get involved in things like that.

Q. What are the main outcomes which you feel children get?

A. I think they see a purpose to their learning. A case in point we were doing some mental maths in school and trying to raise the profile of that. If I say to the children the reason for this is so that you become more alert when you do your shopping. Now I know that people don't need to nowadays as the item is just beeped over the till: but you need to know you are not being robbed. I gave the point, my wife when she shops in the supermarket adds up everything in her head so when she gets to the till she knows roughly what it is going to be.

Q. You also mention some financial gains for the school. Did this have any significant effect?

A. This wild area (wild-life garden) I mentioned. I would say that this was incidental. When we started this project I was concerned about making the playground a more interesting place for the children and wanted to make it more interesting and attractive. We publicised it quite widely and we had a great deal of support. Although the financial aspect was not the catalyst it was certainly most rewarding and we were able to take it further forward than we would have done.

Q. You also mention that work-related education is part of the school policy but then say that *many* of the teachers build it into their planning. How do these two agree?

A. I think that each teacher would try to arrange a visit of some kind, if it was on buildings we would visit the brickwork's nearby, for example. We do try to establish links with local industry. Each class is geared to providing the children with first-hand experiences.

Q. Have you been the main influence?

A. No. I think the teachers believe in hands-on learning rather than passive learning. For example we have two residential visits as part of the geography curriculum. The National Curriculum requires the study of an area other than a local area so we go and do it in a big way. We take the children to Gibraltar Point which is a coastal area and then to Derbyshire in the Dales.

Q. What would you say was the best way to motivate teachers to engage in industry links?

A. I suppose teachers in this school just see the value of providing links of this kind. Ideally I would like, and it is something I have not had myself, is to take part in some teacher placements. To go and work in Marks and Spencer or Thomas Cook for a day, a big organisation. Trouble is I have not got the time, too busy doing my own job. I notice in my discussion with colleagues that schools are becoming more business oriented. We are into Investors in People. We are into that for what we can get out of it and I was concerned with providing quality training for staff. We have still a long way to go. Also the management of structure in the school here is a flattening down of responsibilities rather than a hierarchical structure. We don't have a deputy head. It's fairly revolutionary. I have set up a corporate structure with additional responsibilities for a key stage and as long as one person is nominated to take my place in my absence. I have nominated them both and we have a type of line structure.

Q. You mention that work-related education has been strengthened by the National Curriculum. This is contrary to what most people would say.

A. I feel that it has been. The reason for going out on visits in the past, many teachers have taken the Plowdeness approach: oh wouldn't it be nice to go for a trip to...We are actually quite specific about where we are going. Last year we went to Boston Dock. It was all planned and geared as part of the National Curriculum studies.

Q. How do you feel industry regards working with primary schools?

A. I think we have had some problems there. We have had some locally. They have some concerns about health and safety and perhaps can be a little patronising to some of the children, not understanding where they are coming from, but we have had people coming in they have been quite overwhelmed by the knowledge and information of the children. I have come across some obstacles I have to say with some people not seeing it as part of industry's role to support primary schools. It is all right at secondary level but primary is not quite as important.

Q. This is the main problem?

A. They have tended to put obstacles in the way.

Q. What about the larger industries?

A. They produce first class materials.

Q. Do you use these?

A. Yes, We tend to pick and mix. One thing that I think is worth mentioning, I don't know how other schools manage, are the seminars and training days run locally by some of the companies. I find the cost horrific. £300 per day. With a budget of just over a quarter of a million pounds, I could not do it. We have to make sure we get value for money.

Q. What kind of training days are these?

A. Usually management training. We get quite a lot of invitations and many of them are very useful, but they are just too expensive. They have also set up opportunities for heads to visit industry, but as a head who teaches two days a week I cannot justify the time out of school. Perhaps that says something for my management style.

Q. What about the outcomes. How do those of industry match education?

A. You read in the press some of the comments about children leaving primary school unable to read and write. They should come into school the people who are making these comments, and realise what we are actually doing. A case in point, a friend of mine is a high powered executive with the Inland Revenue. He is living in this cloud cuckoo world where he does not think it matters what goes on in the primary school. Maybe because his children are older. He does not see the significance and is very critical of the fact that some children cannot do long division or multiplication where he saw that as a prerequisite of leaving the primary school. They might not be able to do that but why should they when they can do so many other things. I think that primary education should be valued more than it is.

Q. Is there anything you want to add?

A. No I think I would just like to say that we are keen because it brings schooling to life for children and gives a sense of purpose to it. I think that is only fair for children. My own background is that I went to a state Scottish primary school and then grammar school. I did things in both these schools that had no links with industry or real life. A case in point, I learnt how to divide fractions and I've never yet used that skill in my life.

Q. You mentioned gender stereotypes.

A. Yes, I think that is very important to break down these barriers.

Q. What kind of catchment area is the school in?

A. Very middle class. The children go from here to a variety of schools. Two public schools which children go to on a scholarship basis. Until this year these were two separate schools now they have amalgamated. The girls' school in particular is very keen to break down the barriers.

Interview Schedule 8

Primary School
Lancaster

You say that you first became involved at the suggestion of your head-teacher, but had already planned a visit to a quarry. Would you not have considered this visit to be an aspect of work-related education?

How would you describe the activities you are involved in?

You mention the financial aspect. How influential was this?

You comment that work-related education is best suited to years 5 and 6. Why?

How do other teachers in the school view it?

You feel it has been strengthened by the NC. How?

What do you feel is the best way to involve teachers in activities of this type?

Telephone Interview 8

Primary School
Lancaster

Q. You say that your head-teacher asked you to get involved but indicate that you had already intended to visit a quarry.

A. Yes that's right. What happened was the head at that time was connected to LADBEL which is a group which promotes links between education and industry. He was quite frequently reminding staff that there was finance available for doing certain things. Initially I became involved because as part of the work that I was doing at the time, we were doing changes in the landscape, so we wanted to visit a quarry. We didn't really have the funds to set the trip up independently. We have a lot of children who have learning problems and they come from deprived backgrounds so we needed the finance. It was really through that I first became involved. Shortly after that the head had an Industry Day. We have had about three. We are having one this year again where people come in and work with the children. So it was through the head that I became involved to use the expertise of other people and if the finances were there to use them.

Q. Would you have used the same type of visit previously in your curriculum work?

A. Yes. We try to take the children out to the lower level, a farm, a mill.

Q. How would describe that sort of active involvement if not work-related education?

A. Well I would see it as giving the children the experience in a very direct way. Obviously, our children in particular respond to all the senses. I think if you limit it to simply books, pictures and so on then they are missing out. I think if they are actually physically there, can handle objects, can discuss with the people working there it can be more beneficial. They understand better.

Q. Would you make it obvious that it was a work place?

A. Oh yes. That certainly from the point of view of health and safety, how the people are dressed in the workplace, the kind of machines, trucks and so on, so very much yes. We went around a local paint and wallpaper factory. It was one of the parents who took us around and he emphasised that it was a workplace that there would be machinery, that there would be trucks of different types moving around. It was important to be alert.

Q. Most of the activities which you describe would be linked to a topic being carried out in school. The topic is approached first?

A. Normally you would think of the two together. In our school we are aware of the importance of direct experience. If you were doing a topic that would lend itself to having some form of direct experience then we would probably incorporate that even at the planning stage. For example history, the same approach would apply.

Q. You say that you feel work-related education is best suited to years 5 and 6. Why?

A. I just think that they get more from it. They are more mature and can relate to the world of work. Several children in our school will accompany their parents to work and in fact will help them out. One of my class this year, in year 5, goes with his father to the business in the holidays so in that sense I was thinking otherwise it just becomes a trip. In the lower juniors and the infants it is just a trip. The idea that it is a trip to a workplace won't really register. I think that at years 5 and 6 probably because of that extra maturity and because they are likely to have accompanied parents it is more meaningful. It is a trip to a *workplace* as opposed to a trip.

Q. Do other children in the school do similar things?

A. Yes. I think we go out to different places. More often than not it is in the locality. It really depends on the teacher, the class, what aspect of the curriculum we are covering. In a way it is not an end in itself it is a means of explaining better where we feel that the children would benefit from the direct experience. If we were looking to make it an experience of work I personally feel that it is better done in the upper school.

Q. The head-teacher is obviously keen. Does he promote it strongly?

A. Yes though I think it has been less this year. We are going to be inspected shortly and there are other priorities. I do know that one of the staff has applied for finance this year through LADBEL, so clearly there is still a link there. Some of the staff from LADBEL have been contacted for this industry day.

Q. Are the other teachers happy to be involved?

A. Yes I think so because we are all aware that the type of the school that we teach in and the type of child that we have respond very well to any form of practical activity, any form of direct experience. It really does seem to have an impact. They seem to remember things better.

Q. One of your comments is that you feel that this type of work has been strengthened by the National Curriculum. How?

A. I have only taught in primary since 1990, I was a secondary teacher. I think where it has helped is that the curriculum is now more focused. A trip is now more focused, I am not saying there was no focus in the past. It is now more clearly defined. All the support areas of the curriculum, multi cultural, economic awareness, the links with Europe, personally I think these are now providing teachers with a focus whereas in the past these could have been just to provide an educational experience.

Q. Do you see any problems as a primary school working with industry?

A. I would not have thought so at primary. I would see it more at secondary or higher education level where the closeness of the individual to the world of work is such as to make people consider whether all the help is not to gain an advantage over rivals. Let's be fair. Industry is becoming involved maybe because of a dissatisfaction with GCSEs with certain university courses. They are pumping money into universities hoping to help students in certain faculties to be prepared more precisely for the kind of employment in their firm as they see as important. I think at primary level they are more removed from that. I think it is more altruistic. Once you get to secondary level they are looking to pick up prospective employees. I know from where I used to teach the children do work experience and very often get jobs in the firms, even on a part time basis.

Q. Have you ever had any problems when trying to set up links with business or industry?

A. The only problems I have had are in respect of health and safety. I tried to go to a paper mill and even though we had lots of parents, the paper mill sent lots of information rather than have us round. I think they have some lower age limit. They thought it was all right to have secondary children but thought primary were a little young. That is the only one. The quarry were very accommodating.

Q. What sort of outcomes do you think industry are looking for at primary level?

A. Raising awareness. It is like the adverts that you see on TV that don't seem to tell you anything. It is product awareness. At secondary they are maybe looking at the intake and sizing up the strengths and weaknesses. It is not impossible that they could be looking to see what young employees need to have in order to be a square peg in square hole. There is maybe an element of that in industry exchange.

Q. Do you think the fact that you worked in secondary school could have had any influence on your approach?

A. No. I was never involved in industry or industry links. Maybe nowadays teachers would be more involved.

Q. What do you think might be the best way to involve teachers in primary schools with industry work?

A. I think that the National Curriculum has had an impact in that there is so much paperwork that people don't want to get involved much. The initiative say of LADBEL where finance is offered is a powerful incentive. If it was to be organised on a national level there would have to be money put into it to allow teachers themselves to experience working somewhere else. Teachers are no different to pupils in a lot of senses. We are cut off from experiences of work outside as much as the children. The longer we are in our present employment the more we are cut off. I worked when I was a student but it was a long time ago. There have been a few teacher placements in our area but they are expensive and disruptive. Basically it costs a lot of money.

Q. Do you want to add anything?

A. I think these initiatives are very good. They can be very helpful to teachers in school but you sometimes feel in the education service that your time and your energy is being used on the cheap when if there was a real commitment it would be done nationally and as part of teachers' development. Personally I believe in sabbaticals, not just for university teachers but classroom teachers. During that break one of the things which could be done apart from keeping up to date with the latest academic initiatives would be to sample other forms of work.

Q. What about initial teacher training?

A. I think as it is at present is better if the student is tied to school. Plenty of practice is good but I worry that they are not getting enough theory. Going back to all of the reports. Plowden in the 60s said you need an articulate teaching profession. You are not going to get that if it is nose to the grindstone.

Interview Schedule 9

Primary School
Preston

You say you were strongly influenced by your parents to widen your experiences. Why do you think this was so?

What was your parent's background? Involved in business or industry?

People appear to have had a great influence both at the present time and in the past. You mention colleagues and advisers. What has been their contribution?

How widespread is the approach in school?

Since it is part of the school policy have you been primarily responsible for its inclusion?

How do you feel it has been strengthened by the National Curriculum?

What do you feel is the best means of encouraging teachers to become involved?

Telephone Interview 9

Primary School
Preston

Q. You felt that you had been encouraged to become interested through your parents. Why?

A. Going back to coming from a family of six boys and a girl my mother always encouraged us to do things and be independent. My parents were really busy people. My mother didn't work but she was very involved in the community. There were very often times when we would come home from school and there would be no-one in the house and we would have to make the fire and toast some bread or something just to sustain us to tea. Being involved in cub scouts we had every opportunity to be involved in some community service but also to go away from home and there was never a time when Mum would stand in our way and say oh no you are too young to go away unlike children of today when it is often the case of they are 11 and they are too young to go away, the parents are always anxious. There was always that encouragement and it must have been in my blood because in secondary school I had an opportunity to go to the Shetland Isles and that was an extension of going to summer camp but it had the added extension of a working experience like going to work abroad when I was in college. That came out of links which the college had with Germany and the idea was to go and visit students who would come to our college and also the idea of paying my way and working somewhere so I went over to Germany. The person I stayed with found me a job in a furniture factory.

Q. You seem to have a very interesting and varied background which I am sure a lot of teachers don't have to draw upon.

A. Again that is down to my parents. My Dad was very interested in the country and he used to take us out on walks and youth hosteling. There has always been an objective, my parents saying we want to provide the family with as many experiences as possible. Today, children often don't have those opportunities more so with girls than boys. Right from the word go the boys were not so restricted. There were times when my sister was not allowed to do things. In some cases this was protection, in others there was an element of chauvinism, especially from my Dad who would say no you can't do this you are a woman. All the family are now dotted about, not just in this country. My brother now has his own advertising company in Spain. I have another brother who is one of the top men in the rigging agencies for the pop groups around the world. He is on the Michael Jackson tour at the moment. Through the experiences of the others and through a little competition between family members you benefit from their experiences and they benefit from yours.

Q. People come through very strongly as your major influence.

A. Children in future years remember teachers, mainly because the teachers themselves were creative but mainly because of the interest they take in you.

Q. How widespread is the approach in the school?

A. I've not sent you anything we have done? I will send some. The business links have run in some ways parallel to the work in Europe. Without Europe we would in some ways have been without business. We aim to broaden the pupils' horizons and motivate through real experiences. The staff feel likewise. They have changed over the years. There are those who feel motivated by working with business and adding that dimension to their work, there are others who see it as something extra. We are still in that stage. There will come a time when there are more than less who are keen on the idea of going out there themselves. One thing which the older generation of staff feel a little bit hard to be motivated. It's daft because it is what it is all about. I have to promote it, my own ideas through the European links and emphasise good practice to the staff. The reception teacher is the most committed but we do have staff right across the school. All the junior staff in one way or another have been committed. There are perhaps two members of staff who are still in the reluctant mode. We have not as yet integrated it fully into the curriculum. I encourage staff to include it into their plans as much as possible and the European dimension, although it is planned separately because it involves working with other schools, is integrated into the class plans.

Q. How do you go about motivating the teachers?

A. Just by involvement and my own feelings and my sense of direction in terms of this and what I want to see the school get out of it and what business get out of it as well. Just my own enthusiasm. I've been involved in this at different levels through committees and the steering group for Education Business Partnerships. It is a useful means of finding out what is going on and expertise that can be drawn upon. Lancashire is active at grass routes level.

Q. How might you do that on a wider level?

A. The big problem is the curriculum. More and more people are depressed that they can't often see the silver lining for the clouds.

Q. Yet you say this type of work has been strengthened by the National Curriculum. Why?

A. I suppose in my perspective when you are looking at the National Curriculum you are looking at ways in which you can generate a positive feeling out of the work that you do. Any evidence for me of the children gaining real experiences through the planning, the activity, through the actual teaching, is going to be of benefit. To me it is a circle. Provided you are willing to go full circle, that you go and have an experience such as we have

had with the calendar we are now producing, you see the benefits and you look to build on those benefits in the years ahead. The work we have done with a local printing firm and the Royal Mail has the spin off of the children seeing at first hand how you go from the drawing board to the final copy, the transport to take it to its destination, to Royal Mail and through the whole process there. Straight away there are mathematical and geographical concepts. The benefits are there for all to see not just the children's art work but the first-hand experience they have had in an industry which they might never have thought about and which may be a subtle reminder in future years when they are thinking about their own career but there has also been that sense of fulfilment on both sides. Business is very happy with the work they do in school and in the school itself and the community. It gives a little bit of a boost to the schools image when something like that is publicised and now we are in a position where that calendar is sent world-wide raising the image of the school in the world community.

Q. You've touched upon the next question. Can you see any match in the expected outcomes by education and industry?

A. Perhaps in the case of printing as I was saying perhaps it will inform the future workforce with regard to careers and also raising the profile within the community. For business to be wholly successful it has to work with the community. It can't just take from the community it has to give also. Doing something like this is not just contributing to the partnership in the community at this time but should provide a platform for the future workforce so they are developing something for years ahead. Sadly it does not always work that way. The Lancashire Evening Post had a scheme called Newspapers in Education, but it was considered that the people involved were not providing sufficient income to justify their jobs, which is really a job for the future, so they have closed down.

Q. What kind of catchment area is the school in?

A. Very mixed. Private and council with all the associated problems.

Q. When working with industry, as a primary school, are there any problems?

A. At the beginning of the project I have spoken about there was no partnership but this has to be worked on. The company was new to it but had shown some interest in working with education. They asked me what I wanted and what I hoped to get out of it. Our answer to that has changed over the years. Initially it was just very much to set up a business partnership with a business and see how it would go. We wanted to produce a calendar. Now we both understand what we want to get out of it and each year we see something we want to improve in the next year. They are providing us with technology, we are proving for them a way in which they can use their skills in an exciting and innovative way. They love working with us, there is mutual benefits.

Q. Have you worked with other industries where there have been difficulties?

A. We have but the difficulties there were getting them to understand our objectives and these have been sorted out as we went along. The big companies have a very clear mandate for working with education. The answer then is no, providing you get in touch with the right person because not everyone is trained in education.

Q. But there are 25,000 primary schools and only a few big companies.

A. There are never shortages of businesses to work with. There is file of businesses in Lancashire willing to work with education. It is only when you work with business that you talk about success or failure and often that is based upon your expectations not being realised. Often this is due to misunderstanding, poor communication or raised expectations which you have to expect in life. Not everything goes to plan. The size is important sometimes, other times it isn't. The local businesses around here have supported me to a certain degree but they are in a different league. I have had to say will you provide me with this information. The advantage is having a central clearing place.

APPENDIX 6

Business Focus of Companies Involved in the Survey

Business Focus of Companies Involved in the Survey

1. Oil
2. Airline
3. Restaurants
4. Retail
5. Information technology
6. Manufacturing
7. Manufacturing and retail
8. Manufacturing - food
9. Manufacturing - engineering
10. Chemical industry

APPENDIX 7

Industry Interview Schedule

Industry Interview Schedule

This interview seeks to determine the company's view and approach to education-industry links, particularly with primary schools.

Does your company have a policy for working with education?

Where does this fit with company policy?

Who formulates the policy i.e. is it a group board decision, formulated at the level of community affairs or influenced strongly by one person?

Does this policy specifically include working with primary schools?

If so why or why not?

Would you consider working with primary schools?

Can you give any examples of success - case studies?

Has anything not worked and why?

What are the objectives of your company's education policy?

These might be long term in order to determine future attitudes, recruitment, community involvement.

What are the outcomes sought?

Programmes, materials, and resources.

What has been produced to date?

How do you evaluate?

How do you go about achieving your educational objectives and outcomes?

Do you work in partnership with other organisations? Who formulates the ideas?

How do you go about disseminating the work you are involved in? Are there any difficulties?

Are agencies used?

Are materials distributed without training?

(Comments in *italics* are prompts for the interviewer)

APPENDIX 8

Examples of the Completed Teacher Questionnaires

THE DEVELOPMENT OF CONCERN FOR WORK-RELATED EDUCATION IN PRIMARY SCHOOLS

The School Position

Please identify how work-related education is perceived in your school:

In my school work-related education is perceived as:	YES	NO
• a general school policy		✓
• an activity open to individual teachers or pupil groups	✓	
• integrated into curriculum subjects		✓
• a separate activity	✓	
• strengthened by the introduction of the National Curriculum		✓
• a statutory obligation		✓
• a means of developing links with industry and the wider community.	✓	

	YES	NO
As a means of augmenting this information a number of interviews will be carried out. Would you be willing to participate in these?	✓	

Would you please indicate your sex and your age bracket.

Age: 20-35 35-50 50 Plus

Sex: Male Female

Thank you very much for your help. Your co-operation is much appreciated

THE DEVELOPMENT OF CONCERN FOR WORK-RELATED EDUCATION IN PRIMARY SCHOOLS

Formative Influences

Please write about your life experiences and formative influences which you feel might have contributed to your concern or interest in work-related education in its many forms and the most important influencing factors, giving some details of your current involvement.

Own personal work-related education very limited e.g. attendance at all-girls school, no proper careers guidance with emphasis on gender stereotyped careers.

I wish to give my staff & children a wider understanding of work-related education.

I have tried to develop teacher placement as part of Staff Development, including staff visits with our partner school in U.S.A.

I am trying to establish a mentoring scheme within the school.

I am a board member of the local B.E.P.

I would like to make careers-related education an integral part of the curriculum.

My school is an 8-class junior school right on the edge of North London with many of the social problems associated with an inner-city school - but in a fairly rural setting.

THE DEVELOPMENT OF CONCERN FOR WORK-RELATED EDUCATION IN PRIMARY SCHOOLS

The School Position

Please identify how work-related education is perceived in your school:

In my school work-related education is perceived as:	YES	NO
• a general school policy	✓	
• an activity open to individual teachers or pupil groups	✓	
• integrated into curriculum subjects	✓	
• a separate activity		✓
• strengthened by the introduction of the National Curriculum - but has been re-vivified due to OFSTED & HMI		✓
• a statutory obligation	✓	
• a means of developing links with industry and the wider community.	✓	

	YES	NO
As a means of augmenting this information a number of interviews will be carried out. Would you be willing to participate in these?	✓	

Would you please indicate your sex and your age bracket.

Age: 20-35 35-50 50 Plus

Sex: Male Female

Thank you very much for your help. Your co-operation is much appreciated

Please return by 28th February 1997

THE DEVELOPMENT OF CONCERN

FOR WORK-RELATED EDUCATION IN PRIMARY SCHOOLS

Formative Influences

Please write about your life experiences and formative influences which you feel might have contributed to your concern or interest in work-related education in its many forms and the most important influencing factors, giving some details of your current involvement.

In my second year as a primary teacher responsible for D.T. I was asked if I would like to take part in a project organised by CITB to create education packs based on the construction industry. Initially I was not interested, however immediately after I went on an Economic & Industrial Understanding course by default. (The Deputy Head was ill!) The Education and Business partnership ran it in conjunction with SUP coordinators and the flame was lit. I met positive, enthusiastic people who truly believed that the link of education and industry was the way forward in the light of the N.C. I was asked if I would like to come on a further course and become part of a working party to create the draft proposals for an E.I.U. policy for south Glamorgan. Being with and listening to all the wonderful projects going on encouraged me to go back to school and take up the C.I.T.B. project. I became group coordinator of 4 other teachers including the Head of D.T. of our local comprehensive. I spent a week with the Contracts Manager of a construction company and learnt as much as I could that would be of use in school. The final product of this and lots of brain storming was a pack published by CITB to use in schools. The satisfaction I felt and the buzz of

If necessary use an additional sheet

Please return by 28th February 1997

meeting new people, and the challenge of learning new skills set the wheels in motion and I started organising my own projects in school. (see reports of work done.)

I have helped the county run courses on E.L.U. and have given teachers guidance for visiting for the first time. eg. what to ask for? Look for, how to collect evidence & information. This is really valuable because it takes the fear out of what to expect.

I have spoken about my projects at the National Conference in 1995 and helped motivate new teachers into trying the idea. However I feel it's important to aim at teachers who've been teaching 2 years or so. They're still motivated but have the experience needed to organise the project, successfully.

Also good for teachers who have not experienced this type of approach to go through some projects like those organised by Whitbread. Teachers receive support and strict guidance, and much of the hassle of creating the link have already been resolved by EBP's supporting the project. Because projects are monitored closely teachers are made to get ideas off ground quickly & into the classroom.

You only need to be at the presentation days to see how much the children & staff get out of them.

Why E.L.U. in the N.C.?

- ① Really motivates both staff & children.
- ② Brings 'real world' into the classroom.
- ③ Perfect situation for truly big cross-curricular projects.
- ④ Children develop new skills that wouldn't necessarily come out in normal N.C. eg. presentational, social, organisational, ability to debate. etc.

- ⑤ Makes both industry & education they have many similar problems and look at new ways to solve them.
- ⑥ Parental links improve both through helping in projects and also interest that is developed in children telling parents what they are doing at school.
- ⑦ Children become aware of the various jobs available to them & help to make 'work placement' decisions at secondary school.

Where should E.I.U go next?

- ① Break down national curriculum into mini statements of knowledge & skills
- ② Take similar based statements & join together under E.I.U heading to create 1/2 termly packages that cover NC through E.I.U focus.

This way work done in school is directly related to 'real world' and they will be better prepared for it, when they leave.

eg. Bank Project - Filling in forms - (LANG)
 Talking to Personal banker, why you won't loan. (LANG)
 Maths related to pay back loan - interest rates.
 I.T. use of it to prepare your bank statements - data base work.
 Geog - Banks across world - largest where? Why?

- ③ Take it one step further and link with schools abroad to do comparative work and make idea of E.C. closer to home so students aware of what's outside Britain.

E.I.U should be used at all levels from KS1 (5yrs) to secondary school. There is room for it in all years. Albert Primary is on outskirts of Cardiff. Approx 250-300 children including nursery unit. Range of socio-economic background enormous from council housing²⁵¹ area to middle class, professional.

THE DEVELOPMENT OF CONCERN FOR WORK-RELATED EDUCATION IN PRIMARY SCHOOLS

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In my school work-related education is perceived as:	YES	NO
• a general school policy	✓	
• an activity open to individual teachers or pupil groups	✓	
• integrated into curriculum subjects	✓	
• a separate activity		✓
• strengthened by the introduction of the National Curriculum	✓	
• a statutory obligation		✓
• a means of developing links with industry and the wider community.	✓✓	

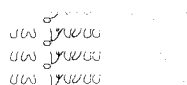
	YES	NO
As a means of augmenting this information a number of interviews will be carried out. Would you be willing to participate in these?	✓	

Would you please indicate your sex and your age bracket.

Age: 20-35 35-50 50 Plus

Sex: Male Female

Thank you very much for your help. Your co-operation is much appreciated



PERSONAL STATEMENT BY MR RAY SUDLOW

HEADTEACHER AT HOLY FAMILY R C PRIMARY SCHOOL INGOL

This first page offers a challenge in itself!

If I were to summarise I would say that my mother (and father to a certain degree) were my driving force(s) in so far as they encouraged me from an early age to gain independence and confidence which in turn led me to experience a variety of work experiences from an early age. Eg paper boy, alter server, cub/scout (community service 'bob-a-job') Tesco assistant and later still... voluntary service in YCS. (Young Christian Students)... summer jobs - fish factory, barman, fisherman (Shetland Isles), furniture factory worker, Freiburg, Germany.

My Teacher Training College required a thesis in my subject, Geography. I did it on the Shetland Fishing Industry!

Since beginning teaching my philosophy has developed/matured. Teaching in under privileged areas of Liverpool and Preston I have always sought to broaden the pupils horizons and motivate through real experiences. Cross-curricular topics have been developed and more recently, since in headship, they have taken on a stronger business link with the added bonus of a European dimension and European Curriculum Award (1994) for the school.

This has evolved into project work of a high professional quality with a range of businesses and in joint initiatives from across Europe.

Influences: Parents
 Teenage peers
 YCS
 Scout leader
 Present colleagues
 School's advisor

Formative experiences: Weekend jobs
 Summer jobs
 YCS
 Teaching experiences (varied)
 European Curriculum Award and its 'knock-on' effects,
 challenges and responsibilities

THE DEVELOPMENT OF CONCERN FOR WORK-RELATED EDUCATION IN PRIMARY SCHOOLS

The School Position

Please identify how work-related education is perceived in your school:

In my school work-related education is perceived as:	YES	NO
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• an activity open to individual teachers or pupil groups	✓	
• integrated into ^{some} curriculum subjects	✓	
• a separate activity	✓	
• strengthened by the introduction of the National Curriculum		✓
• a statutory obligation		✓
• a means of developing links with industry and the wider community.	✓	

	YES	NO
As a means of augmenting this information a number of interviews will be carried out. Would you be willing to participate in these?	✓	

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As co-ordinator of geography I have always stressed to the staff the importance of close involvement with the community. Local studies is place/people - interaction of, evaluation of needs both individual and group, questioning. All of such needs liaison and an understanding between school/business, that mutual support fosters valuable growth of attitudes & well being of others. As an individual I have forged good relationships with shops, supermarkets, listed building groups, church etc. I was then given the responsibility of Community Links Co-ordinator. I have enjoyed this participation with local people but it is not work related as you see it.

I did take every opportunity to respond to circulars etc that came through school. The children want to hand Rover, they came to us. We have Severn Trent in each year, visit the airport etc - but this is what many schools do. It is not a direct link with one company that wishes involvement with my school. And I do feel that companies do not have the same commitment with KS1. Yes they want the P.R. work - give out badges, brochures etc - but nothing that expects real time & planning with new colleagues & my children working together on a regular basis. I have not given up though - and hope that in the near future a bond will be formed. Hold this space

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Please write about your life experiences and formative influences which you feel might have contributed to your concern or interest in work-related education in its many forms and the most important influencing factors, giving some details of your current involvement.

cont.

The other staff appreciate new interests - they like the science activities that stem from Seven Trend, the D+T extension with Land Rover, the Maths etc from Safeway. They are content with accepting what I can offer them appropriate, but they would not take on any responsibility themselves to make arrangements. I negotiate deals with the headteacher who is extremely supportive and she too would like a close involvement with a company who would take an interest in the children & their development. The children are extremely bright - my Yr 2 class would be considered appropriate for more independent learning. We are in the centre of a small town (business parks on the outskirts, v. close to rural country) - so all amenities are on hand.

Thank you for the contact you make with teachers. The majority of us are professional in attitude, - schools are run as businesses now, and yet we are not given such credit by commercial companies. Education is for all.

If necessary use an additional sheet

Please return by 28th February 1997

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• a means of developing links with industry and the wider community.	✓	

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Formative Influences

Please write about your life experiences and formative influences which you feel might have contributed to your concern or interest in work-related education in its many forms and the most important influencing factors, giving some details of your current involvement.

My understanding of work-related education came from the fact that my husband works in industry + I saw a first-hand need for it.

The factors that have most influenced me are: (i) the link between the curriculum + the world of work. (ii) good public relations + links with our local community. (iii) to stimulate a fresh + lively outlook that has relevance. (iv) good follow-up activities or problem solving tasks that continue the involvement with various departments over a number of weeks.

Work-related education is important to staff + children because a) the staff, due to their own type of professional background, may not have seen many examples of industry + b) the child, due to their age + background may have an even limited view.

The age that all industry / community links are most beneficial are as soon as a child can be made aware of its relevance.

The two schools I have been employed at during my experience of work-related education (7 years) have both been in small industrial towns north of

If necessary use an additional sheet

Please return by 28th February 1997

Dinnington - Tamworth & Lichfield.

These are some examples of the companies I have worked with during that time.

Bass Breweries Plc. Burton.

Rugley Power Station.

A.K.N. Ltd. Engineering Co.

Rexam Packaging Ltd.

"Smudge" Smith - local artist + historian.

Celia Walker - poet + author.

Lichfield Cathedral - Education Centre + Craft Centre

Blooming Flowers Florist.

J.C.B. (Hydraulics package)

D.V.C. Computer components

Lichfield Health + Fitness Club.

Birmingham Airport.

Leaf Tree Crêperie Restaurant.

Various Travel Agents + Estate Agents locally.

These are just the companies I can think of at this moment. I'd only be too happy to chat to you if you want any further information.

Yours faithfully
Julia Curthorp.

APPENDIX 9

Examples of the Interviews held with Industrial Representatives

Industry Interview 2

DOES YOUR COMPANY HAVE A POLICY FOR WORKING WITH EDUCATION?

It doesn't have a written policy but we do have a policy in terms of working with education. I work with community relations with *****. Community development is one of the areas and youth development is one of our themes of community relations. We see education as a prime part of that. As yet we don't have a written policy.

WHO FORMULATES THE POLICY THAT YOU WORK TO?

It is something that we in the community relations department have built up in the last three or four years. We put some proposals in to our director in terms of what sort of work we should be doing and why and that was all accepted. It is up to us but we have a very clear focus of what we are trying to achieve with the work and we stick to that .

WHAT DOES THE COMMUNITY AFFAIRS DEPARTMENT COMPRISE? ARE THERE A NUMBER OF YOU?

Yes. The work with education used to be with the human resources department and I worked in the human resources. However, just over a year ago we had a review of the work and it was decided that it fitted better with human relations. I came with the work. There are probably about nine of us in the department. We have some people on secondment. Three of us work on the education side now. The rest deal with other work such as working with the disabled, sponsorship etc. The themes of our community work for this are tourism and heritage, youth development and environment. We work under the youth development side. Three of us. The work we do at the moment: we offer over a thousand work placements for students at Heathrow and we have one full-time person doing that. We are still turning down about 100-150 students a month. We have increased the number of placements from 150 which we were offering in 1992. It peaked last year at 1300 and this year it will be about 1000. We have produced two education packs. One in conjunction with ***** and that was on airport development for geography. GCSE students and A level students. That was disseminated to schools, if they wanted it, within the nine boroughs around Heathrow. It is a very controversial topic. We also produced a curriculum pack called Explore the World of ***** which was for primary and secondary schools. Up until we produced this pack we have not worked with primary schools at all. When I took over four years ago, the work was basically with graduates and secondary schools. We feel that you have to start younger. One of the reasons we did the pack was that we

were getting lots of requests from teachers and we didn't have anything to give them and we wanted to get across the skills which we would look for. While everyone does not want to work with *****, the skills we are looking for are generic skills that can be beneficial to any industry. Things like languages, customer service skills, team working skills, good communication. There are seven in total. We wanted to get those messages across in the curriculum materials. We worked with teachers. We worked with 40 schools in total. Primary, secondary and GNVQ teachers. We got them to tell us what they wanted in a pack to meet their needs and would also get our messages across. The other thing we wanted to get across at primary age was the variety of careers that we have at *****. A lot of people, understandably, think we only recruit pilots and cabin crew. A lot of people don't realise that we recruit graduates and we have a very good graduate programme. Many people don't realise that we recruit women to be pilots for example. We wanted to get across the breadth of careers that we need and also equal opportunity messages as well. That was our main ideas. We have distributed the packs to schools that wanted them but we have launched them all over the country at all of our bases. That is Heathrow, Gatwick, Manchester, Glasgow, Edinburgh, Belfast and Birmingham. We invited all the local schools, primary and secondary. We told them how we developed the pack and why and gave them a free copy. We are selling them to schools outside our local community.

SO YOU DISSEMINATE THE MATERIAL BUT DOES YOUR WORK FINISH THERE? DO YOU WORK WITH ANY PARTICULAR SCHOOLS ON A ONE-TO-ONE BASIS? I WAS WONDERING IF YOU HAD ANY EXAMPLES OF WORK THAT HAVE BEEN DONE WITH PRIMARY SCHOOLS.

We are developing with primary schools. One of my colleagues who is not here today is doing some work with local primary schools. She is working with 5 primary schools in Hounslow, looking at the topic of flight. They are at the stage at the moment where they have had half a session with ***** (the teachers). This involved some presentations from ***** and a couple of staff and the teachers identified areas where they thought we could help them. ***** is meeting again with the EBP person to discuss how we go forward but that has just started really about a month ago. In terms of other work with primary school, apart from giving them the pack, that's it at the moment. The other things we do with education are developing some presentations to take out. We have done some for secondary. We intend to do some for primary but haven't as yet. On things like a day in the life of a pilot, cabin crew. The plan is that if a teacher were to contact us and ask for help on such and such, we would have something ready made. We are looking at September onwards because it takes time to get all these things done. At the moment all we can do is help by telling them about our education pack. Other things we do with education: as I said we give presentations, attend careers fairs, have 189 staff who are school governors and a large percentage of those are primary school governors. Almost 60%.

YOU ENCOURAGE THIS?

Absolutely. We support them by enrolling them as member of the National Association of Governors and Managers and we have also held four workshops for them. We invite the head-teachers or representatives from their school. The conferences are - we have had one on marketing your school, school development planning, the issue relations in a crisis. Not every school governor attends but they are very well attended. We had one yesterday and 70 came. Another major initiative which I won't go into in too much detail since it does not affect primary is the language initiative. We are supporting 6 schools who have achieved language college status and when we were deciding which schools to support, we wanted to ensure that the schools had a mechanism for linking with the feeder schools in terms of languages. This is a new initiative, just started in September. They didn't get approval till January so we've had few days with the teachers. We do want to be looking at how they are working with primary schools.

WHAT OUTCOMES ARE YOU LOOKING FOR? YOU'VE MENTIONED GENERIC SKILLS AND LANGUAGES.

Languages are very important to our business. It is a key requirement. Certain jobs demand a language. Well over 60% of our passengers come from non English speaking countries. We feel that our staff need to reflect that. Cultural awareness and language skills are essential. The earlier you can get the messages across the better people can be prepared. For us linking with primary schools is getting across messages and I am well aware that many primary schools do lack resources and as we are a large employer we should be doing our bit for the community.

SOME OF THE OUTCOMES THAT YOU ARE SEEKING ARE GEARED TOWARDS EMPLOYMENT NEEDS. OTHERS ARE JUST COMMUNITY?

Definitely. We are a large company. At the end of the day our community have a lot to put up with, particularly those who live near the airport. Although we are doing a lot - aircraft that are coming in are quieter, and we are not the only **** here but, however, we contribute a lot to noise and environmental conditions and we are doing as much as we can so what we want to do is put something back into the community, invest in the community and show them the advantages of living near a large employer like ourselves, as well as disadvantages. At the end of the day these people are our customers, existing or potential so though marketing is not a large part of this work I see that we are still representing the company when we go out to a school.

HOW WOULD YOU EVALUATE ANY OF THE WORK THAT YOU DO?

We haven't done anything in that area yet. In terms of the pack for example, I'm getting a student in to chase the evaluation of that pack because we had an evaluation form in there and we have received about 6 back out of about 600. I really want to evaluate how the pack has been used. I'm talking about **** and whether they feel it has contributed to the curriculum. We really need to chase that one before we invest money in another one. In terms of work experience we evaluate that in a small way and we get feedback from the students in terms of what they thought of our placements, how they felt they were treated even when they applied. The service they received, what they were doing and how it has improved or has not improved their skills. We do a summary about that and the skills we ask them about are things like team work, communication skills. We have got a space for 'other' and a lot of them put in things like dealing with customers, and interpersonal skills and confidence in themselves and telephone work. That's how we evaluate that. We really could do with some help. It is quite difficult to quantify what the outcomes are. For example if we go out to a schools careers fair, how many people we would get. It's quite difficult to track. We do feel that a lot of the work that we do is long-term. At the moment in the company we have a problem recruiting cabin crew who have second language and customer service skills. We can't get enough of them. Although the language college initiative that we are doing at the moment and the work that we are doing with schools will be of benefit we won't see it for a long time yet. They have to be twenty before they can even apply. At the moment in terms of measuring the benefits we are not there yet. We haven't got our act together.

YOU MENTIONED THE CONFERENCE YESTERDAY. DO YOU WORK IN PARTNERSHIP WITH OTHER ORGANISATIONS IN MANY CASES?

When we developed our education pack we developed that with SCIP (Schools Curriculum Industry Partnership). Industrial Society work with us for the courses for Governors. We work in partnership with our local EBP, Heathrow. There is nobody in the regions. I cover Gatwick as well. There is nobody at the moment at Manchester. That is a difficulty.

WE'VE BRIEFLY MENTIONED IDEAS. WHO COMES UP WITH THE IDEAS?

I grew into the job. Two predecessors ago, the focus of work was to promote **** to graduates. They got very involved in producing the graduate brochure, going out to universities and promoting the work of **** and work experience had just started. It was a case of responding to a few requests. Then my predecessor took over and she began going to school fairs but still

half of the job was graduate recruitment. When I took over it was just at the time when we decided to get into community affairs so it is all quite new. I started to deal with lots of requests from teachers and the curriculum materials and presentations. I didn't know there was such a thing as an EBP because I was a recruitment officer. I met with local EBPs and said what do you think of **** and they were very negative saying "who are you". From that grew what we have today. Discussion with teachers. In fact when we did the pack we invited in SCIP and then brainstormed. We invited in primary teachers, geography teachers, and travel and tourism teachers and had a few days with them. We talked to them gave them a tour of **** and that sort of thing. We explained to them what we wanted to achieve and then asked them to tell us what they thought we could do for them. Out of it came so many ideas that they formed the basis of the work we are doing now. We also, at the same time because one of our goals is to be a good employer, support staff. I knew one or two people were governors but didn't even know who they were. I found out we organised a conference for them and their head-teachers. We asked them also what we could do to help them. I know there is a whole lot more we can do but we are a very small team and we are trying to focus on the core skills.

YOU ARE A SMALL TEAM YOU SAY, HOW DO YOU GO ABOUT DISSEMINATING THE WORK?

We've got many people who are willing to get involved but due to pressure of work things we would like to do are not always possible. The difficulty is getting people to come into school with us. Obviously they are needed during the day and have not got the time to stay away from work. It is also quite difficult to disseminate in the regions. We want to support them but cannot give them our full resource. I feel the answer, which I am still trying to get approved, is to have the company policy written down on what **** will do with community and schools and this is "by senior management" so that it is seen as part of our business. Although it is approved I think it needs to be more up front rather than just be seen as a nice thing to do. I think this way it will be easier for people to be released. I am not sure that the work we do is fully understood by people in the company. We have 55,000 employees. I wouldn't expect every person to understand but it is a case of knowing what we are doing and why. I also understand that at the end of the day we are here to fly passengers so if someone can't go to a school because there is an issue with resourcing and a flight won't go well that is the priority and has to come first.

WHAT ABOUT THIS PACK HERE WHICH LOOKS VERY GOOD AND COST A GREAT DEAL OF MONEY TO PRODUCE? HOW MANY HAVE YOU DISTRIBUTED?

We've sent out about 800 . We need to sell more. We need to do workshops with teachers.

WOULD THAT BE YOUR STAFF?

Yes **** and I will be doing them.

Industry Interview 3

DOES THIS COMPANY HAVE AN EDUCATION POLICY?

We certainly do have a policy and we have a mission statement which I can't actually quote off the top of my head. We have a number of objectives that we try to meet through the education service, so, the objectives are to increase the broad image, develop good will within the community nationally, help the recruitment process and develop the motivation and moral of the people working with the schools and education. That's about it. The policy. We do have the objectives and an action plan laid out.

WHO FORMULATES THE POLICY? IS THIS DONE AT BOARD LEVEL OR IS IT INFLUENCED AT REST LEVEL OR IS IT ONE PERSON?

No, originally **** our consultant whom you have met was hired about five years ago to look at what we do with education and with schools. There was a feeling then that we did quite a lot but nobody really knew what we were doing and so he researched and did some surveys and so on and came out with a mission statement, the objectives what the company should do. One of his things was that we should have one person responsible for it, hence my appointment, four years ago now. I then put together a strategy paper that went to the board and the board said fine and ok'd it and gave the budgets and so on. The strategy came from the research from **** and from talking with teachers, EBP people like that.

HAS THIS BEEN RE-DEVELOPED OVER TIME?

Yes the strategies have certainly changed, the objectives have not really changed. The areas we are working in are mainly the same only what we do within those areas has changed slightly. You've got two levels. You've got the corporate level of sponsorship ideal then the local level. What they do on the local level is mirrored slightly by what we do on a national level. We will sponsor training competitions, teachers and so on and on local level they'll take on teacher placements.

DOES THE POLICY YOU HAVE SPECIFICALLY INCLUDE WORKING WITH PRIMARY SCHOOLS?

No it's not specific - any ages 5-19. One thing we do say to the schools that as much as possible it's got to be an active programme on the local level, it's reacting to requests as much as anything else. We never tell the stores to develop links with say, three primary schools in their area.

DO YOU HAVE ANY PROBLEM WORKING WITH PRIMARY SCHOOLS OR ARE YOU QUITE HAPPY WITH THAT?

Yes we're quite happy. Certainly when we have worked with primary schools and primary teachers its been great. From the store's point of view it's more rewarding, it's more fun in that sense. It's great. We tend to get more requests from secondary schools.

WHAT KIND OF THINGS DO THE SECONDARY SCHOOLS ASK FOR?

Work-experience GNVQ, mainly around business, some leisure and tourism. Curriculum based projects or managers going into schools to talk about an aspect of GNVQ that relates to *****. Nothing dramatically different from what any other company do.

HOW WOULD THAT DIFFER FROM WHAT PRIMARY SCHOOLS WOULD DO?

We get teachers wanting to do a teacher placement. We don't anymore get so many requests for presentations or visits, it's only things that are related to the National Curriculum. Maths - we had some teachers in not so long ago in Portsmouth wanting to base maths and the maths curriculum around ***** , so they did a placement and put some materials together. We have had some teachers focusing on EIU basing that around ***** and put a pack together on that.

ANYTHING YOU HAVE DONE WHICH HAS NOT BEEN SUCCESSFUL?

Not to the extent that we would never do it again. We have done a conference for head-teachers with Lincolnshire TEC - that was not terribly successful although the evaluations were great. It's just that our people when they were dealing with groups, felt very uncomfortable about it. We are doing another conference for primary head-teachers in Scotland. Nothing so bad we'd never do it again. We say that didn't go very well, we will do it differently next time.

DO YOU KEEP ANY RECORD OF THINGS YOU HAVE BEEN INVOLVED IN? CASE STUDIES FOR EXAMPLE?

Some we do, where they can be of use or benefit to other teachers rather than re-inventing the wheel. For example economic and industrial understanding, a case study. A teacher's activities that she put together with her primary class.

WE HAVE TALKED ABOUT THE POLICY AND HOW IT EVOLVED, WHAT WOULD YOU SAY WAS THE MAIN FOCUS COMMUNITY INVOLVEMENT, STAFF RECRUITMENT?

It's very difficult to say ... it's community involvement. We have this idea of a trust bank you are building up in a trust bank for a rainy day when something might go wrong in the local community or with the company generally. It's goodwill, it's developing the brand interest but it's very difficult to say I've worked with this school for a year and this has actually impacted my sales so it's really the idea of putting something back in the community, the store managers doing something with the community, whether it is schools or charities or hospitals or whatever. It is something the company has always done but it is probably done it better and more of it in the States, but now with the growing franchises community in the company (franchises are going to be running their stores for at least 20 years) they have much more interest in the community, a willingness to become something in the community and obviously it does help sales in the long run as well although it would be very difficult to justify it to the board on the basis of sales.

WHAT IS THE POLICY IN THE STATES?

It's totally different. They have education packs and so on. They're great for America but you couldn't do them over here.

SUCH AS?

They had one which they did with Walt Disney, the award for the best teacher in the country - I can't remember - they called it the Mickey Mouse Awards or something - which gives you the idea that it wouldn't transfer over here. They do very good nutritional packs and so on. They have some very good anti-drug programmes using cartoon characters. They have a variety of things.

OBVIOUSLY SOME THINGS WOULD NOT TRANSFER. THE NUTRITIONAL IDEAS SOUNDS VERY GOOD.

Its a great idea. We've looked at doing nutritional things, targeting areas which people don't think are nutritious, fat and so on, we thought about doing a resource pack but at the end of the day we thought if ***** come up with a pack so we deliberately stayed away from that one.

WHAT KIND OF THINGS DO YOU AIM FOR IN YOUR POLICY - IS THERE ANYTHING IN PARTICULAR, PROGRAMME, RESOURCES?

Programmes - what we would really like to do is get as many of the stores involved as possible with their local schools. We do have some packs. One for each Key Stage but they are very low budget, they're a very reactive process. A teacher rings in or writes and we say we've got this at Key Stage * but we don't go out and advertise that we've got them. For example the Key Stage 1 pack, in the last three years, we've only sent out about 600.

It's mostly an interactive process at local level. Some stores may have gone through their EBP and developed links with primary schools and have been more pro-active. More and more were trying to get the stores, if they want to work with schools which they tend to since they see it as a good way to get into the community in a non-threatening atmosphere, something they are quite comfortable with, so they have a better understanding of the community - to do it through the EBPs.

HOW DO YOU EVALUATE THE PROGRAMMES?

We've actually hired an agency and at the moment we are doing an evaluation of what we do and what the stores are doing.

Questionnaires, one to one interviews, focus groups with managers, with teachers and EBP managers. People with whom we've been involved and those with whom we've not been involved at all, so hopefully that will give us some idea of whether we are doing the right sort of things, whether it is making any impact at the store level and at the school level.

YOU MENTIONED EARLIER THAT YOU PUT MONEY INTO NUTRITIONAL ORGANISATION. DO YOU WORK WITH ANY OTHER ORGANISATION OR IS MOST OF YOUR WORK DONE ALONE?

Mostly it's alone. With sponsorship we work with the TES, the School Governors Conferences, Action for Governors, into training, anti-drugs programme. Do work with TECs and EBPs but with other companies.... we did with a Key Stage 2 pack. Eastern Electricity, with TEC and EBPs, it's mainly conferences.

WOULD THEY APPROACH YOU?

Sometimes, yes. It's hard to say. We're doing a conference in Glasgow at the end of the year. In that case I think we were just talking, and **** was asking what we were doing because we've worked with them in the past and we were

talking about conferences and it just stemmed from there. But generally with EBPs there are some very good ones which we have been working with and who we know quite well and there are some that we have not worked with and know of, and wouldn't want to work with. Some areas we aren't involved with because maybe we haven't got enough stores there, or we wouldn't want a teacher to go into a store because we've got a problem with it, or the store manager, or recruitment and it wouldn't give the right impression,. There are all sorts of things.

YOU MENTIONED THAT YOU HAVE A FEW RESOURCES. HOW DO YOU DISSEMINATE?

We send out about 30,000 student information packs a year.

HOW DO TEACHERS FIND OUT ABOUT IT?

We don't advertise them at all. Generally it is just those teachers who ring up and ask if we have anything. It's the same with the pupils. I think pupils now expect every company to have something. I think we used to advertise through the UBI directory. We do not advertise but we are listed I think we probably still are and that's it.

ARE YOU QUITE HAPPY WITH THAT?

Yes I am. About 18 months ago we were on the money programme and we got quite a hammering for our Key Stage 1 pack. They tried to make out that we had advertised our pack to all schools - all primary schools - but we hadn't.

BUT DON'T YOU WORK WITH TEACHERS WHEN YOU DEVELOP YOUR RESOURCES?

Absolutely.

Industry Interview 4

DOES THE COMPANY HAVE AN EDUCATION POLICY?

It does. It's essentially divided into two. Community involvement has a policy which seeks to encompass community education, social education, citizenship, bullying, environmental education and recruitment education policy embraces careers issues, employability skills to look at the whole gambit of employment skills, so on the one hand you have got community issues on the other employment issues.

IS THIS ALL ONE STRATEGY?

It's two separate strategies which are delivered either by us centrally by way of funding projects or delivered by stores. So the store receives a request from a school, and it tends to be secondary schools on the basis of business or work placements, or placements for teachers or for secondary students for projects linked into GNVQ and they are geared up to working with secondary schools perhaps a little bit better than primary schools. Two separate policies. Our policy looks at core skill development, retail awareness, promoting links with schools and influencing the National Curriculum, helping with the professional development of teachers.

AND THEY ARE ALL CARRIED OUT BY ONE TEAM OR SEPARATE TEAMS?

They are generated by two teams in the centre community involvement, their policy, our policy and delivered by stores and ***** departments.

WHO FORMULATES THE POLICY IN THE FIRST STAGES?

It's top down and bottom up. If we put community involvement aside, look at the recent education policy, our starting point is consultation. The department themselves went out and talked to people we knew had links with schools at the variety of levels, right up to HE. We asked them what schools were not delivering. Where could we help fill the gaps? We came out with - development retail awareness - people working in retail, being switched on to retail. We developed our policy. We then took it to our director who endorsed it. She agreed that policy. She asked us to formulate the policy, up until now stores have been working to different policy guidelines and were slightly confused as to what they should be doing so we set the framework. She asked us to do the work. We then consulted, got the framework and went back to her.

YOU'VE ALREADY MADE SOME MENTION OF PRIMARY SCHOOLS. IS THERE ANY SPECIFIC GUIDELINES FOR WORKING WITH PRIMARY SCHOOLS?

There is no specific mention of primary schools other than we work across the whole education spectrum and stores must ensure that they work within each section of education. The reason that they don't do as much work with primary schools is they don't know how to. They get loads of requests from the placement project but what do they do with the primary schools and that's where we believe there can be the most influence.

YOU ARE SAYING THERE IS NOT A LOT GOING ON?

A lot of this could be due to the fact that there is not a lot of material available. If you want to make sure that the section of education is not neglected - its the resources. We want to but we have to work with schools to tell them how to do it. Also we encourage them to tell us what they are doing so that we can share good practice.

COULD YOU GIVE ME AN EXAMPLE OF WHAT YOU WOULD CONSIDER TO BE A SUCCESS IN THE PRIMARY SCHOOL AREA?

Dating back to the old Primary Enterprise pack to the current resources and of course switching the programme and focusing it on retail and school development we do work with the Eureka Museum in Halifax which contains a ***** Foodstore which we sponsored. Schools from across the country can go and visit, raising awareness of retail. We also encourage stores management teams to accept primary school children into the store to look at perhaps how the floor and our food section is laid down - to get them in as customer panels - we are going to introduce this new product. What do you think? It does need teasing out. We need to tell our management teams how to work with primary schools. When we started to look at our budget breakdown for the next financial year we wondered should we divide by curriculum sector - by education sector and linking it to the business and recruitment. But if we did that primary would not get a look in. Because if you say the majority of our resources should go to higher education, then secondary, then primary it would all be weighted in one direction, so what we have decided to do is divide it according to business groups - food group, general merchandise, design, IT, Europe, within each of these project distinctions equal rating and consideration should be given to each sector of education. To say to them its good to work with primary school children because they provide the greatest opportunity. If you start sowing seeds at that age, your are influencing career choices not necessarily about making a career but, promoting ***** at that stage. I think you can't be too prescriptive, you can just provide tasters and information and hope that something happens.

YOU'VE MENTIONED SOME OF THE THINGS YOU TRY TO ENCOURAGE; WHERE WOULD YOU SAY THE GREATEST FOCUS LAY - ATTITUDES, RECRUITMENT, MARKETING, COMMUNITY, OR MAYBE A MIXTURE?

I would say across the whole lot but particularly core skills development, because if you go to the top end of recruitment and you ask them, the first criteria is the academic. If you can't display the academic achievement you won't get your foot in the door. If you have a group of people who have come out of the education system with equal qualifications then what we are looking for are core-skills. Can they communicate, can they work within a team, what leadership skills have they got? We place as much emphasis on that as we do on the academic qualifications. We have over 8000 applications for graduate entries we've got to set some criteria, so those skills and competencies will carry them through their working life and their private lives.

DO YOU HAVE ANY PARTICULAR OUTCOMES THAT YOU ARE SEEKING IN INDUSTRY/EDUCATION LINKS? I.E. PROGRAMME MATERIAL, RESOURCES OR IS IT AGAIN A MIXTURE OF DIFFERENT ELEMENTS?

I think probably it's mainly into projects purely because its something that needs to be interactive, we need to get our people out of their store to work with the teachers and their students, and students out of classrooms. It needs to be attractive, it needs to be a partnership. Pure funding won't necessarily achieve that, activities will because you can take any project within retail, whether it be working, improvements, transit, packaging. You can dilute it down to the basic message for whatever audience you need to. By starting for example and working with a primary school teacher to understand what the curriculum requirements are because you can't go in there and impose our own needs. Say what the projects are you are doing in school, come in perhaps on a teacher placement, look at our environment and see what it is you can take away. Lets work up a project around that. So we don't go with predetermined ideas. We are looking, obviously, for an increase in recruitment numbers but helping young people make informed decisions so we prefer to work through an activity based approach because the visual messages are what the young people take away. Just handing out a case study won't necessarily give the best impression of *****. If you are going into the store and are working through that activity and see how that activity applies to the work environment, those are the messages you will take away and that might make you feel - I like that or I don't like that. Then if I don't like that I'm not going to apply to ***** for a career or I can see the importance of what core skills really means in the workplace, or leadership or how I need to work in a team or the influence I have on other people.

**HOW DO YOU GO ABOUT ACHIEVING YOUR OBJECTIVES?
WOULD YOU SEEK TO DO IT FROM YOUR BASE HERE,
THROUGH YOUR STORES OR WOULD YOU WORK IN
PARTNERSHIP WITH OTHER ORGANISATIONS TO GENERATE
IDEAS?**

The germ of the idea may start within the business so for example our food group were concerned that we are not getting enough food technologists through the system. The universities who offer courses in food technology were concerned that not enough people were applying. The problem maybe down below in primary and secondary education so they've gone out with an idea to look for partners who produce material. They will involve the stores and others in the process or similarly the ideas may come from an organisation. For example, we have been made aware that the transition from primary to secondary is very difficult what can we do, what can industry do to help. We will consult internally, we may then agree to fund it. It's not just money, its resources as well; we are quite happy to work with others. For example we are working with an organisation call COORR. An organisation of retailers who take young people in, graduates etc. We put together with them a specialised programme. You could say we are working with competitors but we are raising standards. We are helping young people make informed career decisions within the industry. But you can start influencing those choices at a young age, particularly for primary school children where their only involvement with ***** is when they are being dragged around the store. That's what it equates to. On the whole you have got to be flexible. I think our only focus is to go back to our policy objectives of core skills - retail awareness and working with teachers, we can't really detract from that. If a project comes in or we generate a project around those themes we are quite happy about whatever process we adopt.

**DO YOU HAVE ANY DIFFICULTY DISSEMINATING YOUR WORK
- HOW DO YOU GO ABOUT IT?**

In an ideal world - if I start by telling you we are producing a resource guide for stores. They are crying out for good quality material to work with schools. So we felt, 280 stores throughout the UK and with a further 67 distribution centres. If we sent each of our stores and distribution centres a copy of this resource pack, with materials small enough to go in that pack, we'll include it, if it's a leaflet that makes reference to a bigger resource we will include that. The store staff can read through and say this is what ***** does with education, this is how they suggest we do it. They suggest we give primary schools a look in so how can we work with primary schools and if there's a pack we can use all the better, you don't have to use it word for word. Follow it, use it as an idea and guide. That's in an ideal world, with 20,000 plus primary schools. Any attempts to reach every primary school has been unsuccessful because you're competing with other organisations whether they are promotional organisations or companies or charities. Everyone tries to get

a look in. How to get through the front door is through our own store link and network, all those who have links with schools will receive the pack they can then contact the schools say the company has produced these resources, can I interest you in them and then there is the back-up as well.

HAVE YOU EVER THOUGHT OF USING ANY AGENCIES TO PROMOTE YOUR RESOURCES?

If we are one of a group, yes, because I think its right for schools to see a cross section of resources available. Although we would like to promote our new resources. I think its right for schools to have a choice and if an organisation runs that on an industry's behalf yes we would be happy to do it, and to provide somebody to go along if that is required then if necessary they could talk in more detail.

Industry Interview 5

DOES YOUR COMPANY HAVE A POLICY FOR WORKING WITH EDUCATION?

We don't have written policy as such, it is part of the community policy. We like to encourage employees to work with schools. There are 30 locations/facility centres - each centre has a manager - co-ordinator full or a part-time for community work. There are no resources as such. There is some local funding. There is no specific policy, just a general ethos which encourages working with the community and education. We may suggest people to work with and we circulate a list of conferences which are taking place and which staff might wish to attend.

DOES YOUR POLICY INCLUDE WORKING WITH PRIMARY SCHOOLS?

No specific directions to work with Primary schools, though we are happy to do this.

We like to work with primary schools, but this needs a broker - someone to help, there are so many of them. There are more expectations with primary schools - need regularity of contact. This is a busy business. If you can't go in for any reason after you have promised you feel that you have let them down and the school feels let down.

One example of a good link with a primary school is a good monitoring programme in Newcastle. ***** has a lot of employees who are governors - also parents (average age of staff 35). We have a governors' programme. Also we have an electronic network which keeps staff up to date with what is going on. There are training sessions for school governors and staff are allowed time off (4 hours per week). Resources are available.

WHAT IS YOUR COMPANY'S EDUCATION POLICY?

Corporate social responsibility - Employee morale and motivation (developing employee skills, financial skills). We feel staff can learn a lot from schools since they have to work very closely with their budget (NVQ level 4). Also the children are our future workforce. We're keen to promote key skills. Much of this is self-interest.

WHAT ARE THE OUTCOMES SOUGHT?

We used to develop material but we don't do that any more. Our aim is to look at ways to upgrade teacher skills (ITT and primary teachers especially). We would like to develop a project to upgrade teachers' skills. This would probably be through an Initial Teacher Training college.

HOW DO YOU GO ABOUT ACHIEVING YOUR EDUCATIONAL OBJECTIVES?

We're not in schools' markets. Programmes are at local level - people element. Ideas come from the bottom up - and top down. Also from counterparts in other companies. We also contribute to some national conferences.

HOW DO YOU DISSEMINATE THE WORK YOU ARE INVOLVED IN?

We disseminate through public relation, international magazines, electronic mail. There is a need to disseminate the results of our work - tell people what we have done. This is not always easy. Publications are often more keen on the disaster stories rather than the good ones.

There is some difficulty with the plethora of things going on in the whole industry/education interface. I feel there is a lack of co-ordination. The two sides speak different languages. ITT needs encouragement and we need to do as much as possible to help.